To: Charmley, William[charmley.william@epa.gov]
From: Bevan, Analisa@ARB
Sent: Fri 8/18/2017 10:13:46 PM
Subject: RE: August 21 (Monday) - Monthly OTAQ/ARB Senior Leadership Coordination

Annette and I are both on vacation Monday.

Analisa Bevan

Assistant Division Chief

Emissions Compliance, Automotive Regulations and Science Division (ECARS)

California Air Resources Board

O: 916-323-8966

M: 916-834-4536

From: Charmley, William [mailto:charmley.william@epa.gov]
Sent: Friday, August 18, 2017 2:01 PM
To: Grundler, Christopher <grundler.christopher@epa.gov>; Cook, Leila <cook.leila@epa.gov>; Hengst, Benjamin <Hengst.Benjamin@epa.gov>; Haugen, David <haugen.david@epa.gov>; Simon, Karl <Simon.Karl@epa.gov>; Hebert, Annette@ARB <annette.hebert@arb.ca.gov>; Kitowski, Jack@ARB <jack.kitowski@arb.ca.gov>; Carter, Michael@ARB <michael.carter@arb.ca.gov>; Corey, Richard@ARB <richard.corey@arb.ca.gov>; Bevan, Analisa@ARB <analisa.bevan@arb.ca.gov>; Fuentes, Mark@ARB <mfuentes@arb.ca.gov>; Bunker, Byron <bunker.byron@epa.gov>; Fuentes, Mark@ARB <mfuentes@arb.ca.gov>; McCarthy, Mike@ARB <michael.mccarthy@arb.ca.gov>
Subject: August 21 (Monday) - Monthly OTAQ/ARB Senior Leadership Coordination

Dear all –

Our next monthly call if for this upcoming Monday from 12-1pm pacific, and 3-4pm eastern time.

I am available, and perhaps others from OTAQ, but I know that both Karl and Chris will either be on their way to California or in California for the Asilomar conference, so I don't think they can participate.

If we want to have the call that would be okay from my perspective, Ex. 5 - Deliberative Process

Ex. 5 - Deliberative Process

I would appreciate hearing from others regarding the level of interest and availability for a call on Monday afternoon.

Thanks

Bill

-----Original Appointment-----
From: Grundler, Christopher
Sent: Friday, September 09, 2016 2:50 PM
To: Grundler, Christopher; Cook, Leila; Hengst, Benjamin; Charmley, William; Haugen, David; Simon, Karl; Ayala, Alberto@ARB; Hebert, Annette@ARB; jack.kitowski@arb.ca.gov; Carter, Michael@ARB; richard.corey@arb.ca.gov; analisa.bevan@arb.ca.gov; mark.fuentes@arb.ca.gov; Bunker, Byron
Cc: Fuentes, Mark@ARB; McCarthy, Mike@ARB

Subject: Monthly OTAQ/ARB Senior Leadership Coordination Ex. 6 - Personal Privacy
When: Monday, August 21, 2017 3:00 PM-4:00 PM (UTC-05:00) Eastern Time (US & Canada).
Where: C174/Rm 6520

To: Charmley, William[charmley.william@epa.gov]
Cc: Philip Fine[pfine@aqmd.gov]; Jill Whynot[JWhynot@aqmd.gov]; mmiyasato@aqmd.gov[mmiyasato@aqmd.gov]; Denise Whitcher[DWhitcher@aqmd.gov]; Grundler, Christopher[grundler.christopher@epa.gov]
From: Wayne Nastri
Sent: Thur 8/24/2017 4:21:52 PM
Subject: Re: Proposed "glider" reconsideration

Thanks Bill!

Wayne Nastri
Executive Officer
South Coast Air Quality Management District
Sent from my iPhone

> On Aug 24, 2017, at 9:00 AM, Charmley, William <charmley.william@epa.gov> wrote:
>
> Wayne -
>
> Here is a draft fact sheet we developed last year to explain what a glider is, and why EPA took the actions we did in the Phase 2 final rule regarding gliders.
>
>
>
> -----Original Message-----
> From: Charmley, William
> Sent: Thursday, August 24, 2017 11:55 AM
> To: 'Wayne Nastri' <wnastri@aqmd.gov>
> Cc: Philip Fine <pfine@aqmd.gov>; Jill Whynot <JWhynot@aqmd.gov>; mmiyasato@aqmd.gov; Denise Whitcher <DWhitcher@aqmd.gov>; Grundler, Christopher <grundler.christopher@epa.gov>
> Subject: RE: Proposed "glider" reconsideration
>
> Dear Wayne,
>
> Last week on Thursday EPA made an announcement regarding the heavy-duty glider vehicle and glider kit regulations that we established in EPA's 2016 Final Rule for the Heavy-duty Phase 2 program.
>
> In response to a petition from 3 companies who assemble and sell heavy-duty gliders, EPA Administrator Pruitt sent a letter to the petitioner's stating that based on the issues they have raised, EPA intends to revisit the EPA requirements for glider vehicles and glide kits established in the Phase 2 final rule, and EPA will develop and issue a notice of proposed rulemaking (NPRM) to revisit the program. EPA has made no announcements regarding the timing of this new NPRM.
>
> Attached is the petition from the 3 companies, and EPA's response letter. All of this information is available on EPA's web site. I have also included the language in the House Appropriations Committee report from July that discussed this topic, and which asked EPA to study gliders in more detail and issue a report. That bill has not been passed into law. In the committee report, they note that the Committee has supported EPA's efforts under the DERA program to clean up older diesels, and they recognize that gliders go in the opposite direction.
>
> I will also send you a second email that contains press releases we saw last week from a few various stakeholders - including Congresswoman Black from Tennessee, the American Trucking Association, and the Truck and Engine Manufacturers Association. Note that both ATA and EMA also discuss EPA's announcement from last week to re-look at the trailer program established in the heavy-duty Phase 2 rule. Please let me know if you would like more information on that topic.
>

> I will also send you the assessment EPA did in the heavy-duty Phase 2 final rule regarding the potential impacts of glider vehicles on NOx and PM emissions and the potential public health impacts from gliders.
>
> Please let Chris or I know if there is additional information we can provide.
>
> Best regards,
>
> Bill Charmley
>
>
>
>
> -----Original Message-----
> From: Wayne Nastri [mailto:wnastri@aqmd.gov]
> Sent: Wednesday, August 23, 2017 4:23 PM
> To: Charmley, William <charmley.william@epa.gov>
> Cc: Philip Fine <pfine@aqmd.gov>; Jill Whynot <JWhynot@aqmd.gov>; mmiyasato@aqmd.gov; Denise Whitcher <DWhitcher@aqmd.gov>
> Subject: Proposed "glider" reconsideration
>
> Hi Bill,
>
> I hope this email finds you well. I read with some concern last week that the Agency may be reconsidering action with regard to the "Gliders". Could you please send me information relative to this issue as this has the potential to have significant impacts in our region. Thanks and I look forward to hearing from you.
>
> Wayne Nastri
> Executive Officer
> South Coast Air Quality Management District Sent from my iPhone
> <EPA Glider Kit FAQ - DRAFT October 2016.pdf>

To: Charmley, William[charmley.william@epa.gov]
Cc: Philip Fine[pfine@aqmd.gov]; Jill Whynot[JWhynot@aqmd.gov]; mmiyasato@aqmd.gov[mmiyasato@aqmd.gov]; Denise Whitcher[DWhitcher@aqmd.gov]
From: Wayne Nastri
Sent: Wed 8/23/2017 8:22:57 PM
Subject: Proposed "glider" reconsideration

Hi Bill,

I hope this email finds you well. I read with some concern last week that the Agency may be reconsidering action with regard to the "Gliders". Could you please send me information relative to this issue as this has the potential to have significant impacts in our region. Thanks and I look forward to hearing from you.

Wayne Nastri
Executive Officer
South Coast Air Quality Management District
Sent from my iPhone

To: Charmley, William[charmley.william@epa.gov]
From: Carter, Michael@ARB
Sent: Mon 11/20/2017 7:26:37 PM
Subject: RE: November OTAQ/ARB Senior Leadership Coordination: Monday, November 20 - Call for Agenda Items

Back at you Bill. Have a great Thanksgiving.

ARB Email

-----Original Message-----
From: Charmley, William [charmley.william@epa.gov]
Received: Monday, 20 Nov 2017, 9:01AM
To: Grundler, Christopher [grundler.christopher@epa.gov]; Cook, Leila [cook.leila@epa.gov]; Hengst, Benjamin [Hengst.Benjamin@epa.gov]; Haugen, David [haugen.david@epa.gov]; Simon, Karl [Simon.Karl@epa.gov]; Cliff, Steve@ARB [Steve.Cliff@arb.ca.gov]; Hebert, Annette@ARB [annette.hebert@arb.ca.gov]; Kitowski, Jack@ARB [jack.kitowski@arb.ca.gov]; Carter, Michael@ARB [michael.carter@arb.ca.gov]; Corey, Richard@ARB [richard.corey@arb.ca.gov]; Bevan, Analisa@ARB [analisa.bevan@arb.ca.gov]; Fuentes, Mark@ARB [mfuentes@arb.ca.gov]; Bunker, Byron [bunker.byron@epa.gov]; Fuentes, Mark@ARB [mfuentes@arb.ca.gov]; McCarthy, Mike@ARB [michael.mccarthy@arb.ca.gov]; Morris, Desirey@ARB [Desirey.Morris@arb.ca.gov]
Subject: RE: November OTAQ/ARB Senior Leadership Coordination: Monday, November 20 - Call for Agenda Items

Dear all –

I apologize, but both Karl and I now have a conflict that can't be moved, and Chris Grundler is on leave today.

So, I have asked Chris's secretary to cancel our call for this afternoon.

Jack/Mike C. – I will catch up with both of you within the next few days regarding a few highway heavy-duty topics.

I hope everyone has a nice Thanksgiving break.

Best regards,

Bill

From: Charmley, William
Sent: Friday, November 17, 2017 2:49 PM
To: Grundler, Christopher <grundler.christopher@epa.gov>; Cook, Leila <cook.leila@epa.gov>; Hengst, Benjamin <Hengst.Benjamin@epa.gov>; Haugen, David <haugen.david@epa.gov>; Simon, Karl <Simon.Karl@epa.gov>; steve.cliff@arb.ca.gov; Hebert, Annette@ARB <annette.hebert@arb.ca.gov>; jack.kitowski@arb.ca.gov; Carter, Michael@ARB <michael.carter@arb.ca.gov>; richard.corey@arb.ca.gov; analisa.bevan@arb.ca.gov; mark.fuentes@arb.ca.gov; Bunker, Byron <bunker.byron@epa.gov>; Fuentes, Mark@ARB <mfuentes@arb.ca.gov>; McCarthy, Mike@ARB <mmccarth@arb.ca.gov>; Morris, Desirey@ARB <Desirey.Morris@arb.ca.gov>
Subject: November OTAQ/ARB Senior Leadership Coordination: Monday, November 20 - Call for Agenda Items

Dear all –

Our November ARB/OTAQ senior leadership coordination call is scheduled for this upcoming Monday, November 20 from 12-1pm pacific, 3-4 eastern.

Here are a few suggestions I have for agenda items:

1. **Highway Heavy-duty Topics**

- EPA Update on Heavy-duty Gliders [Charmley]
- CARB & EPA Update on Heavy-duty NOx work
- CARB Update on Adoption of Heavy-duty Phase 2 Program [Carter/Kitowski]

2. **EPA Light-duty Mid-term Evaluation Update** [Charmley]

3. **CARB Advanced Clean Cars 2026+ Update** [Cliff/Hebert/McCarthy]

Please send me other topics you would like added to the Agenda. I will send out a final agenda on Monday morning.

Thanks

Bill

To: Cliff, Steve@ARB[Steve.Cliff@arb.ca.gov]; Hengst, Benjamin[Hengst.Benjamin@epa.gov]; Cook, Leila[cook.leila@epa.gov]; Fuentes, Mark@ARB[mfuentes@arb.ca.gov]; Haugen, David[haugen.david@epa.gov]; Hebert, Annette@ARB[annette.hebert@arb.ca.gov]; Simon, Karl[Simon.Karl@epa.gov]; Grundler, Christopher[grundler.christopher@epa.gov]; Charmley, William[charmley.william@epa.gov]; mike mccarthy[michael.mccarthy@arb.ca.gov]; Bunker, Byron[bunker.byron@epa.gov]; Carter, Michael@ARB[michael.carter@arb.ca.gov]; Morris, Desirey@ARB[Desirey.Morris@arb.ca.gov]; Bevan, Analisa@ARB[analisa.bevan@arb.ca.gov]; Fuentes, Mark@ARB[mfuentes@arb.ca.gov]; Kitowski, Jack@ARB[jack.kitowski@arb.ca.gov]
From: Corey, Richard@ARB
Sent: Mon 11/20/2017 6:21:44 PM
Subject: RE: November OTAQ/ARB Senior Leadership Coordination: Monday, November 20 - Call for Agenda Items

Understood. We wish you, Karl, Chris and our other EPA colleagues a wonderful Thanksgiving. Talk soon.
Richard

On November 20, 2017 at 9:01:40 AM PST, Charmley, William <charmley.william@epa.gov> wrote:

Dear all –

I apologize, but both Karl and I now have a conflict that can't be moved, and Chris Grundler is on leave today.

So, I have asked Chris's secretary to cancel our call for this afternoon.

Jack/Mike C. – I will catch up with both of you within the next few days regarding a few highway heavy-duty topics.

I hope everyone has a nice Thanksgiving break.

Best regards,

Bill

From: Charmley, William
Sent: Friday, November 17, 2017 2:49 PM
To: Grundler, Christopher <grundler.christopher@epa.gov>; Cook, Leila <cook.leila@epa.gov>; Hengst, Benjamin <Hengst.Benjamin@epa.gov>; Haugen, David <haugen.david@epa.gov>; Simon, Karl <Simon.Karl@epa.gov>; steve.cliff@arb.ca.gov; Hebert, Annette@ARB <annette.hebert@arb.ca.gov>; jack.kitowski@arb.ca.gov; Carter, Michael@ARB <michael.carter@arb.ca.gov>; richard.corey@arb.ca.gov; analisa.bevan@arb.ca.gov; mark.fuentes@arb.ca.gov; Bunker, Byron <bunker.byron@epa.gov>; Fuentes, Mark@ARB <mfuentes@arb.ca.gov>; McCarthy, Mike@ARB <mmccarth@arb.ca.gov>; Morris, Desirey@ARB <Desirey.Morris@arb.ca.gov>
Subject: November OTAQ/ARB Senior Leadership Coordination: Monday, November 20 - Call for Agenda Items

Dear all –

Our November ARB/OTAQ senior leadership coordination call is scheduled for this upcoming Monday, November 20 from 12-1pm pacific, 3-4 eastern.

Here are a few suggestions I have for agenda items:

1. **Highway Heavy-duty Topics**

•□□□□□□□□ EPA Update on Heavy-duty Gliders [Charmley]

•□□□□□□□□ CARB & EPA Update on Heavy-duty NOx work

•□□□□□□□□ CARB Update on Adoption of Heavy-duty Phase 2 Program [Carter/Kitowski]

2. **EPA Light-duty Mid-term Evaluation Update** [Charmley]

3. **CARB Advanced Clean Cars 2026+ Update** [Cliff/Hebert/McCarthy]

Please send me other topics you would like added to the Agenda. I will send out a final agenda on Monday morning.

Thanks

Bill

To: Grundler, Christopher[grundler.christopher@epa.gov]; Cook, Leila[cook.leila@epa.gov]; Hengst, Benjamin[Hengst.Benjamin@epa.gov]; Haugen, David[haugen.david@epa.gov]; Simon, Karl[Simon.Karl@epa.gov]; steve.cliff@arb.ca.gov[steve.cliff@arb.ca.gov]; Hebert, Annette@ARB[annette.hebert@arb.ca.gov]; jack.kitowski@arb.ca.gov[jack.kitowski@arb.ca.gov]; Carter, Michael@ARB[michael.carter@arb.ca.gov]; richard.corey@arb.ca.gov[richard.corey@arb.ca.gov]; analisa.bevan@arb.ca.gov[analisa.bevan@arb.ca.gov]; mark.fuentes@arb.ca.gov[mark.fuentes@arb.ca.gov]; Bunker, Byron[bunker.byron@epa.gov]; Fuentes, Mark@ARB[mfuentes@arb.ca.gov]; McCarthy, Mike@ARB[mmccarth@arb.ca.gov]; Morris, Desirey@ARB[Desirey.Morris@arb.ca.gov]
From: Charmley, William
Sent: Mon 11/20/2017 5:01:46 PM
Subject: RE: November OTAQ/ARB Senior Leadership Coordination: Monday, November 20 - Call for Agenda Items

Dear all –

I apologize, but both Karl and I now have a conflict that can't be moved, and Chris Grundler is on leave today.

So, I have asked Chris's secretary to cancel our call for this afternoon.

Jack/Mike C. – I will catch up with both of you within the next few days regarding a few highway heavy-duty topics.

I hope everyone has a nice Thanksgiving break.

Best regards,

Bill

From: Charmley, William
Sent: Friday, November 17, 2017 2:49 PM
To: Grundler, Christopher <grundler.christopher@epa.gov>; Cook, Leila <cook.leila@epa.gov>; Hengst, Benjamin <Hengst.Benjamin@epa.gov>; Haugen, David <haugen.david@epa.gov>; Simon, Karl <Simon.Karl@epa.gov>; steve.cliff@arb.ca.gov; Hebert, Annette@ARB <annette.hebert@arb.ca.gov>; jack.kitowski@arb.ca.gov; Carter, Michael@ARB <michael.carter@arb.ca.gov>; richard.corey@arb.ca.gov; analisa.bevan@arb.ca.gov; mark.fuentes@arb.ca.gov; Bunker, Byron <bunker.byron@epa.gov>; Fuentes, Mark@ARB <mfuentes@arb.ca.gov>; McCarthy, Mike@ARB <mmccarth@arb.ca.gov>; Morris, Desirey@ARB <Desirey.Morris@arb.ca.gov>
Subject: November OTAQ/ARB Senior Leadership Coordination: Monday, November 20 - Call for Agenda Items

Dear all –

Our November ARB/OTAQ senior leadership coordination call is scheduled for this upcoming Monday, November 20 from 12-1pm pacific, 3-4 eastern.

Here are a few suggestions I have for agenda items:

1. **Highway Heavy-duty Topics**

•□□□□□□□□ EPA Update on Heavy-duty Gliders [Charmley]

•□□□□□□□□ CARB & EPA Update on Heavy-duty NOx work

- CARB Update on Adoption of Heavy-duty Phase 2 Program [Carter/Kitowski]

2. **EPA Light-duty Mid-term Evaluation Update** [Charmley]

3. **CARB Advanced Clean Cars 2026+ Update** [Cliff/Hebert/McCarthy]

Please send me other topics you would like added to the Agenda. I will send out a final agenda on Monday morning.

Thanks

Bill

To: Carter, Michael@ARB[michael.carter@arb.ca.gov]
From: Charmley, William
Sent: Mon 8/21/2017 4:19:39 PM
Subject: RE: August 21 (Monday) - Monthly OTAQ/ARB Senior Leadership Coordination

Sounds good Mike. We'll go ahead and have the call.

I hope you are having a nice break. Remember today – don't look right at it without the right solar protection glasses (if that's what you are doing today!).

From: Carter, Michael@ARB [mailto:michael.carter@arb.ca.gov]
Sent: Monday, August 21, 2017 12:17 PM
To: Charmley, William <charmley.william@epa.gov>
Subject: RE: August 21 (Monday) - Monthly OTAQ/ARB Senior Leadership Coordination
Importance: High

I'm out the whole week Bill. I can't make the call, but I know jack can.

Sent from my ARB Android.

-----Original Message-----
From: Charmley, William [charmley.william@epa.gov]
Received: Monday, 21 Aug 2017, 6:01AM
To: McCarthy, Mike@ARB [michael.mccarthy@arb.ca.gov]; Kitowski, Jack@ARB [jack.kitowski@arb.ca.gov]; Carter, Michael@ARB [michael.carter@arb.ca.gov]
Subject: RE: August 21 (Monday) - Monthly OTAQ/ARB Senior Leadership Coordination

Mike M. – thanks.

Jack and Mike C. – if either of you are available I would like to go ahead and have the call today.

It would be good for a short catch-up on both light-duty and on EPA's announcement from last week on the heavy-duty phase 2 gliders and trailers.

Thanks

Bill

From: McCarthy, Mike@ARB [mailto:michael.mccarthy@arb.ca.gov]
Sent: Friday, August 18, 2017 7:38 PM
To: Charmley, William <charmley.william@epa.gov>; Grundler, Christopher <grundler.christopher@epa.gov>; Cook, Leila <cook.leila@epa.gov>; Hengst, Benjamin <Hengst.Benjamin@epa.gov>; Haugen, David <haugen.david@epa.gov>; Simon, Karl <Simon.Karl@epa.gov>; Hebert, Annette@ARB <annette.hebert@arb.ca.gov>; Kitowski, Jack@ARB <jack.kitowski@arb.ca.gov>; Carter, Michael@ARB <michael.carter@arb.ca.gov>; Corey, Richard@ARB <richard.corey@arb.ca.gov>; Bevan, Analisa@ARB <analisa.bevan@arb.ca.gov>; Fuentes, Mark@ARB <mfuentes@arb.ca.gov>; Bunker, Byron <bunker.byron@epa.gov>; Fuentes, Mark@ARB <mfuentes@arb.ca.gov>
Subject: RE: August 21 (Monday) - Monthly OTAQ/ARB Senior Leadership Coordination

Bill:

I'll be available and can tie in from Sacramento if we still have it. I can update you on what we have been doing about future requirements but that shouldn't take much time.

From: Charmley, William [mailto:charmley.william@epa.gov]
Sent: Friday, August 18, 2017 2:01 PM
To: Grundler, Christopher <grundler.christopher@epa.gov>; Cook, Leila <cook.leila@epa.gov>; Hengst, Benjamin <Hengst.Benjamin@epa.gov>; Haugen, David <haugen.david@epa.gov>;

Simon, Karl <Simon.Karl@epa.gov>; Hebert, Annette@ARB <annette.hebert@arb.ca.gov>; Kitowski, Jack@ARB <jack.kitowski@arb.ca.gov>; Carter, Michael@ARB <michael.carter@arb.ca.gov>; Corey, Richard@ARB <richard.corey@arb.ca.gov>; Bevan, Analisa@ARB <analisa.bevan@arb.ca.gov>; Fuentes, Mark@ARB <mfuentes@arb.ca.gov>; Bunker, Byron <bunker.byron@epa.gov>; Fuentes, Mark@ARB <mfuentes@arb.ca.gov>; McCarthy, Mike@ARB <michael.mccarthy@arb.ca.gov>
Subject: August 21 (Monday) - Monthly OTAQ/ARB Senior Leadership Coordination

Dear all –

Our next monthly call if for this upcoming Monday from 12-1pm pacific, and 3-4pm eastern time.

I am available, and perhaps others from OTAQ, but I know that both Karl and Chris will either be on their way to California or in California for the Asilomar conference, so I don't think they can participate.

If we want to have the call that would be okay from my perspective, Ex. 5 - Deliberative Process

Ex. 5 - Deliberative Process

I would appreciate hearing from others regarding the level of interest and availability for a call on Monday afternoon.

Thanks

Bill

-----Original Appointment-----
From: Grundler, Christopher
Sent: Friday, September 09, 2016 2:50 PM
To: Grundler, Christopher; Cook, Leila; Hengst, Benjamin; Charmley, William; Haugen, David; Simon, Karl; Ayala, Alberto@ARB; Hebert, Annette@ARB; jack.kitowski@arb.ca.gov; Carter, Michael@ARB; richard.corey@arb.ca.gov; analisa.bevan@arb.ca.gov; mark.fuentes@arb.ca.gov; Bunker, Byron
Cc: Fuentes, Mark@ARB; McCarthy, Mike@ARB
Subject: Monthly OTAQ/ARB Senior Leadership Coordination **Ex. 6 - Personal Privacy**
When: Monday, August 21, 2017 3:00 PM-4:00 PM (UTC-05:00) Eastern Time (US & Canada).
Where: C174/Rm 6520

To: McCarthy, Mike@ARB[michael.mccarthy@arb.ca.gov]; Kitowski, Jack@ARB[jack.kitowski@arb.ca.gov]; Carter, Michael@ARB[michael.carter@arb.ca.gov]
From: Charmley, William
Sent: Mon 8/21/2017 1:00:49 PM
Subject: RE: August 21 (Monday) - Monthly OTAQ/ARB Senior Leadership Coordination

Mike M. – thanks.

Jack and Mike C. – if either of you are available I would like to go ahead and have the call today.

It would be good for a short catch-up on both light-duty and on EPA's announcement from last week on the heavy-duty phase 2 gliders and trailers.

Thanks

Bill

From: McCarthy, Mike@ARB [mailto:michael.mccarthy@arb.ca.gov]
Sent: Friday, August 18, 2017 7:38 PM
To: Charmley, William <charmley.william@epa.gov>; Grundler, Christopher <grundler.christopher@epa.gov>; Cook, Leila <cook.leila@epa.gov>; Hengst, Benjamin <Hengst.Benjamin@epa.gov>; Haugen, David <haugen.david@epa.gov>; Simon, Karl <Simon.Karl@epa.gov>; Hebert, Annette@ARB <annette.hebert@arb.ca.gov>; Kitowski, Jack@ARB <jack.kitowski@arb.ca.gov>; Carter, Michael@ARB <michael.carter@arb.ca.gov>; Corey, Richard@ARB <richard.corey@arb.ca.gov>; Bevan, Analisa@ARB <analisa.bevan@arb.ca.gov>; Fuentes, Mark@ARB <mfuentes@arb.ca.gov>; Bunker, Byron <bunker.byron@epa.gov>; Fuentes, Mark@ARB <mfuentes@arb.ca.gov>
Subject: RE: August 21 (Monday) - Monthly OTAQ/ARB Senior Leadership Coordination

Bill:

I'll be available and can tie in from Sacramento if we still have it. I can update you on what we have been doing about future requirements but that shouldn't take much time.

From: Charmley, William [mailto:charmley.william@epa.gov]
Sent: Friday, August 18, 2017 2:01 PM
To: Grundler, Christopher <grundler.christopher@epa.gov>; Cook, Leila <cook.leila@epa.gov>; Hengst, Benjamin <Hengst.Benjamin@epa.gov>; Haugen, David <haugen.david@epa.gov>; Simon, Karl <Simon.Karl@epa.gov>; Hebert, Annette@ARB <annette.hebert@arb.ca.gov>; Kitowski, Jack@ARB <jack.kitowski@arb.ca.gov>; Carter, Michael@ARB <michael.carter@arb.ca.gov>; Corey, Richard@ARB <richard.corey@arb.ca.gov>; Bevan, Analisa@ARB <analisa.bevan@arb.ca.gov>; Fuentes, Mark@ARB <mfuentes@arb.ca.gov>; Bunker, Byron <bunker.byron@epa.gov>; Fuentes, Mark@ARB <mfuentes@arb.ca.gov>; McCarthy, Mike@ARB <michael.mccarthy@arb.ca.gov>
Subject: August 21 (Monday) - Monthly OTAQ/ARB Senior Leadership Coordination

Dear all –

Our next monthly call if for this upcoming Monday from 12-1pm pacific, and 3-4pm eastern time.

I am available, and perhaps others from OTAQ, but I know that both Karl and Chris will either be on their way to California or in California for the Asilomar conference, so I don't think they can participate.

If we want to have the call that would be okay from my perspective, Ex. 5 - Deliberative Process

Ex. 5 - Deliberative Process

I would appreciate hearing from others regarding the level of interest and availability for a call on Monday afternoon.

Thanks

Bill

-----Original Appointment-----
From: Grundler, Christopher
Sent: Friday, September 09, 2016 2:50 PM
To: Grundler, Christopher; Cook, Leila; Hengst, Benjamin; Charmley, William; Haugen, David; Simon, Karl; Ayala, Alberto@ARB; Hebert, Annette@ARB; jack.kitowski@arb.ca.gov; Carter, Michael@ARB; richard.corey@arb.ca.gov; analisa.bevan@arb.ca.gov; mark.fuentes@arb.ca.gov; Bunker, Byron
Cc: Fuentes, Mark@ARB; McCarthy, Mike@ARB
Subject: Monthly OTAQ/ARB Senior Leadership Coordination **Ex. 6 - Personal Privacy**
When: Monday, August 21, 2017 3:00 PM-4:00 PM (UTC-05:00) Eastern Time (US & Canada).
Where: C174/Rm 6520

To: Grundler, Christopher[grundler.christopher@epa.gov]; Cook, Leila[cook.leila@epa.gov]; Hengst, Benjamin[Hengst.Benjamin@epa.gov]; Haugen, David[haugen.david@epa.gov]; Simon, Karl[Simon.Karl@epa.gov]; steve.cliff@arb.ca.gov[steve.cliff@arb.ca.gov]; Hebert, Annette@ARB[annette.hebert@arb.ca.gov]; jack.kitowski@arb.ca.gov[jack.kitowski@arb.ca.gov]; Carter, Michael@ARB[michael.carter@arb.ca.gov]; richard.corey@arb.ca.gov[richard.corey@arb.ca.gov]; analisa.bevan@arb.ca.gov[analisa.bevan@arb.ca.gov]; mark.fuentes@arb.ca.gov[mark.fuentes@arb.ca.gov]; Bunker, Byron[bunker.byron@epa.gov]; Fuentes, Mark@ARB[mfuentes@arb.ca.gov]; McCarthy, Mike@ARB[mmccarth@arb.ca.gov]; Morris, Desirey@ARB[Desirey.Morris@arb.ca.gov]
From: Charmley, William
Sent: Fri 11/17/2017 7:49:01 PM
Subject: November OTAQ/ARB Senior Leadership Coordination: Monday, November 20 - Call for Agenda Items

Dear all –

Our November ARB/OTAQ senior leadership coordination call is scheduled for this upcoming Monday, November 20 from 12-1pm pacific, 3-4 eastern.

Here are a few suggestions I have for agenda items:

1. **Highway Heavy-duty Topics**

•□□□□□□□□ EPA Update on Heavy-duty Gliders [Charmley]

•□□□□□□□□ CARB & EPA Update on Heavy-duty NOx work

•□□□□□□□□ CARB Update on Adoption of Heavy-duty Phase 2 Program [Carter/Kitowski]

2. **EPA Light-duty Mid-term Evaluation Update** [Charmley]

3. **CARB Advanced Clean Cars 2026+ Update** [Cliff/Hebert/McCarthy]

Please send me other topics you would like added to the Agenda. I will send out a final agenda on Monday morning.

Thanks

Bill

To: Grundler, Christopher[grundler.christopher@epa.gov]; Cook, Leila[cook.leila@epa.gov]; Hengst, Benjamin[Hengst.Benjamin@epa.gov]; Haugen, David[haugen.david@epa.gov]; Simon, Karl[Simon.Karl@epa.gov]; Hebert, Annette@ARB[annette.hebert@arb.ca.gov]; jack.kitowski@arb.ca.gov[jack.kitowski@arb.ca.gov]; Carter, Michael@ARB[michael.carter@arb.ca.gov]; richard.corey@arb.ca.gov[richard.corey@arb.ca.gov]; analisa.bevan@arb.ca.gov[analisa.bevan@arb.ca.gov]; mark.fuentes@arb.ca.gov[mark.fuentes@arb.ca.gov]; Bunker, Byron[bunker.byron@epa.gov]; Fuentes, Mark@ARB[mfuentes@arb.ca.gov]; McCarthy, Mike@ARB[mmccarth@arb.ca.gov]
From: Charmley, William
Sent: Fri 8/18/2017 9:00:39 PM
Subject: August 21 (Monday) - Monthly OTAQ/ARB Senior Leadership Coordination

Dear all –

Our next monthly call if for this upcoming Monday from 12-1pm pacific, and 3-4pm eastern time.

I am available, and perhaps others from OTAQ, but I know that both Karl and Chris will either be on their way to California or in California for the Asilomar conference, so I don't think they can participate.

If we want to have the call that would be okay from my perspective, I can provide an update regarding the actions EPA has taken recently regarding the light-duty MTE, and then yesterday's actions regarding trailers and gliders.

I would appreciate hearing from others regarding the level of interest and availability for a call on Monday afternoon.

Thanks

Bill

-----Original Appointment-----
From: Grundler, Christopher
Sent: Friday, September 09, 2016 2:50 PM
To: Grundler, Christopher; Cook, Leila; Hengst, Benjamin; Charmley, William; Haugen, David; Simon, Karl; Ayala, Alberto@ARB; Hebert, Annette@ARB; jack.kitowski@arb.ca.gov; Carter, Michael@ARB; richard.corey@arb.ca.gov; analisa.bevan@arb.ca.gov; mark.fuentes@arb.ca.gov; Bunker, Byron
Cc: Fuentes, Mark@ARB; McCarthy, Mike@ARB
Subject: Monthly OTAQ/ARB Senior Leadership Coordination Ex. 6 - Personal Privacy
When: Monday, August 21, 2017 3:00 PM-4:00 PM (UTC-05:00) Eastern Time (US & Canada).
Where: C174/Rm 6520

To: Flint, Steven (DEC)[steven.flint@dec.ny.gov]; Moulis, Charles[moulis.charles@epa.gov]; Mitchell, George[Mitchell.George@epa.gov]
From: Charmley, William
Sent: Wed 11/22/2017 5:43:18 PM
Subject: RE: EPA Notice of Proposed Rulemaking "Repeal of Emission Requirements for Glider Vehicles, Glider Engines, and Glider Kits"

Dear Steve,

Next week I will have two of the EPA staff follow-up with you on your questions – Chuck Moulis, and George Mitchell. Chuck has collected some information regarding how glider vehicles are sold, and recently George has been looking at Polk registration data to see where the glider vehicles are registered.

Chuck and George – can the two of you talk on Monday and then get back with Steve Flint?

Best regards,

Bill

Bill Charmley

Director

Assessment and Standards Division

Office of Transportation and Air Quality

U.S. Environmental Protection Agency

National Vehicle and Fuel Emissions Laboratory

2000 Traverwood Drive

Ann Arbor, MI 48105

desk ph. 734-214-4466

cell ph. 734-545-0333

e-mail: charmley.william@epa.gov

From: Flint, Steven (DEC) [mailto:steven.flint@dec.ny.gov]
Sent: Tuesday, November 14, 2017 4:43 PM
To: Charmley, William <charmley.william@epa.gov>
Subject: Re: EPA Notice of Proposed Rulemaking "Repeal of Emission Requirements for Glider Vehicles, Glider Engines, and Glider Kits"

Bill- how are these sold and registered? I'd be interested in trying to figure out the spatial distribution

Sent from my iPhone

On Nov 9, 2017, at 2:51 PM, Charmley, William <charmley.william@epa.gov> wrote:

ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.

Dear Steve,

2 things on this topic.

First, in the past two months we have been able to perform detailed emissions testing of glider vehicles at the Ann Arbor laboratory. I am hopeful we will be able to put a technical memo documenting those results into the docket for the Phase 2 rule within the next 1-2 weeks. That will help shed some light on the subject of the emissions from gliders.

Second – we recently had a call with Tennessee Tech to discuss their test program that as very helpful. I think we will be able to shed more light on that test program in the next few weeks and also docket that information for the public.

Thanks

Bill

From: Flint, Steven (DEC) [mailto:steven.flint@dec.ny.gov]
Sent: Thursday, November 09, 2017 2:00 PM
To: Charmley, William <charmley.william@epa.gov>
Subject: RE: EPA Notice of Proposed Rulemaking "Repeal of Emission Requirements for Glider Vehicles, Glider Engines, and Glider Kits"

Bill- I'm missing something.

In the petition from Fitzgerald et al there is an appendix from Tennessee Tech about emissions testing. While there are statements about NOx, NOx does not appear in the Table. Is there a more complete document somewhere, because I would like to see actual NOx numbers, as well as test procedures and methodology (eg, a statement that PM is below detection limits is worthless unless the detection limit is identified)

thanks

Steven E. Flint, PE

Director, Division of Air Resources

New York State Department of Environmental Conservation

625 Broadway, Albany, NY 12233-3250

P: (518) 402-8452 | F: (518) 402-9035 | steven.flint@dec.ny.gov

www.dec.ny.gov | <image001.png> | <image002.png>

From: Charmley, William [mailto:charmley.william@epa.gov]
Sent: Thursday, November 09, 2017 12:57 PM
Subject: EPA Notice of Proposed Rulemaking "Repeal of Emission Requirements for Glider Vehicles, Glider Engines, and Glider Kits"

ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.

Dear Highway Heavy-duty Stakeholder;

Today EPA Administrator Pruitt signed the Notice of Proposed Rulemaking titled "*Repeal of Emission Requirements for Glider Vehicles, Glider Engines, and Glider Kits*". You can find information regarding this proposed rule at the following website;

https://www.epa.gov/regulations-emissions-vehicles-and-engines/regulations-greenhouse-gas-emissions-commercial-trucks

EPA is opening a public comment period on the proposed rule which extends until January 5, 2018. EPA will also hold a public hearing on the proposal on Monday, December 4, 2017.

Information on how to submit public comments, as well as information on the public hearing, are detailed in the proposed rule. A pre-Federal Register publication version of the proposed rule is available at the website listed above.

Sincerely,

Bill Charmley

US EPA

To: Carter, Michael@ARB[michael.carter@arb.ca.gov]; Jack Kitowski (jack.kitowski@arb.ca.gov)[jack.kitowski@arb.ca.gov]; richard.corey@arb.ca.gov[richard.corey@arb.ca.gov]
From: Charmley, William
Sent: Fri 8/18/2017 8:46:03 PM
Subject: EPA actions from yesterday regarding trailers and gliders

Dear Richard, Jack and Mike –

Ex. 5 - Deliberative Process

Below is a link to an EPA web site that includes the letters the Administrator sent yesterday to the trailer petitioners and the glider petitioners regarding the Administrator's decision to consider the petitioners issues via a new rulemaking process.

Thanks

Bill

https://www.epa.gov/regulations-emissions-vehicles-and-engines/petitions-reconsideration-phase-2-ghg-emissions-and-fuel

To: Wayne Nastri[wnastri@aqmd.gov]
Cc: Philip Fine[pfine@aqmd.gov]; Jill Whynot[JWhynot@aqmd.gov]; mmiyasato@aqmd.gov[mmiyasato@aqmd.gov]; Denise Whitcher[DWhitcher@aqmd.gov]; Grundler, Christopher[grundler.christopher@epa.gov]
From: Charmley, William
Sent: Thur 8/24/2017 4:00:47 PM
Subject: RE: Proposed "glider" reconsideration
EPA Glider Kit FAQ - DRAFT October 2016.pdf

Wayne -

Here is a draft fact sheet we developed last year to explain what a glider is, and why EPA took the actions we did in the Phase 2 final rule regarding gliders.

-----Original Message-----
From: Charmley, William
Sent: Thursday, August 24, 2017 11:55 AM
To: 'Wayne Nastri' <wnastri@aqmd.gov>
Cc: Philip Fine <pfine@aqmd.gov>; Jill Whynot <JWhynot@aqmd.gov>; mmiyasato@aqmd.gov; Denise Whitcher <DWhitcher@aqmd.gov>; Grundler, Christopher <grundler.christopher@epa.gov>
Subject: RE: Proposed "glider" reconsideration

Dear Wayne,

Last week on Thursday EPA made an announcement regarding the heavy-duty glider vehicle and glider kit regulations that we established in EPA's 2016 Final Rule for the Heavy-duty Phase 2 program.

In response to a petition from 3 companies who assemble and sell heavy-duty gliders, EPA Administrator Pruitt sent a letter to the petitioner's stating that based on the issues they have raised, EPA intends to revisit the EPA requirements for glider vehicles and glide kits established in the Phase 2 final rule, and EPA will develop and issue a notice of proposed rulemaking (NPRM) to revisit the program. EPA has made no announcements regarding the timing of this new NPRM.

Attached is the petition from the 3 companies, and EPA's response letter. All of this information is available on EPA's web site. I have also included the language in the House Appropriations Committee report from July that discussed this topic, and which asked EPA to study gliders in more detail and issue a report. That bill has not been passed into law. In the committee report, they note that the Committee has supported EPA's efforts under the DERA program to clean up older diesels, and they recognize that gliders go in the opposite direction.

I will also send you a second email that contains press releases we saw last week from a few various stakeholders – including Congresswoman Black from Tennessee, the American Trucking Association, and the Truck and Engine Manufacturers Association. Note that both ATA and EMA also discuss EPA's announcement from last week to re-look at the trailer program established in the heavy-duty Phase 2 rule. Please let me know if you would like more information on that topic.

I will also send you the assessment EPA did in the heavy-duty Phase 2 final rule regarding the potential impacts of glider vehicles on NOx and PM emissions and the potential public health impacts from gliders.

Please let Chris or I know if there is additional information we can provide.

Best regards,

Bill Charmley

-----Original Message-----
From: Wayne Nastri [mailto:wnastri@aqmd.gov]
Sent: Wednesday, August 23, 2017 4:23 PM
To: Charmley, William <charmley.william@epa.gov>
Cc: Philip Fine <pfine@aqmd.gov>; Jill Whynot <JWhynot@aqmd.gov>; mmiyasato@aqmd.gov; Denise Whitcher <DWhitcher@aqmd.gov>
Subject: Proposed "glider" reconsideration

Hi Bill,

I hope this email finds you well. I read with some concern last week that the Agency may be reconsidering action with regard to the "Gliders". Could you please send me information relative to this issue as this has the potential to have significant impacts in our region. Thanks and I look forward to hearing from you.

Wayne Nastri
Executive Officer
South Coast Air Quality Management District Sent from my iPhone

To: Wayne Nastri[wnastri@aqmd.gov]
Cc: Philip Fine[pfine@aqmd.gov]; Jill Whynot[JWhynot@aqmd.gov]; mmiyasato@aqmd.gov[mmiyasato@aqmd.gov]; Denise Whitcher[DWhitcher@aqmd.gov]; Grundler, Christopher[grundler.christopher@epa.gov]
From: Charmley, William
Sent: Thur 8/24/2017 3:57:35 PM
Subject: RE: Proposed "glider" reconsideration
EMA, 2017 08 21 PRC GHG Phase 2 Revisit Press Release.pdf

Dear Wayne - here are the 3 press releases I mentioned in my previous email;

FOR IMMEDIATE RELEASE
August 18, 2017

Contact: Sean McNally
(703) 838-1995

ATA Concerned Reopening of GHG Phase 2 Rule Could Undermine Federal Uniformity

Group Worried EPA Announcement Could Allow California to Set De Facto Standards

Arlington, Va. – Today, the American Trucking Associations officials said they were concerned that by moving to reopen the second phase of its Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty rule, the Environmental Protection Agency could be setting the stage for California to impose a de facto national standard, superseding federal rules.

"ATA is proud of our record on fuel efficiency and sustainability," said **ATA President and CEO Chris Spear**. "In large part due to our support for Phase 1 of the EPA's greenhouse gas rule, today's new trucks are cleaner and more efficient than ever. We had worked closely with

EPA and the National Highway Traffic Safety Administration on Phase 2 to continue building on that success, but by reopening the rule to reexamine trailers and glider kits, EPA has opened the door to California taking the lead, and a more aggressive track, in setting trailer standards.

"As representatives of an interstate industry," Spear said, "ATA believes a single national standard, set by federal regulators, is preferable to at worst, a patchwork of state standards or at best, a de facto national standard that is set without the appropriate opportunity for the entire regulated community – many members of which are not based in California – to weigh in."

"As we have done over the entire course in developing the Phase 2 Rule, we will continue to work closely with both EPA and NHTSA as they reopen and consider changes to the final rule" said **Glen Kedzie, ATA vice president and energy and environmental counsel**.

For nearly a decade, ATA has supported improvements in fuel efficiency through our support of the EPA SmartWay Transport Partnership, the establishment of an ATA Sustainability Task Force and subsequent creation of the Fuel Efficiency Advisory Committee. That advisory committee laid out 15 principles for the Phase 2 rule, all of which were met.

"The trucking industry will invest in fuel efficiency technologies that are robustly tested, affordable and that show real, measurable results," Kedzie said. "We encourage regulators in Washington, D.C., and California to take concerns like feasibility, durability and other operational issues into account when evaluating these technologies."

American Trucking Associations is the largest national trade association for the trucking industry. Through a federation of 50 affiliated state trucking associations and industry-related conferences and councils, ATA is the voice of the industry America depends on most to move our nation's freight. Follow ATA on Twitter or on Facebook. Trucking Moves America Forward

https://black.house.gov/media/press-releases/epa-intends-roll-back-job-killing-regulation-hurting-small-business-owners

EPA Intends to Roll Back Job Killing Regulation Hurting Small Business Owners

August 17, 2017

Press Release

Move will Save Thousands of Jobs Nationwide

Washington, D.C. – Today, the Environmental Protection Agency (EPA) announced it will change a crippling Obama-era regulation that threatens to shut down the U.S. glider kit industry. Without immediate action, the rule will devastate these small and medium-sized manufacturers, costing thousands of jobs in Tennessee alone.

Glider kits are used to refurbish wrecked or unsafe highway tractors, and are often far more cost effective for the fleets of small business owners who are unable to buy all new vehicles. Known as the "Phase 2 Rule," the Obama-era regulation would cap a manufacturer's production at 300 glider kits per year by January 2019, a small fraction of the current production level. Ending the production of these high quality, safe and efficient vehicles will result in a direct loss of approximately 20,000 jobs nationwide. On a broader scale, an independent study found that the economic impact of this rule could exceed a conservative estimate of $1 billion nationwide.

Congressman Diane Black (R-TN-06) released the following statement:

"The Obama administration's rule not only ignores the benefits of gliders, it destroys an entire industry. To say that I am grateful for the hard work of Administrator Pruitt and his team is an understatement. Tennesseans deeply value the work ethic that those in this industry exemplify, and it is with great pride that we can count this as a victory for communities across our state. I applaud the Administrator for recognizing the harmful effects this overreaching regulation would have on thousands of families dependent on this trade as a way of life."

Following the announcement, **EPA Administrator Scott Pruitt said**, *"EPA is committed to revisiting rules that may not fall under the Agency's jurisdiction and have negative impacts on businesses across the country. By revisiting these provisions, we are allowing all stakeholders to share their concerns and the Agency to explore the full impact of these rules."*

Glider kit manufacturers such as Fitzgerald Glider Kits, Harrison Truck Centers and Indiana Phoenix, have argued that despite the previous Administration's stated goal to reduce greenhouse gas emissions, the EPA did not perform any actual testing to analyze the environmental impact of remanufactured engines and gliders compared to new, or Original Equipment Manufacturer ("OEM"), vehicles. Instead, it relied on unsubstantiated assumptions about the number of older engines used in gliders and their emissions.

This argument was confirmed in a 2016 study by Tennessee Tech University. The study tested emissions from thirteen vehicles and concluded that remanufactured engines performed equally as well as the OEM engines when compared with the 2010 EPA emissions standards. *"This study demonstrates that the so-called data the EPA relied upon was based on unsupported assumptions rather than true science,"* **said Congressman Black.**

Impact on Glider Kit Manufacturers

In Tennessee, Fitzgerald Glider Kits was founded in 1989 by Tommy Fitzgerald Sr. and his brother, Ricky, beginning in a single bay facility located in Pall Mall. Thirty years later, the company has expanded to six counties in Tennessee, with facilities covering roughly 750,000 square feet and 500 employees in Tennessee alone.

"On behalf of my family and the terrific employees at Fitzgerald Glider Kits, I want to thank Congressman Black and Administrator Pruitt for their leadership on this issue and genuinely caring for the concerns of small businesses like ours," **said Tommy Fitzgerald Sr.** *"There is a way to strike a rational balance between environmental concerns and jobs, but this rule is not it. The EPA's announcement should inspire small businesses everywhere."*

"The Fitzgerald family is very grateful for Congressman Black's dedication and leadership on the glider issue dating back to 2015. The Congressman's recognition of the potentially adverse impact of a misinformed rule on thousands of jobs in rural areas of the Upper Cumberland Region and the tens of thousands of jobs nationally demonstrates her commitment to helping preserve and create American jobs," **said Fitzgerald Sr.**

The EPA's announcement today follows voiced concerns by stakeholders and business owners, like Fitzgerald, regarding the impact these regulations would have on their industries. Congressman Black has worked alongside Fitzgerald Trucking since 2015 to ensure that the restrictions are not enforced.

"The Fitzgerald family has become part of our own family in Washington. They have the ability to bring businesses and jobs to the small, rural areas of Tennessee and have changed the lives of countless families," **said Congressman Black.** *"It is my hope that this action by Administrator Pruitt will continue that legacy. To the Fitzgerald's, this business is far more than making a dollar – it's about giving back, and I am proud to stand next to them as they build on their vision."*

Background:

Trucking operators rely on glider kits for the construction of affordable and reliable vehicles which in turn promote economic growth and job stability. A well assembled kit gives small business owners the ability to minimize maintenance downtime and provides their drivers with important safety features as they drive across the country. The gliders lower the cost of truck ownership compared to a factory-produced vehicle, allowing small business owners to continue operating efficiently with the highest quality trucks, without the added cost of purchasing a new vehicle.

Fitzgerald Glider Kits is North America's largest Glider Kit assembler and specializes in installing re-manufactured main components of trucks into a new cab. These cabs are reliable and fuel efficient, and provide trucking businesses with a more cost-effective way of doing business. In some cases, the gliders can save 25% off the sticker price of a new truck and possess better fuel economy. The company is based in central Tennessee and produces more than 3,500 trucks per year, offering various models of household name brands. Still owned and operated by Robert Fitzgerald, Tommy Fitzgerald Jr. and associate Nick Bresaw, Fitzgerald Glider Kits has facilities in six locations across the Upper Cumberland region.

In July 2015, Congressman Black introduced and successfully passed H. Amdt. 630, an amendment to *the Department of the Interior, Environment, and Related Agencies Appropriations Act* that would prohibit the EPA from applying its proposed "Phase 2 rules" on greenhouse gas emissions standard for medium and heavy duty trucks to glider kits. H. Amdt. 630 would prohibit the EPA from extending the rule to glider kits as they were wrongly labeled as "new vehicles." The amendment passed the House by voice vote.

Click HERE to view the EPA's press release.

###

Congressman Diane Black represents Tennessee's 6th Congressional District. A nurse for more than 40 years, she serves as Chairman of the House Budget Committee and a member of the Ways and Means Committee.

-----Original Message-----
From: Wayne Nastri [mailto:wnastri@aqmd.gov]
Sent: Wednesday, August 23, 2017 4:23 PM
To: Charmley, William <charmley.william@epa.gov>
Cc: Philip Fine <pfine@aqmd.gov>; Jill Whynot <JWhynot@aqmd.gov>; mmiyasato@aqmd.gov; Denise Whitcher <DWhitcher@aqmd.gov>
Subject: Proposed "glider" reconsideration

Hi Bill,

I hope this email finds you well. I read with some concern last week that the Agency may be reconsidering action with regard to the "Gliders". Could you please send me information relative to this issue as this has the potential to have significant impacts in our region. Thanks and I look forward to hearing from you.

Wayne Nastri

Executive Officer

South Coast Air Quality Management District Sent from my iPhone

Truck & Engine Manufacturers Association®
Bringing Cleaner Power to the World Since 1968®

333 West Wacker Drive, Suite 810
Chicago, Illinois 60606
Tel: (312) 929-1970 | Fax: (312) 929-1975
www.truckandenginemanufacturers.org

CONTACT: Timothy Blubaugh
(312) 929-1972

FOR IMMEDIATE RELEASE

ENGINE AND TRUCK MANUFACTURERS EXPRESS CONCERN THAT REVISITING THE PHASE 2 GREENHOUSE GAS AND FUEL EFFICIENCY RULES COULD LEAD TO MISALIGNMENT OF REGULATORY REQUIREMENTS

CHICAGO, August 21, 2017 – The Environmental Protection Agency (EPA) has announced its intent to revisit provisions of the second phase of the greenhouse gas and fuel efficiency rules for medium- and heavy-duty on-highway trucks and engines that were finalized last year. The Phase 2 program builds on the Phase 1 regulations that manufacturers have successfully implemented starting in 2014. While the new regulations are significantly more ambitious and complex than the Phase 1 requirements, EMA and its members have consistently supported their implementation.

"As the primary manufacturers of medium- and heavy-duty engines and vehicles in the United States, EMA members provided tremendous technical input to EPA and NHTSA in the development of the Phase 2 rules, based on our experience implementing the Phase 1 requirements," stated Jed Mandel, EMA President. "EMA members strongly support a uniform, nationwide program to apply regulatory controls to the greenhouse gas emissions and fuel efficiency of the heavy-duty products they produce. The collaborative rulemaking approach that EPA and NHTSA used to develop the Phase 2 rules is fostering the adoption of an aligned program by the California Air Resources Board. Aligning the heavy-duty on-highway greenhouse gas and fuel efficiency regulations across the United States is the only way for manufacturers to effectively meet the needs of their customers in the nation's trucking industry."

Commenting on EPA's announcement to revisit provisions of the federal rules, Mr. Mandel expressed concern that reopening the rules could lead to a lack of regulatory alignment. "Right now, the regulators in California are in the process of developing their Phase 2 greenhouse gas rules," stated Mr. Mandel, "and truck and engine manufacturers have significant concerns that reopening the federal rules could lead to the promulgation of different requirements across the nation." EMA members have already begun investing considerable resources to develop products that will achieve the complex and stringent new standards beginning in 2021 and are concerned that changes to the rules could reduce necessary leadtime and regulatory certainty. In addition, those product development expenditures could multiply if manufacturers are forced to meet differing, and potentially conflicting, requirements. "An aligned, nationwide program is essential to the success of the Phase 1 greenhouse gas and fuel efficiency rules, and that alignment becomes even more crucial for the technology-forcing Phase 2 program," emphasized Mr. Mandel.

Engine and truck manufacturers have a long history of working cooperatively with EPA and NHTSA on successful and innovative programs to reduce pollutant emissions, greenhouse gas emissions, and fuel consumption from medium- and heavy-duty engines and vehicles. Looking forward, Mr. Mandel commented that "we stand ready to bring additional technical input to the agencies to address the concerns that are the subject of the announcement."

######

The Truck and Engine Manufacturers Association (EMA) is a trade association representing worldwide manufacturers of internal combustion engines used in applications such as trucks and buses, farm and construction equipment, locomotives, marine vessels, and lawn, garden, and utility equipment, as well as the manufacturers of medium and heavy-duty trucks with a gross vehicle weight rating greater than 10,000 pounds. EMA works with government and other stakeholders to help the nation achieve its goals of cleaner fuels, more efficient engines and vehicles, cleaner air, and safer trucks and roadways.

102440_1.docxc

Bcc: jwesthafer@24m.com[jwesthafer@24m.com]; jeff@38northsolutions.com[jeff@38northsolutions.com]; robert.sliwa@airflowtruck.com[robert.sliwa@airflowtruck.com]; nrahim@aisintca.com[nrahim@aisintca.com]; tombrown@aisintca.com[tombrown@aisintca.com]; cmiller@ajw-inc.com[cmiller@ajw-inc.com]; Brian.Tucker@alcoa.com[Brian.Tucker@alcoa.com]; mario.greco@alcoa.com[mario.greco@alcoa.com]; gambrozaitis@autoalliance.org[gambrozaitis@autoalliance.org]; debbie.gordon@allisontransmission.com[debbie.gordon@allisontransmission.com]; mark.janson@allisontransmission.com[mark.janson@allisontransmission.com]; william.formanek@allisontransmission.com[william.formanek@allisontransmission.com]; travis.bonnell@allisontransmission.com[travis.bonnell@allisontransmission.com]; barbara.chance@allisontransmission.com[barbara.chance@allisontransmission.com]; kevin.rodgers@allisontransmission.com[kevin.rodgers@allisontransmission.com]; prasmussen@altetechnologies.com[prasmussen@altetechnologies.com]; doug.richman@kaiseral.com[doug.richman@kaiseral.com]; Brian.Tucker@alcoa.com[Brian.Tucker@alcoa.com]; tlanger@aceee.org[tlanger@aceee.org]; jhall@steel.org[jhall@steel.org]; cconnor@lungusa.org[cconnor@lungusa.org]; paul.billings@lung.org[paul.billings@lung.org]; scrane@thoracic.org[scrane@thoracic.org]; ekjorgensen@jxe.com[ekjorgensen@jxe.com]; Greenhaus, Doug[DGREENHAUS@NADA.org]; ktreadway@kwsco.com[ktreadway@kwsco.com]; bgraves@trucking.org[bgraves@trucking.org]; Glen Kedzie[GKedzie@trucking.org]; thodges@gogginwarehousing.com[thodges@gogginwarehousing.com]; arousseau@anl.gov[arousseau@anl.gov]; erask@anl.gov[erask@anl.gov]; shalbach@anl.gov[shalbach@anl.gov]; lgaines@anl.gov[lgaines@anl.gov]; rthomas@iltrucking.org[rthomas@iltrucking.org]; tjennings@arcindy.com[tjennings@arcindy.com]; jgoodfellow@avondalepartnersllc.com[jgoodfellow@avondalepartnersllc.com]; jjacoby@azuredynamics.com[jjacoby@azuredynamics.com]; jmancuso@azuredynamics.com[jmancuso@azuredynamics.com]; mkiers@azuredynamics.com[mkiers@azuredynamics.com]; nbouchon@azuredynamics.com[nbouchon@azuredynamics.com]; riacobelli@azuredynamics.com[riacobelli@azuredynamics.com]; derek.matthews@baesystems.com[derek.matthews@baesystems.com]; thomas.m.apalenek@baesystems.com[thomas.m.apalenek@baesystems.com]; jcolbourn@baaqmd.gov[jcolbourn@baaqmd.gov]; mmurphy@baaqmd.gov[mmurphy@baaqmd.gov]; pvondriska@bergstrominc.com[pvondriska@bergstrominc.com]; lan.bothwell@bestbuy.com[lan.bothwell@bestbuy.com]; jsigurdson@bison.ca[jsigurdson@bison.ca]; bruce.miles@blue-bird.com[bruce.miles@blue-bird.com]; zoel@bluegreenalliance.org[zoel@bluegreenalliance.org]; robm@bluegreenalliance.org[robm@bluegreenalliance.org]; stuart.ogle@us.bosch.com[stuart.ogle@us.bosch.com]; chambersjuli@bfusa.com[chambersjuli@bfusa.com]; kjensen@bandag.com[kjensen@bandag.com]; tidwellgreer@bfusa.com[tidwellgreer@bfusa.com]; GaryB@crengland.com[GaryB@crengland.com]; bho@arb.ca.gov[bho@arb.ca.gov]; dluo@arb.ca.gov[dluo@arb.ca.gov]; mscheibl@arb.ca.gov[mscheibl@arb.ca.gov]; pmilkey@arb.ca.gov[pmilkey@arb.ca.gov]; peggy.taricco@arb.ca.gov[peggy.taricco@arb.ca.gov]; bob.fletcher@arb.ca.gov[bob.fletcher@arb.ca.gov]; rhill@arb.ca.gov[rhill@arb.ca.gov]; schinn@arb.ca.gov[schinn@arb.ca.gov]; stephan.lemieux@arb.ca.gov[stephan.lemieux@arb.ca.gov]; mary.nichols@arb.ca.gov[mary.nichols@arb.ca.gov]; kim.heroy-rogalski@arb.ca.gov[kim.heroy-rogalski@arb.ca.gov]; michael.carter@arb.ca.gov[michael.carter@arb.ca.gov]; richard.corey@arb.ca.gov[richard.corey@arb.ca.gov]; todd.sax@arb.ca.gov[todd.sax@arb.ca.gov]; g.forrester@calmarresearch.com[g.forrester@calmarresearch.com]; l.maynus@calmarresearch.com[l.maynus@calmarresearch.com]; r.sheckler@calmarresearch.com[r.sheckler@calmarresearch.com]; don.moore@atminc.on.ca[don.moore@atminc.on.ca]; brian.bernasek@carlyle.com[brian.bernasek@carlyle.com]; martin.sumner@carlyle.com[martin.sumner@carlyle.com]; sharon@cascadesierrasolutions.org[sharon@cascadesierrasolutions.org];

christina@catercommunications.com[christina@catercommunications.com];
agamajr@cat.com[agamajr@cat.com]; coe_brian_p@cat.com[coe_brian_p@cat.com];
JBryant@celadontrucking.com[JBryant@celadontrucking.com]; rawn@ceres.org[rawn@ceres.org];
davidre@challenger.com[davidre@challenger.com];
anthony.demattee@cityofchicago.org[anthony.demattee@cityofchicago.org];
DarrinM.Hall@cityofhouston.net[DarrinM.Hall@cityofhouston.net]; dmarshall@catf.us[dmarshall@catf.us];
cleanairfrank@cleanairwatch.org[cleanairfrank@cleanairwatch.org];
tcampbell@cleanenergyfuels.com[tcampbell@cleanenergyfuels.com];
karen@cngonesource.com[karen@cngonesource.com]; agildea@blakey-agnew.com[agildea@blakey-agnew.com]; martin@coalitionforcleanair.org[martin@coalitionforcleanair.org];
jack@consumerfed.org[jack@consumerfed.org]; heavener.carl@con-way.com[heavener.carl@con-way.com]; ruder.scott@con-way.com[ruder.scott@con-way.com]; sangdahl.robert@con-way.com[sangdahl.robert@con-way.com]; mullett.randy@con-way.com[mullett.randy@con-way.com];
jschulze@cscmp.org[jschulze@cscmp.org];
hamkar@covenanttransport.com[hamkar@covenanttransport.com];
Lzepp@crosspointkinetics.com[Lzepp@crosspointkinetics.com];
brian.c.mormino@cummins.com[brian.c.mormino@cummins.com];
michael.j.ruth@cummins.com[michael.j.ruth@cummins.com];
steve.j.charlton@cummins.com[steve.j.charlton@cummins.com];
christopher.riley@cummins.com[christopher.riley@cummins.com];
brian.burton@daimler.com[brian.burton@daimler.com];
david.kayes@daimler.com[david.kayes@daimler.com];
sean.waters@daimler.com[sean.waters@daimler.com]; donald.keski-hynnila@daimler.com[donald.keski-hynnila@daimler.com]; dale.kardos@motorvehicleregs.com[dale.kardos@motorvehicleregs.com];
damien.flynn@dana.com[damien.flynn@dana.com]; tom.bosler@dana.com[tom.bosler@dana.com];
mark.davis1@dana.com[mark.davis1@dana.com];
Linda.J.Rusin@delphi.com[Linda.J.Rusin@delphi.com];
james.bigelow@dhl.com[james.bigelow@dhl.com];
aschaeffer@dieselforum.org[aschaeffer@dieselforum.org];
heather.mckee@us.army.mil[heather.mckee@us.army.mil];
ken.howden@ee.doe.gov[ken.howden@ee.doe.gov];
reuben.sarkar@ee.doe.gov[reuben.sarkar@ee.doe.gov];
david.howell@ee.doe.gov[david.howell@ee.doe.gov];
thomas.white@ee.doe.gov[thomas.white@ee.doe.gov];
Linda.Bluestein@ee.doe.gov[Linda.Bluestein@ee.doe.gov];
Susan.Rogers@ee.doe.gov[Susan.Rogers@ee.doe.gov];
kenneth.kelly@nrel.gov[kenneth.kelly@nrel.gov]; eric.wood@nrel.gov[eric.wood@nrel.gov];
adam.duran@nrel.gov[adam.duran@nrel.gov]; jeff.gonder@nrel.gov[jeff.gonder@nrel.gov];
Matthew.Thornton@nrel.gov[Matthew.Thornton@nrel.gov];
mmcgowan@dykema.com[mmcgowan@dykema.com];
adrienne.boose@dynamex.com[adrienne.boose@dynamex.com];
timothy.walter@dynamex.com[timothy.walter@dynamex.com];
eajus@earthjustice.org[eajus@earthjustice.org]; ddepoincy@eastmfg.com[ddepoincy@eastmfg.com];
cbarnett@alpinegroup.com[cbarnett@alpinegroup.com];
stephenjhunter@eaton.com[stephenjhunter@eaton.com];
MihaiDorobantu@eaton.com[MihaiDorobantu@eaton.com];
michael.block@emisstar.com[michael.block@emisstar.com];
mdegain@enginecert.com[mdegain@enginecert.com];
Ben@environmentmassachusetts.org[Ben@environmentmassachusetts.org];
ed.crupi@ec.gc.ca[ed.crupi@ec.gc.ca]; karley.webb@gov.bc.ca[karley.webb@gov.bc.ca];
lynn.nadon@ec.gc.ca[lynn.nadon@ec.gc.ca]; Naomi.Katsumi@ec.gc.ca[Naomi.Katsumi@ec.gc.ca];
Stephane.Couroux@ec.gc.ca[Stephane.Couroux@ec.gc.ca];
julie.deschatelets@ec.gc.ca[julie.deschatelets@ec.gc.ca];
joanna.bellamy@ec.gc.ca[joanna.bellamy@ec.gc.ca];
andrew.giallonardo@ec.gc.ca[andrew.giallonardo@ec.gc.ca];
miranda@environmentillinois.org[miranda@environmentillinois.org]; ecraft@edf.org[ecraft@edf.org];

jmathers@edf.org[jmathers@edf.org]; vpatton@edf.org[vpatton@edf.org];
fkrupp@edf.org[fkrupp@edf.org]; rcollier@edf.org[rcollier@edf.org]; dsteyn@e-one.com[dsteyn@e-one.com]; Duncan.JOHNSTONE@ec.europa.eu[Duncan.JOHNSTONE@ec.europa.eu];
Guenter.Hoermandinger@ec.europa.eu[Guenter.Hoermandinger@ec.europa.eu];
marianne.klingbeil@ec.europa.eu[marianne.klingbeil@ec.europa.eu]; doug@exa.com[doug@exa.com];
Gregory.Rymarz@dot.gov[Gregory.Rymarz@dot.gov];
sam.snyder@fedex.com[sam.snyder@fedex.com]; wkcurtis@fedex.com[wkcurtis@fedex.com];
patricia.morinchin@fcagroup.com[patricia.morinchin@fcagroup.com];
gary.oshnock@fcagroup.com[gary.oshnock@fcagroup.com];
mdh25@chrysler.com[mdh25@chrysler.com]; ken.degroot@fcagroup.com[ken.degroot@fcagroup.com];
bob_schomber@fpl.com[bob_schomber@fpl.com];
cdenson@fontainecorp.com[cdenson@fontainecorp.com]; tjlively@foodlion.com[tjlively@foodlion.com];
jviera@ford.com[jviera@ford.com]; kmcalind@ford.com[kmcalind@ford.com];
nhomeist@ford.com[nhomeist@ford.com]; rholycro@ford.com[rholycro@ford.com];
cwilli96@ford.com[cwilli96@ford.com]; jkaltenstein@foe.org[jkaltenstein@foe.org];
mkeever@foe.org[mkeever@foe.org]; michael.kunz@amgeneral.com[michael.kunz@amgeneral.com];
kenneth.weber@gapac.com[kenneth.weber@gapac.com]; gvismara@gillig.com[gvismara@gillig.com];
barbara.kiss@gm.com[barbara.kiss@gm.com]; robert.babik@gm.com[robert.babik@gm.com];
mark.cherveny@goodyear.com[mark.cherveny@goodyear.com];
sford@goodyear.com[sford@goodyear.com];
KAltrichter@gordontrucking.com[KAltrichter@gordontrucking.com];
crfetz@greatdanetrailers.com[crfetz@greatdanetrailers.com];
Lance.O'Daniel@greatwide.com[Lance.O'Daniel@greatwide.com];
bcurry@groot.com[bcurry@groot.com]; anystrom@wolding.com[anystrom@wolding.com];
obpatton@comcast.net[obpatton@comcast.net]; ghertner.susan@heb.com[ghertner.susan@heb.com];
ykudo@hmmusa.com[ykudo@hmmusa.com]; aharada@hmmusa.com[aharada@hmmusa.com];
kkokrda@hmmusa.com[kkokrda@hmmusa.com];
stacey.bernards@honeywell.com[stacey.bernards@honeywell.com];
gcorinescu@hubgroup.com[gcorinescu@hubgroup.com]; swysmull@us.ibm.com[swysmull@us.ibm.com];
fanta@theicct.org[fanta@theicct.org]; ben@theicct.org[ben@theicct.org];
drew@theicct.org[drew@theicct.org]; lbrowning@icfi.com[lbrowning@icfi.com];
anrej.divis@ihs.com[anrej.divis@ihs.com]; sabina.strautman@ikea.com[sabina.strautman@ikea.com];
lknezevic@greenstudents.org[lknezevic@greenstudents.org];
Mary@impactconsult.com[Mary@impactconsult.com];
ajump@indianaphoenix.com[ajump@indianaphoenix.com]; mpwalsh@igc.org[mpwalsh@igc.org];
dieseltrap@gmail.com[dieseltrap@gmail.com]; a.karkkainen@nav-international.com[a.karkkainen@nav-international.com]; takahiro.koseki@isza.com[takahiro.koseki@isza.com];
kristi_noland@jbhunt.com[kristi_noland@jbhunt.com];
jamie_buckmeier@jayco.com[jamie_buckmeier@jayco.com];
avandenb@jcpenney.com[avandenb@jcpenney.com];
stevedickson@johnchristner.com[stevedickson@johnchristner.com]; Stiffler-ClausVanessaG@JohnDeere.com[Stiffler-ClausVanessaG@JohnDeere.com];
mkeany1@cscus.jnj.com[mkeany1@cscus.jnj.com];
Randy.Peart@PACCAR.com[Randy.Peart@PACCAR.com];
stelios.chrysandreas@kcc.com[stelios.chrysandreas@kcc.com];
davew@knighttrans.com[davew@knighttrans.com]; June.Fischer@kohls.com[June.Fischer@kohls.com];
tdzojko@kraft.com[tdzojko@kraft.com]; smoran@limited-logistics.COM[smoran@limited-logistics.COM];
kevin.g.perry@lowes.com[kevin.g.perry@lowes.com]; ncivello@ltitrucking.com[ncivello@ltitrucking.com];
dbau@lubrizol.com[dbau@lubrizol.com]; craigaltemose@gmail.com[craigaltemose@gmail.com];
jerry.warmkessel@macktrucks.com[jerry.warmkessel@macktrucks.com];
mark.linton@mackayco.com[mark.linton@mackayco.com];
rsharpe@mackinnontransport.com[rsharpe@mackinnontransport.com];
swierman@marama.org[swierman@marama.org];
mjeffress@maverickusa.com[mjeffress@maverickusa.com]; jkubsh@meca.org[jkubsh@meca.org];
asantos@meca.org[asantos@meca.org]; awilson@mema.org[awilson@mema.org];
lmerino@mema.org[lmerino@mema.org];

Barnes.Tommy@menloworldwide.com[Barnes.Tommy@menloworldwide.com];
michael.d.scott@daimler.com[michael.d.scott@daimler.com];
james.keane@meritor.com[james.keane@meritor.com];
bradford.hicks@meritor.com[bradford.hicks@meritor.com]; dean@m-v-t.com[dean@m-v-t.com];
jason.bokar@us.michelin.com[jason.bokar@us.michelin.com];
mike.wischhusen@us.michelin.com[mike.wischhusen@us.michelin.com];
randy.clark@us.michelin.com[randy.clark@us.michelin.com];
sue.nelson@us.michelin.com[sue.nelson@us.michelin.com];
stan.lew@us.michelin.com[stan.lew@us.michelin.com]; dlowell@mjbradley.com[dlowell@mjbradley.com];
Martin, Neal[RMartin@mlstrategies.com]; mjeppsen@nd.edu[mjeppsen@nd.edu];
mike.roeth@nacfe.org[mike.roeth@nacfe.org]; nkruger@4cleanair.org[nkruger@4cleanair.org];
gwen@ntda.org[gwen@ntda.org]; doyle@ntea.com[doyle@ntea.com];
steves@ntea.com[steves@ntea.com]; mkastner@ntea.com[mkastner@ntea.com];
bowes@nwf.org[bowes@nwf.org]; Lipman@nwf.org[Lipman@nwf.org];
jclarke@ngvamerica.org[jclarke@ngvamerica.org]; Ltonachel@nrdc.org[Ltonachel@nrdc.org];
Cortney.Guzlas@Navistar.com[Cortney.Guzlas@Navistar.com];
david.majors@navistar.com[david.majors@navistar.com];
anthony.cook@navistar.com[anthony.cook@navistar.com];
bruce.harrison@navistar.com[bruce.harrison@navistar.com];
colin.casey@navistar.com[colin.casey@navistar.com];
david.piech@navistar.com[david.piech@navistar.com];
matt.smith@navistar.com[matt.smith@navistar.com];
patrick.charbonneau@navistar.com[patrick.charbonneau@navistar.com];
richard.kempf@navistar.com[richard.kempf@navistar.com];
Stan.miller@navistar.com[Stan.miller@navistar.com];
steve.perkins@navistar.com[steve.perkins@navistar.com];
msolomon@nescaum.org[msolomon@nescaum.org]; amarin@nescaum.org[amarin@nescaum.org];
dmckenzie@neweagle.net[dmckenzie@neweagle.net];
joel_abraman@newflyer.com[joel_abraman@newflyer.com];
Chris.Salmi@dep.state.nj.us[Chris.Salmi@dep.state.nj.us]; Zivanic@nwttech.com[Zivanic@nwttech.com];
seflint@gw.dec.state.ny.us[seflint@gw.dec.state.ny.us]; james.tamm@dot.gov[james.tamm@dot.gov];
tami.brost@nike.com[tami.brost@nike.com]; tracy.woodard@nissan-usa.com[tracy.woodard@nissan-usa.com]; yamaday@ntcna.nissan-usa.com[yamaday@ntcna.nissan-usa.com];
krose@nosecone.com[krose@nosecone.com]; joe.dalum@odyne.com[joe.dalum@odyne.com];
bill.mammen@odyne.com[bill.mammen@odyne.com];
MATT.JARMUZ@Dueco.com[MATT.JARMUZ@Dueco.com];
Phillip.Eidler@odyne.com[Phillip.Eidler@odyne.com]; john.petras@odyne.com[john.petras@odyne.com];
shela.fletcher@officedepot.com[shela.fletcher@officedepot.com]; trent@theoec.org[trent@theoec.org];
abayatpour@crimson.ua.edu[abayatpour@crimson.ua.edu];
jon_gensler@hks11.harvard.edu[jon_gensler@hks11.harvard.edu];
millerch1980@yahoo.com[millerch1980@yahoo.com];
wade_barnes@hks11.harvard.edu[wade_barnes@hks11.harvard.edu];
kneehe@ornl.gov[kneehe@ornl.gov]; rlackore@oshkoshcorp.com[rlackore@oshkoshcorp.com];
astam@oshkoshcorp.com[astam@oshkoshcorp.com];
scott_grenerth@ooida.com[scott_grenerth@ooida.com]; rajkovacz@ooida.com[rajkovacz@ooida.com];
tom_weakley@ooida.com[tom_weakley@ooida.com]; tappc@pamt.com[tappc@pamt.com];
landon.sproull@paccar.com[landon.sproull@paccar.com];
Bart.Wieland@daftrucks.com[Bart.Wieland@daftrucks.com];
everett.chu@paccar.com[everett.chu@paccar.com];
Margaret.Sullivan@paccar.com[Margaret.Sullivan@paccar.com]; Dan Kieffer[Dan.Kieffer@PACCAR.com]; tom.sloane@paccar.com[tom.sloane@paccar.com];
Yisheng.Zhang@parker.com[Yisheng.Zhang@parker.com]; chindle@parker.com[chindle@parker.com];
jloeffler@parker.com[jloeffler@parker.com]; mike.hasinec@penske.com[mike.hasinec@penske.com];
John.A.Sheehy@fritolay.com[John.A.Sheehy@fritolay.com];
carolyn.gaston@paccar.com[carolyn.gaston@paccar.com]; bwright@pmaa.org[bwright@pmaa.org];
Dwight.Hansell@pi-innovo.com[Dwight.Hansell@pi-innovo.com];

Mmorganptsa@cox.net[Mmorganptsa@cox.net];
andy.suhy@psiengines.com[andy.suhy@psiengines.com]; al.cohn@psi-atis.com[al.cohn@psi-atis.com];
broderick.sp@pg.com[broderick.sp@pg.com]; leslies@pscleanair.org[leslies@pscleanair.org];
todd.reabe@qg.com[todd.reabe@qg.com]; rbingle@rei.com[rbingle@rei.com];
graham.weller@ricardo.com[graham.weller@ricardo.com];
mark.kuhn@ricardo.com[mark.kuhn@ricardo.com];
gary.grandominico@ridgecorp.com[gary.grandominico@ridgecorp.com];
bret.moss@ridgecorp.com[bret.moss@ridgecorp.com]; Casey.Chroust@retail-
leaders.org[Casey.Chroust@retail-leaders.org];
tmhodgson@roadsafeamerica.org[tmhodgson@roadsafeamerica.org];
jolene.Sternweis@roehl.net[jolene.Sternweis@roehl.net];
timj@rosenbaueramerica.com[timj@rosenbaueramerica.com]; dpolan@ruan.com[dpolan@ruan.com];
tnorberg@rma.org[tnorberg@rma.org]; scott_perry@ryder.com[scott_perry@ryder.com];
George_M_Luostari@ryder.com[George_M_Luostari@ryder.com]; matthew.marks@sabic-
ip.com[matthew.marks@sabic-ip.com]; russell.batson@sabic-ip.com[russell.batson@sabic-ip.com];
gerlb@schneider.com[gerlb@schneider.com]; RMinsk@secureenergy.org[RMinsk@secureenergy.org];
jprice@sensors-inc.com[jprice@sensors-inc.com]; ServidiM@sharpsec.com[ServidiM@sharpsec.com];
ann.mesnikoff@sierraclub.org[ann.mesnikoff@sierraclub.org]; gina.coplon-
newfield@sierraclub.org[gina.coplon-newfield@sierraclub.org];
sarah.gulezian@sierraclub.org[sarah.gulezian@sierraclub.org];
david.rostker@sba.gov[david.rostker@sba.gov];
singham@smarttrucksystems.com[singham@smarttrucksystems.com];
swulff@smarttrucksystems.com[swulff@smarttrucksystems.com];
mrajapakshe@smithers.com[mrajapakshe@smithers.com];
pshepler@smithers.com[pshepler@smithers.com]; jpopio@smithersmail.com[jpopio@smithersmail.com];
hhogo@aqmd.gov[hhogo@aqmd.gov]; PGreenwald@aqmd.gov[PGreenwald@aqmd.gov];
barghout@southernresearch.org[barghout@southernresearch.org];
mark.sackett@spartanmotors.com[mark.sackett@spartanmotors.com];
Wes.Chestnut@spartanmotors.com[Wes.Chestnut@spartanmotors.com];
todd.wright@kochcompanies.com[todd.wright@kochcompanies.com];
rdonovan@stateslogistics.com[rdonovan@stateslogistics.com];
bob.montgomery@stemco.com[bob.montgomery@stemco.com];
jeff.grossmann@stemco.com[jeff.grossmann@stemco.com];
fritz.marinko@stemco.com[fritz.marinko@stemco.com]; cschnuth@stllabs.com[cschnuth@stllabs.com];
dpetit@stllabs.com[dpetit@stllabs.com]; rboccelli@stonyfield.com[rboccelli@stonyfield.com];
garyf@stoughtontrailers.com[garyf@stoughtontrailers.com];
jbell@stricktrailers.com[jbell@stricktrailers.com]; sburns@stricktrailers.com[sburns@stricktrailers.com];
jhoover@diamatrix.net[jhoover@diamatrix.net]; maireadek@gmail.com[maireadek@gmail.com];
rsmith@sutphencorp.com[rsmith@sutphencorp.com];
david_berry@swifttrans.com[david_berry@swifttrans.com]; jwanthony@swri.org[jwanthony@swri.org];
joseph.anthony@swri.org[joseph.anthony@swri.org]; brian.wilson@swri.org[brian.wilson@swri.org];
wendy.rigterink@target.com[wendy.rigterink@target.com];
jimc@tecsafesystems.com[jimc@tecsafesystems.com];
james.mentele@chartermi.net[james.mentele@chartermi.net];
pquinn@theaccordgroup.com[pquinn@theaccordgroup.com];
travis_j_riney@homedepot.com[travis_j_riney@homedepot.com];
dudley.miller@timken.com[dudley.miller@timken.com]; jeff@timpte.com[jeff@timpte.com];
harvey@retread.org[harvey@retread.org];
ian@melamedcommunications.com[ian@melamedcommunications.com];
bruce.sauer@penton.com[bruce.sauer@penton.com];
kyle.alexander@transplace.com[kyle.alexander@transplace.com];
marlene.hein@tc.gc.ca[marlene.hein@tc.gc.ca]; paul.topping@tc.gc.ca[paul.topping@tc.gc.ca];
roussed@tc.gc.ca[roussed@tc.gc.ca]; jim.lothrop@tc.gc.ca[jim.lothrop@tc.gc.ca];
ryan.klomp@tc.gc.ca[ryan.klomp@tc.gc.ca]; marc.a.belzile@tc.gc.ca[marc.a.belzile@tc.gc.ca];
barry.pekilis@tc.gc.ca[barry.pekilis@tc.gc.ca]; chmelnit@cc.umanitoba.ca[chmelnit@cc.umanitoba.ca];
dstgermain@ROBERT.CA[dstgermain@ROBERT.CA];

johna@triadtransport.com[johna@triadtransport.com];
cpargeter@trilliuminvest.com[cpargeter@trilliuminvest.com];
jmandel@emamail.org[jmandel@emamail.org]; tblubaugh@emamail.org[tblubaugh@emamail.org];
john@ttmanet.org[john@ttmanet.org]; jeff@ttmanet.org[jeff@ttmanet.org];
kelly.gallagher@tufts.edu[kelly.gallagher@tufts.edu]; efigdor@pirg.org[efigdor@pirg.org];
jhamilton@ucsusa.org[jhamilton@ucsusa.org]; KKimmell@ucsusa.org[KKimmell@ucsusa.org];
Bbell@ucsusa.org[Bbell@ucsusa.org]; danair@ucsusa.org[DAnair@ucsusa.org];
mrobinson@ucsusa.org[mrobinson@ucsusa.org]; jnassar@uaw.net[jnassar@uaw.net];
tgarcia@uaw.net[tgarcia@uaw.net]; dguernsey@ups.com[dguernsey@ups.com];
mcallaway@usxpress.com[mcallaway@usxpress.com]; gmacko@usg.com[gmacko@usg.com];
AESworski@ashland.com[AESworski@ashland.com];
niklas.v.gustavsson@volvo.com[niklas.v.gustavsson@volvo.com];
steve.berry@volvo.com[steve.berry@volvo.com];
anthony.greszler@volvo.com[anthony.greszler@volvo.com];
timothy.lafon@volvo.com[timothy.lafon@volvo.com]; nclark@wvu.edu[nclark@wvu.edu];
scott.wayne@mail.wvu.edu[scott.wayne@mail.wvu.edu];
jscarcelli@wabashnational.com[jscarcelli@wabashnational.com];
gus.sumcad@wabashnational.com[gus.sumcad@wabashnational.com]; chris.sultemeier@wal-mart.com[chris.sultemeier@wal-mart.com]; kkelly5@wm.com[kkelly5@wm.com];
mehrenhaft@wm.com[mehrenhaft@wm.com]; srobinson@wm.com[srobinson@wm.com];
richards@wksh.com[richards@wksh.com]; wdsenterprises@gmail.com[wdsenterprises@gmail.com];
wengmark@aol.com[wengmark@aol.com]; robert.gaarder@webasto.com[robert.gaarder@webasto.com];
bvanamburg@weststart.org[bvanamburg@weststart.org]; rparish@weststart.org[rparish@weststart.org];
TDenoyer@wolfetrahan.com[TDenoyer@wolfetrahan.com];
srichardson@xlspecializedtrailer.com[srichardson@xlspecializedtrailer.com];
sfairbanks@xlspecializedtrailer.com[sfairbanks@xlspecializedtrailer.com];
mike.kelley@yrcw.com[mike.kelley@yrcw.com];
tommy@fitzgeraldtrucksales.com[tommy@fitzgeraldtrucksales.com];
Nile_Elam@ooida.com[Nile_Elam@ooida.com];
dustin.petersen@htctrucks.com[dustin.petersen@htctrucks.com];
dkeener@indianaphoenix.com[dkeener@indianaphoenix.com];
mmiyasato@aqmd.gov[mmiyasato@aqmd.gov]; wnastri@aqmd.gov[wnastri@aqmd.gov];
mspears@emamail.org[mspears@emamail.org]; jack.kitowski@arb.ca.gov[jack.kitowski@arb.ca.gov];
steve.cliff@arb.ca.gov[steve.cliff@arb.ca.gov]; ecwhite@placer.ca.gov[ecwhite@placer.ca.gov];
steven.flint@dec.ny.gov[steven.flint@dec.ny.gov]; Erin.Luke@PACCAR.com[Erin.Luke@PACCAR.com];
kkinsey@nescaum.org[kkinsey@nescaum.org]; Moulis, Charles[moulis.charles@epa.gov]; Yanca, Catherine[yanca.catherine@epa.gov]; Parsons, Christy[Parsons.Christy@epa.gov]; Kathryn Sargeant (sargeant.kathryn@epa.gov)[sargeant.kathryn@epa.gov]; Angela Cullen[Cullen.Angela@epa.gov];
Brewer, Tom (tbrewer@tntech.edu)[tbrewer@tntech.edu]
From: Charmley, William
Sent: Thur 11/9/2017 5:57:12 PM
Subject: EPA Notice of Proposed Rulemaking "Repeal of Emission Requirements for Glider Vehicles, Glider Engines, and Glider Kits"

Dear Highway Heavy-duty Stakeholder;

Today EPA Administrator Pruitt signed the Notice of Proposed Rulemaking titled "*Repeal of Emission Requirements for Glider Vehicles, Glider Engines, and Glider Kits*". You can find information regarding this proposed rule at the following website;

https://www.epa.gov/regulations-emissions-vehicles-and-engines/regulations-greenhouse-gas-emissions-commercial-trucks

EPA is opening a public comment period on the proposed rule which extends until January 5, 2018. EPA will also hold a public hearing on the proposal on Monday, December 4, 2017.

Information on how to submit public comments, as well as information on the public hearing, are detailed in the proposed rule. A pre-Federal Register publication version of the proposed rule is available at the website listed above.

Sincerely,

Bill Charmley

US EPA

To: Wayne Nastri[wnastri@aqmd.gov]
Cc: Philip Fine[pfine@aqmd.gov]; Jill Whynot[JWhynot@aqmd.gov]; mmiyasato@aqmd.gov[mmiyasato@aqmd.gov]; Denise Whitcher[DWhitcher@aqmd.gov]; Grundler, Christopher[grundler.christopher@epa.gov]
From: Charmley, William
Sent: Thur 8/24/2017 3:55:54 PM
Subject: RE: Proposed "glider" reconsideration
Fitzgerald et al petition for reconsideration of EPA's glider kit regula....pdf
Signed - Letter to Fitzgerald - Gliders.pdf
House Appropriations Committee's Report, FY2018 Interior-Enviornment App....pdf

Dear Wayne,

Last week on Thursday EPA made an announcement regarding the heavy-duty glider vehicle and glider kit regulations that we established in EPA's 2016 Final Rule for the Heavy-duty Phase 2 program.

In response to a petition from 3 companies who assemble and sell heavy-duty gliders, EPA Administrator Pruitt sent a letter to the petitioner's stating that based on the issues they have raised, EPA intends to revisit the EPA requirements for glider vehicles and glide kits established in the Phase 2 final rule, and EPA will develop and issue a notice of proposed rulemaking (NPRM) to revisit the program. EPA has made no announcements regarding the timing of this new NPRM.

Attached is the petition from the 3 companies, and EPA's response letter. All of this information is available on EPA's web site. I have also included the language in the House Appropriations Committee report from July that discussed this topic, and which asked EPA to study gliders in more detail and issue a report. That bill has not been passed into law. In the committee report, they note that the Committee has supported EPA's efforts under the DERA program to clean up older diesels, and they recognize that gliders go in the opposite direction.

I will also send you a second email that contains press releases we saw last week from a few various stakeholders – including Congresswoman Black from Tennessee, the American Trucking Association, and the Truck and Engine Manufacturers Association. Note that both ATA and EMA also discuss EPA's announcement from last week to re-look at the trailer program established in the heavy-duty Phase 2 rule. Please let me know if you would like more information on that topic.

I will also send you the assessment EPA did in the heavy-duty Phase 2 final rule regarding the potential impacts of glider vehicles on NOx and PM emissions and the potential public health impacts from gliders.

Please let Chris or I know if there is additional information we can provide.

Best regards,

Bill Charmley

-----Original Message-----
From: Wayne Nastri [mailto:wnastri@aqmd.gov]
Sent: Wednesday, August 23, 2017 4:23 PM
To: Charmley, William <charmley.william@epa.gov>
Cc: Philip Fine <pfine@aqmd.gov>; Jill Whynot <JWhynot@aqmd.gov>; mmiyasato@aqmd.gov; Denise Whitcher <DWhitcher@aqmd.gov>
Subject: Proposed "glider" reconsideration

Hi Bill,

I hope this email finds you well. I read with some concern last week that the Agency may be reconsidering action with regard to the "Gliders". Could you please send me information relative to this issue as this has the potential to have significant impacts in our region. Thanks and I look forward to hearing from you.

Wayne Nastri
Executive Officer
South Coast Air Quality Management District Sent from my iPhone

RECEIVED
2017 JUL 11 AM 10: 01
OFFICE OF THE
EXECUTIVE SECRETARIAT

July 10, 2017

Scott Pruitt, Administrator
Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Re: Petition for Reconsideration of Application of the Final Rule Entitled "Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles—Phase 2 Final Rule" to Gliders

Pursuant to 5 U.S.C. § 553(e) and 42 U.S.C. § 7607(d)(7)(B), Fitzgerald Glider Kits, LLC ("Fitzgerald"), Harrison Truck Centers, Inc. ("Harrison"), and Indiana Phoenix, Inc. ("Indiana Phoenix") (collectively, "Petitioners"), on behalf of the glider industry, hereby request that the Environmental Protection Agency ("EPA") reconsider the application of the final rule entitled "Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles—Phase 2 Final Rule," 81 Fed. Reg. 73,478 (Oct. 25, 2016) ("Phase 2 Rule"), to "gliders."[1]

Background

"Gliders" are medium- and heavy-duty trucks that are assembled by combining certain new truck parts (that together constitute a "glider kit") with the refurbished powertrain—the engine, the transmission, and typically the rear axle—of an older truck. The glider kit generally includes the tractor chassis with frame, front axle, cab, and brakes. 81 Fed. Reg. at 73,512. A glider is manufactured by combining the powertrain from the used vehicle with the parts in the glider kit.

Gliders are approximately 25% less expensive than new trucks, a significant cost savings for small businesses and owner-operators. Envtl. Prot. Agency & Dep't of Transp., Response to Comments for Joint Rulemaking ("RTC"), at 1846 (Aug. 2016) (comment of GATR Truck Center). Businesses and drivers that cannot afford a new truck often purchase gliders as an alternative to continuing to drive their older vehicle. *Id.* at 1825 (comment of Clarke Power Services). Glider kits can also extend the working life of a damaged vehicle. *Id.* Gliders also require less maintenance, yielding less downtime, and have modern safety features and amenities. *Id.* Overall, they offer a more economical option for smaller fleets and owner-operators to maintain the reliability of their commercial trucking operations.

In the Phase 2 Rule published October 25, 2016, EPA for the first time mandated that glider kits, glider vehicles, and rebuilt engines installed in gliders (hereinafter "gliders") satisfy

[1] The Phase 2 Rule was jointly promulgated by EPA and the National Highway Traffic Safety Administration ("NHTSA"), an agency within the Department of Transportation ("DOT"). Because Petitioners request reconsideration of only certain elements of the Phase 2 Rule that were promulgated pursuant to EPA's Clean Air Act authority, this Petition is directed to EPA, and not NHTSA or DOT.

emissions standards applicable to new motor vehicles and new motor vehicle engines. The regulations accomplish this by ignoring the age of the engine and other powertrain elements installed in gliders and applying instead emissions standards based on the "calendar year in which assembly of the glider is completed." 81 Fed. Reg. at 73,943; *see* 40 C.F.R. § 1037.635. In other words, if a glider assembler installs a reclaimed engine in a glider in 2017, that engine must be certified to comply with all emissions standards applicable to new engines from model year 2017, regardless of the actual model year of the engine. "This requirement applies to all pollutants, and thus encompasses criteria pollutant standards as well as the separate [greenhouse gas ("GHG")] standards." 81 Fed. Reg. at 73,943; *see* 40 C.F.R. § 1037.635.

Recognizing that the new standards applied to gliders in the Phase 2 Rule were both sudden and onerous, the Phase 2 Rule purports to provide some "transitional flexibilities," 81 Fed. Reg. at 73,942, but these provisions are not enough to prevent a devastating impact on the glider industry when the standards become almost fully applicable to gliders on January 1, 2018. In 2017, glider assemblers are permitted to produce a limited number of gliders exempt from the regulations. The number of gliders exempted in 2017 for any particular company is equivalent to the "highest annual production of glider kits and glider vehicles for any year from 2010 to 2014" by the company. 40 C.F.R. § 1037.150(t)(3). Because of the growth of their business since 2014, this provision has forced Fitzgerald, Harrison, and Indiana Phoenix to scale back production in 2017 to a certain degree, but it has allowed for continued operation. Beginning January 1, 2018, however, the 2017 regime is replaced with an allowance to build only 300 gliders per year that are exempt from the regulations. *Id.* § 1037.105(t)(1)(ii). This stringent production cap would effectively destroy the glider industry.[2]

Despite EPA's stated goal to reduce greenhouse gas emissions, EPA did not perform any actual testing to analyze the environmental impact of remanufactured engines and gliders compared to new Original Equipment Manufacturer ("OEM") vehicles. Instead, it relied on unsubstantiated assumptions about the number of older engines used in gliders and the emissions from engines used in gliders.

If left in place, the Phase 2 Rule would significantly curtail American manufacturing and effectively shut down the glider industry and the nearly 20,000 jobs it supports across the nation. For example, Fitzgerald, which is based out of Tennessee and Kentucky, is currently responsible for 1,600 direct and indirect jobs in those two states alone and several thousand more associated with suppliers across the country. Yet, if this regulation goes into full effect, by the end of the year, the company will be forced to cut production and its workforce by 90%. Harrison, based in Iowa, employs approximately 450 people, and its suppliers account for many more glider-related jobs. Indiana Phoenix, based in Indiana, directly employs over a 100 people in Avilla, Indiana. The Phase 2 Rule, if it takes effect, would put more job opportunities out of reach for economically challenged areas already struggling with unemployment. Additionally, it would force small businesses to buy more expensive new vehicles instead of growing their business and creating jobs.

---

[2] There are additional exceptions from the general requirement for engines from more recent model years or with relatively few miles of engine operation. *See* 40 C.F.R. §§ 1037.150(t)(2); 1037.635(c). These carve outs do not apply to the vast majority of the gliders assembled by companies like Fitzgerald and Harrison, which tend to use engines from earlier model years and that have been subjected to normal use.

Bases for Reconsideration

EPA should reconsider the application of the Phase 2 Rule to glider kits, glider vehicles, and rebuilt engines installed in gliders for three reasons: (1) Section 202(a) of the Clean Air Act does not authorize EPA to regulate gliders; (2) EPA's prior decision to regulate gliders was based on unsupported assumptions rather than data; and (3) reconsideration is warranted under Executive Order 13783.

1. Section 202(a) of the Clean Air Act Does Not Authorize EPA to Regulate Gliders

The Phase 2 Rule relied on EPA's authority under section 202(a) of the Clean Air Act to regulate emissions from "new motor vehicles" and "new motor vehicle engines." 42 U.S.C. § 7521(a)(1). Because glider vehicles are not "new motor vehicles" and glider engines are not "new motor vehicle engines," EPA lacked authority under this provision to apply the Phase 2 Rule to gliders.

A glider is not a "new motor vehicle" because the most significant parts of the vehicle—the engine, transmission, and typically the rear axle—are not new. A vehicle is a "new motor vehicle" within the meaning of the Clean Air Act only if "equitable or legal title" to the vehicle has "never been transferred to an ultimate purchaser." 42 U.S.C. § 7550(3). For gliders, the "legal or equitable" title to the main components of the vehicle had previously "been transferred to an ultimate purchaser"—the owner of the donor truck. Simply adding new parts to a used truck does not make it a "new motor vehicle." The Phase 2 Rule's consideration of this issue was arbitrary and capricious and contrary to law. The Rule indicated first that EPA's authority could not be challenged because EPA had implicitly found gliders to be new vehicles in its Phase 1 Rule, which granted an interim exemption for gliders. 81 Fed. Reg. at 73,513-14. EPA, however, had an obligation to determine in the Phase 2 Rule that it had authority to act. *See Louisiana Pub. Serv. Comm'n v. FCC*, 476 U.S. 355, 374 (1986) ("[A]n agency literally has no power to act . . . unless and until Congress confers power upon it."); *Arlington v. FCC*, 133 S. Ct. 1863, 1880 (2013) (same). The Phase 2 Rule also erroneously based its interpretation of the Clean Air Act on marketing materials from the Fitzgerald web site. 81 Fed. Reg. at 73,514. EPA's legal authority does not turn on how a glider is described in marketing materials. EPA should reconsider this issue and conclude that because the principal parts of a glider are used, a glider is not a "new motor vehicle."

Such a conclusion would be consistent with the treatment of this issue by the National Highway Traffic Safety Administration ("NHTSA"). NHTSA's regulations make clear that a truck is not considered to be "newly manufactured" if the "engine, transmission, and drive axle(s) (as a minimum) of [an] assembled vehicle are not new" and at least two of those three components come from the same donor vehicle. 49 C.F.R. § 571.7(e). Gliders do not fall within this definition. EPA failed adequately to explain its departure from NHTSA's approach.

Moreover, "glider kits" do not even fall within the Clean Air Act's definition of "motor vehicle." Under the Act, a "motor vehicle" must be "self-propelled." 42 U.S.C. § 7550(2). But a glider kit lacks an engine, transmission, and often a rear axle. A collection of parts lacking these key components obviously is not "self-propelled." The Phase 2 Rule relies on particular

provisions authorizing regulation of specific vehicle components. 81 Fed. Reg. at 73,514; *see* 42 U.S.C. § 7521(a)(5)(A) (fueling systems); *id.* § 7521(a)(6) (onboard vapor recovery systems). But there is no provision authorizing regulation of the parts that make up a glider kit. The fact that the Clean Air Act allows EPA to regulate certain specified vehicle components, but not the components in a glider kit, undermines the Phase 2 Rule's application to glider kits. Congress understood how to grant EPA authority to regulate vehicle components but declined to authorize regulation of glider kits. *See TRW, Inc. v. Andrews*, 534 U.S. 19, 28-29 (2001) (applying *expressio unius* canon of construction). Under the interpretation set forth in the Phase 2 Rule, there would be no limit on EPA's authority to regulate parts of vehicles.

The Phase 2 Rule also states that EPA has authority to regulate "incomplete vehicles" and "vehicle components" under Section 202(a). *See* 81 Fed. Reg. at 73,514. It first points to language from Section 202(a)(1) stating that EPA has authority "whether such [new motor] vehicles . . . are designed as complete systems or incorporate devices to prevent or control . . . pollution." 42 U.S.C. § 7521(a)(1). This portion of section 202(a)(1), however, merely provides that emissions standards are limited to the useful life of a vehicle or engine. *See id.* It does not purport to expand EPA's authority in the first sentence of that section. *See id.* ("The Administrator shall by regulation prescribe (and from time to time revise) in accordance with the provisions of this section, standards applicable to the emission of any air pollutant from any class or classes of *new motor vehicles* . . . ." (emphasis added)).[3]

Finally, the Phase 2 Rule erred in concluding that glider engines are "new motor vehicle engines" under the Act. A "new motor vehicle engine" is defined as either (1) "an engine in a new motor vehicle," or (2) a "motor vehicle engine the equitable or legal title to which has never been transferred to the ultimate purchaser." 42 U.S.C. § 7550(3). Because a glider is not a new motor vehicle, a glider engine is not "an engine in a new motor vehicle." *Id.* And because a glider engine has previously been owned, title in the engine has previously been "transferred to an ultimate purchaser." *Id.*

For all of these reasons, Petitioners respectfully suggest that EPA reconsider its authority to regulate gliders under Section 202(a) of the Clean Air Act.

2. EPA's Prior Decision To Regulate Gliders Was Based on Unsupported Assumptions Rather than Data

The Phase 2 Rule relied upon unsupported assumptions to arrive at the conclusion that immediate regulation of glider vehicles was warranted and necessary. First, the Phase 2 Rule assumed that *all* glider engines would be older engines from before 2002. *See* 81 Fed. Reg. at

[3] The Phase 2 Rule also indicated that EPA's authority to regulate "defeat devices" "support[ed] the actions EPA is taking [under section 202] with respect to . . . glider kits." 81 Fed. Reg. at 73,518. There is no basis for this contention. Under the Act, a defeat device is "any part or component intended for use with, or as part of, any motor vehicle or motor vehicle engine, where a principal effect of the part or component is *to bypass, defeat, or render inoperative any device or element of design installed on or in a motor vehicle or motor vehicle engine* in compliance with [Clean Air Act] regulations." 42 U.S.C. § 7522(a)(3)(B) (emphasis added). But the "principal effect" of a glider kit is not to "bypass, defeat, or render inoperative" some "device" or "element of design" in a vehicle. The Rule never explained what device or element of design it thought was being defeated.

73,943 ("The modeling also assumed that these gliders emit at the level equivalent to the engines meeting the MY 1998-2001 standards . . . ."); RTC 1960-1961. EPA indicated that it believed "*most* glider vehicles currently being produced use remanufactured engines of this vintage," *id.* (emphasis added), but it made no effort to quantify what percentage of glider engines in fact would fall within this category and instead assumed that *all* of them would. In fact, the model year of the engines used in glider vehicles varies depending on the donor vehicle or owner and includes engines from after 2002.

EPA also assumed that the nitrogen oxide ("NO_x") and particulate matter ("PM") emissions of glider vehicles using pre-2007 engines would be at least ten times higher than emissions from equivalent vehicles being produced with brand new engines. *See id.* at 73,942. But EPA relied on no actual data to support this conclusion; it simply relied on the pre-2007 standards. *Id.* A recent study by Tennessee Technological University ("Tennessee Tech") analyzing the NO_x, PM, and carbon monoxide ("CO") emissions from both remanufactured and OEM engines reached a contrary conclusion. *See* Exhibit 1 (Letter to the Hon. Diane Black from Philip B. Oldham, President, Tennessee Technological University, and Thomas Brewer, Associate Vice President, Center for Intelligent Mobility (June 15, 2017)). The results showed that remanufactured engines from model years between 2002 and 2007 performed roughly on par with OEM "certified" engines, and in some instances even out-performed the OEM engines. *See id.* at 1. Tennessee Tech's research also "showed that remanufactured and OEM engines experience parallel decline in emissions efficiency with increased mileage." *Id.* at 2. Tennessee Tech also estimated that glider vehicles would emit less than 12% of the total NO_x and PM emissions for all Class 8 heavy duty vehicles, *see id.*, not 33% as the Phase 2 Rule suggests, *see* 81 Fed. Reg. at 73,943. Tennessee Tech's findings constitute new information, developed since the Phase 2 Rule was promulgated, and provide a basis for EPA to reconsider the existing rule pursuant to Section 307 of the Clean Air Act. 42 U.S.C. § 7607(d)(7)(B); *see* S. Rep. No. 91-1196, at 41-42 (1970) ("[N]ew information . . . may dictate a revision or modification of any promulgated standard or regulation established under the [Clean Air] act."); *Oljato Chapter of the Navajo Tribe v. Train*, 515 F.2d 654, 660 (D.C. Cir. 1975) (same).

EPA also did not account for its own low-sulfur diesel rule. Starting in 2006, EPA required that diesel fuel refiners produce diesel fuels with a 97% lower sulfur content. *See* 40 C.F.R. §§ 80.500, 80.520. This reduction of sulfur significantly reduced the amount of NO_x, PM, and other pollutants emitted from diesel engines, including gliders and other heavy-duty truck tractors. This reduction was not taken into account in the development of the Phase 2 Rule for gliders.

The Phase 2 Rule also erroneously assumed that the only explanation for the growth of the glider vehicle market was that glider assemblers sought to avoid the increasingly restrictive emission standards for engines in new OEM tractors. 81 Fed. Reg. at 73,943. The reality is that glider vehicles do not directly compete with new OEM tractors. For most individuals or companies that purchase gliders, the choice is not between a glider or a new tractor. The choice is between a glider and continuing to run their old tractor. Further, glider vehicle assemblers often take the lead on forward-thinking research and development that benefits the entire industry, including innovative research on fuel additives, emission devices, and tire and wheel combinations in small production runs. *See* Exhibit 1, at 2. Glider assemblers are currently

testing components, light weight drive systems, alternative fuel mixtures, autonomous drive systems, light weight body materials, and intelligent transportation systems. *Id.* In short, the glider assemblers are a complementary part of the medium- and heavy-duty truck industry, not direct competitors to OEMs.

Finally, the Phase 2 Rule failed to consider the significant environmental *benefits* that glider vehicles create. Glider vehicle GHG emissions are less than those of OEM vehicles due to gliders' greater fuel efficiency, and the carbon footprint of gliders is further reduced by the savings created by recycling materials. Gliders are 20% more fuel efficient than OEM vehicles. *See id.* Moreover, gliders reuse engines and other components, instead of casting new parts. Glider assemblers reuse approximately 4,000 pounds of cast steel in the remanufacturing process, including 3,000 pounds for the engine assembly alone. *Id.* Reusing these components avoids the environmental impact of casting steel, including the significant associated NO_x emissions. *See, e.g.*, National Emission Standards for Hazardous Air Pollutants: Integrated Iron and Steel Manufacturing, 68 Fed. Reg. 27,646 (May 20, 2003); Envtl. Prot. Agency, *Alternative Control Techniques Document – NO_x Emissions From Iron and Steel Mills*, EPA-453/R-94-065 (Sept. 1994); *see also* Exhibit 1, at 2. Given their better fuel efficiency and reuse of cast steel, gliders have a lower carbon footprint than OEM vehicles, a fact not considered in the development of the Phase 2 Rule.

In light of the new information developed by Tennessee Tech and the unsupported assumptions that form the basis for the Phase 2 Rule as it applies to gliders, EPA should reconsider the rule.

3. Reconsideration Is Warranted under Executive Order 13783

The March 28, 2017 Executive Order, "Presidential Executive Order on Promoting Energy Independence and Economic Growth," further highlights why EPA should reconsider the Phase 2 Rule as it applies to gliders. Exec. Order No. 13,783 (Mar. 28, 2017). The Executive Order rescinds (among other things) the June 2013 report from the Executive Office of the President, titled "The President's Climate Action Plan," and instructs EPA and all other federal agencies to "identify existing agency actions related to or arising from" the now-rescinded plan and to "suspend, revise, or rescind, or publish for notice and comment proposed rules suspending, revising, or rescinding any such actions, as appropriate and consistent with law and with the policies set forth in section 1 of th[e] order." *Id.* §§ 3(b), (d). The Phase 2 Rule is a direct product of the Climate Action Plan. 81 Fed. Reg. at 73,480. And reconsideration of the application of the Phase 2 Rule to gliders is consistent with the Executive Order's stated purpose of avoiding environmental regulation that "constrain[s] economic growth" and "prevent[s] job creation" and ensuring that "environmental regulations comply with the law, are of greater benefit than cost, and are developed through transparent processes that employ the best available peer-reviewed science and economics." Exec. Order No. 13,783 §§ 1(a), (e). Because the Phase 2 Rule is related to the rescinded Climate Action Plan, and because the portion of the Rule that applies to gliders conflicts with the policies set forth in Section 1 of the Order, EPA should reconsider the rule. Based on that reconsideration, EPA should "suspend, revise, or rescind" the Rule as applied to gliders, including, as necessary, by promulgating new regulations. *See id.* § 3(d).

Conclusion

For the foregoing reasons, Petitioners respectfully request EPA to reconsider application of the Phase 2 Rule to gliders. Given the impending January 1, 2018 compliance date, which will effectively eliminate the industry, Petitioners request that EPA complete this reconsideration as soon as possible.

Respectfully,

Fitzgerald Glider Kits, LLC
Tommy C. Fitzgerald, President

Harrison Truck Centers, Inc.
Dustin Petersen, Shareholder

Indiana Phoenix, Inc.
Dane Keener, General Manager

EXHIBIT 1

Office of the President

TENNESSEE TECH

June 15, 2017

The Honorable Diane Black
1131 Longworth HOB
Washington, DC 20515

Reference: Tennessee Tech University – Summary of Heavy Duty Truck Study and Evaluation of the Phase II Heavy Duty Truck Rule

Congressman Black:

From September 2016 – November 2016, the Tennessee Technological University Department of Civil and Environmental Engineering ("Tennessee Tech") conducted the first phase of its research on the environmental and economic impact of the Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles – Phase 2 rule ("Phase 2 Rule") published October 25, 2016. The key areas of research were to (1) Compare Glider Kit compliance with the Phase 2 Rule; (2) Perform high level environmental footprint and economic study of OEM manufacturing vs. assembly of remanufactured components (Glider Kits); and (3) Evaluate industry optimization plans to address future environmental regulations including but not limited to production vehicles, component assembly, and facility compliance.

To carry out the environmental footprint component of the research, Tennessee Tech tested thirteen heavy-duty trucks on a common chassis dynamometer at a common site; eight trucks were remanufactured engines and five were OEM "certified" engines, all with low mileage (NOTE: These Base Line Setting Phase I results were completed by testing only one Glider Kit manufacturer's product and one OEM's product). Each vehicle was evaluated for fuel efficiency, carbon monoxide (CO), particulate matter (PM) emissions and nitrogen oxide (NO_x). The results of the emissions test were compared with the 2010 EPA emissions standards for HDVs. Our research showed that optimized and remanufactured 2002-2007 engines and OEM "certified" engines performed equally as well and in some instances out-performed the OEM engines. (see also Appendix A for more detailed test results).

Summary Chart of Phase 1 Test Results	
Emission Standard	**Result**
CO	All vehicles met the standard
PM	All vehicles met the standard
NO_x	None of the vehicles met the standard

Tennessee Tech / Box 5007 Cookeville, TN 38505 / 931-372-3241 / F: 931-372-6332 / www.tntech.edu/president

While none of the vehicles met the NO_x standard, a glider remanufactured engine achieved the best result of any engine tested (see Appendix A). Further, our research showed that remanufactured and OEM engines experience parallel decline in emissions efficiency with increased mileage. Contrary to the assertion in the Phase 2 Rule, it is our estimate that the glider kit HDVs would emit less than 12% of the total NO_x and PM emissions, not 50%, for all Class 8 HDVs. Should the Phase 2 glider cap be fully implemented on January 1, 2018, there is little doubt that consumers utilizing glider vehicles, due to economic considerations, will delay purchasing new equipment and consequently, slow the reduction of engine emissions nationwide. In this regard, the Phase 2 rule is counter-productive to its stated intent.

In addition to equal or lower emissions, glider kits have a smaller carbon footprint than OEM vehicles due to fuel efficiency and recycling of materials. Comparisons between 2016 glider kit vehicles and new EPA compliant vehicles for fuel efficiency reflect that glider kits are 20% more efficient on fuel consumption. Glider vehicles also reuse engines and other components in the remanufacturing process, resulting in the reuse of approximately 4,000 pounds of cast steel. The engine assembly alone accounts for approximately 3,000 pounds of recycled cast steel. Thus, the well-documented environmental impact of casting steel, including the significant NOx emissions, is avoided by reusing cast steel components in glider vehicles. Consequently, given the superior fuel efficiency and the reuse of cast steel, glider vehicles have a lower carbon footprint than OEMs. None of these facts were considered in the development of the Phase 2 rule.

From an economic standpoint, Tennessee Tech examined the impact of the Phase 2 Rule sales cap of 300 units for glider kits would have on the State of Tennessee. The 300 unit sales cap represents 9% of Fitzgerald's current sales. It is estimated that a 91% reduction in output by Fitzgerald would result in a direct loss of approximately 947 jobs and a loss of approximately $512 million of economic output in the State of Tennessee alone. This impact takes into account the direct and indirect economic impact, including expenditures on labor, operations and maintenance as well as changes in the supply chain throughout the state. Additionally, on a broader scale, the economic impact of the Phase 2 Rule could easily exceed $1 billion nationwide due to thousands of permanent job losses and supply chain interruption and reduction. The Phase 2 Rule failed to sufficiently evaluate and consider these impacts.

Finally, this phase of the research shows that trucking companies that utilize glider kit HDVs in their fleets are vigilant in maintenance and elect to optimize their fleets to maximum efficiency throughout the life span of the vehicle. Further, glider kit assemblers facilitate research and development for OEM's by conducting innovative research for fuel additives, emission devices, tire and wheel combinations in small production runs and are currently testing components, light weight drive systems, alternative fuel mixtures, autonomous drive systems, light weight body materials, and intelligent transportation systems. As a general statement, our observation is glider assemblers are in tune with industry needs and cutting edge innovation.

Congressman Black
June 15, 2017

Tennessee Tech will continue to evaluate HDV engines during Phase II of the research in 2017. Such effort will be conducted in conjunction with the Oak Ridge National Lab - Fuel Engines & Emissions Research Center. The goals of the next phase include development of engineering and manufacturing solutions that exceed EPA emission standards, a focused research, development, and testing plan for NO_x emissions, and to continue testing to demonstrate continuous improvement of emissions from remanufactured heavy-duty engines.

Sincerely,

Philip B. Oldham
President

Thomas Brewer
Associate Vice President
Center for Intelligent Mobility

APPENDIX A: Testing Results from Tennessee Tech Phase 1 Heavy Duty Vehicle Study			
Engine	**Type**	**CO (g/HP * hr) (2010 standard = 15.5)**	**PM**
Detroit Diesel DD15	ReMan	0.290	BTD
Caterpillar CT13	ReMan	0.212	BTD
Detroit Diesel Series 60	ReMan	1.553	BTD
Detroit Diesel Series 60	ReMan	1.959	BTD
Detroit Diesel Series 60	ReMan	0.015	BTD
Detroit Diesel Series 60	ReMan	0.317	BTD
Detroit Diesel Series 60	ReMan	0.483	BTD
Detroit Diesel Series 60	ReMan	0.467	BTD
Detroit Diesel DD15	OEM	0.491	BTD
Detroit Diesel DD15	OEM	1.169	BTD
Detroit Diesel DD15	OEM	0.556	BTD
Detroit Diesel DD15	OEM	0.098	BTD
Detroit Diesel DD15	OEM	1.558	BTD

*BTD=below threshold detection point

** NO_x (g/HP * HP) (2010 standard = 0.2); All tested engines were higher than the standard and ranged from a low of 0.44 to a high of 6.45. The lowest tested NOx was a Fitzgerald – Reman Detroit Diesel DD 15 using proprietary Fitzgerald engine design and set up. That same engine also tested at the 0.290 Co rate.

EPA-HQ-2018-009214

Package Details:

- Washington Express tracking number: 2589830
- Package Sent To:

  Cheryl Woodward
  Environmental Protection Agency
  1200 Pennsylvania Avenue, N.W.
  North Building
  Washington, DC 20004
  US

- Client/Matter/Sender: 2214062/00120/02092
- Ready Time: 03:15 PM
- Service: Regular
- Packaging: Env-Package-Book
- Pieces: 1
- Weight: unspecified
- Instructions: Please wait at security till 4:30pm and Cheryl Woodward will meet you there at exactly 4:30pm to except the envelope.

ED_001620_00003677-00013

[FULL COMMITTEE PRINT]

115TH CONGRESS, 1st Session " HOUSE OF REPRESENTATIVES ! REPORT 115–

DEPARTMENT OF THE INTERIOR, ENVIRONMENT, AND RELATED AGENCIES APPROPRIATIONS BILL, 2018

, 2017.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

Mr. CALVERT, from the Committee on Appropriations, submitted the following

R E P O R T

[To accompany H.R.]

The Committee on Appropriations submits the following report in explanation of the accompanying bill making appropriations for the Department of the Interior, the Environmental Protection Agency, and Related Agencies for the fiscal year ending September 30, 2018. The bill provides regular annual appropriations for the Department of the Interior (except the Bureau of Reclamation and the Central Utah Project), the Environmental Protection Agency, and for other related agencies, including the Forest Service, the Indian Health Service, the Smithsonian Institution, and the National Foundation on the Arts and the Humanities.

CONTENTS

	Page number Bill	Report
Title I—Department of the Interior:		
Bureau of Land Management	2	7
United States Fish and Wildlife Service	8	11
National Park Service	15	23
United States Geological Survey	20	33
Bureau of Ocean Energy Management	23	36
Bureau of Safety and Environmental Enforcement	24	37
Office of Surface Mining Reclamation and Enforcement	26	38
Bureau of Indian Affairs and Bureau of Indian Education	29	39
Office of the Secretary	38	46
Insular Affairs	40	46
Office of the Solicitor	43	48
Office of Inspector General	43	48

23–918

EPA-HQ-2018-009214

	Page number Bill	Report
Office of the Special Trustee for American Indians	43	48
Department-wide Programs:		
Wildland Fire Management, Interior Department	45	48
FLAME Wildfire Suppression Reserve Fund, Interior Department	N/A	49
Central Hazardous Materials Fund	49	50
Natural Resource Damage Assessment and Restoration	49	50
Working Capital Fund	49	50
Office of Natural Resources Revenue	51	50
Payments in Lieu of Taxes (PILT)	52	50
General Provisions, Department of the Interior	52	51
Title II—Environmental Protection Agency:		
Science and Technology	62	53
Environmental Programs and Management	63	55
Hazardous Waste Electronic Manifest System Fund	64	59
Office of Inspector General	65	60
Buildings and Facilities	65	60
Hazardous Substance Superfund	65	61
Leaking Underground Storage Tank Trust Fund Program	66	62
Inland Oil Spill Programs	67	62
State and Tribal Assistance Grants	67	63
Water Infrastructure Finance and Innovation Program Account	75	65
Administrative Provisions	76	66
Title III—Related Agencies:		
Forest Service, U.S. Department of Agriculture	79	66
Office of the Under Secretary for Natural Resources and Environment	79	67
Wildland Fire Management, Forest Service	85	75
FLAME Wildfire Suppression Reserve Fund, Forest Service	N/A	76
Indian Health Service, U.S. Department of Health and Human Services	95	77
National Institute of Environmental Health Sciences	103	81
Agency for Toxic Substances and Disease Registry	104	82
Other Related Agencies:		
Council on Environmental Quality and Office of Environmental Quality	105	82
Chemical Safety and Hazard Investigation Board	105	83
Office of Navajo and Hopi Indian Relocation	106	83
Institute of American Indian and Alaska Native Culture and Arts Development	108	84
Smithsonian Institution	108	84
National Gallery of Art	109	86
John F. Kennedy Center for the Performing Arts	111	87
Woodrow Wilson International Center for Scholars	112	88
National Endowment for the Arts	112	88
National Endowment for the Humanities	112	89
Commission of Fine Arts	114	90
National Capital Arts and Cultural Affairs	115	91
Advisory Council on Historic Preservation	115	91
National Capital Planning Commission	115	91
United States Holocaust Memorial Museum	115	92
Dwight D. Eisenhower Memorial Commission	116	92
Women's Suffrage Centennial Commission	117	93
World War I Centennial Commission	117	93
Title IV—General Provisions:	117	94

INTRODUCTION

The Department of the Interior, Environment, and Related Agencies Appropriations bill for fiscal year 2018 totals $31,456,000,000.

ED_001620_00003678-00002

This amount is $824,000,000 below the fiscal year 2017 enacted level and $4,256,911,000 above the budget request.

The amounts in the accompanying bill are reflected by title in the table below.

BUDGET AUTHORITY RECOMMENDED IN BILL BY TITLE

Activity	Budget estimates, fiscal year 2018	Committee bill, fiscal year 2018	Committee bill compared with budget estimates
Title I, Department of the Interior:			
New budget authority	$10,554,207,000	$11,887,470,000	+$1,333,263,000
Title II, Environmental Protection Agency:			
New budget authority	5,655,000,000	7,530,087,000	+1,875,087,000
Title III, Related Agencies:			
New budget authority	10,989,882,000	12,038,443,000	+1,048,561,000
Title IV, General Provisions:			
New budget authority	0	0	0
Grand total, New budget authority	27,199,089,000	31,456,000,000	+4,256,911,000

COMMITTEE OVERSIGHT

Members of Congress have provided considerable input in fashioning this bill. In total, 351 Members submitted nearly 5,200 programmatic requests relating to multiple agencies and programs.

The Interior, Environment, and Related Agencies Subcommittee conducted 10 budget hearings and briefings this year (including four hearings involving American Indians and Alaska Natives) to carefully review the programs and budgets under its jurisdiction. The Subcommittee held the following oversight hearings:

Members' Day hearing—February 28, 2017

American Indian/Alaska Native Public Witnesses—May 16, 2017 (morning)

American Indian/Alaska Native Public Witnesses—May 16, 2017 (afternoon)

American Indian/Alaska Native Public Witnesses—May 17, 2017 (morning)

American Indian/Alaska Native Public Witnesses—May 17, 2017 (afternoon)

Indian Health Service FY18 budget oversight hearing—May 24, 2017

High Risk American Indian/Alaska Native Programs—May 24, 2017

U.S. Forest Service FY18 budget oversight hearing—May 25, 2017

Department of the Interior FY18 budget oversight hearing—June 8, 2017

Environmental Protection Agency FY18 budget oversight hearing—June 15, 2017

In total, 110 individuals representing the Executive Branch, Congress, State, Tribal, and local governments, and the general public testified before the Subcommittee. In addition to those who testified in person, another 125 Members of Congress, organizations, or coalitions provided written testimony for the hearing record which is publicly available online.

COST OF WILDLAND FIRE

In six of the last ten years, the Forest Service and the Department of the Interior have exceeded their wildland fire suppression budgets despite being fully funded at the ten-year suppression average for such costs. Fire seasons have grown longer and more destructive, putting people, communities, and ecosystems at greater risk. Fire borrowing has now become routine rather than extraordinary. Borrowing from non-fire accounts to pay suppression costs results in the Forest Service and Department of the Interior having fewer resources available for forest management activities to improve overall forest health and reduce the risk of catastrophic wildland fires.

The Committee continues to believe the most catastrophic wildland fires should be addressed in a fashion similar to other major natural disasters such as floods and hurricanes, and funded through the disaster cap adjustment established by the Budget Control Act of 2011 (P.L. 112–25). This common sense reform would allow for a more responsible and stable way to budget for wildland fire suppression costs.

While the budget request does not include a specific proposal, the Committee notes that the Administration has indicated its interest in working with Congress to find a solution, potentially like legislation that has been developed in the House (H.R. 2862) which has the support of every member of the Interior, Environment, and Related Agencies Subcommittee. As the issue of the disaster cap adjustment falls outside of the Committee's jurisdiction, the Committee's recommendation does not include the request for suppression funding through the disaster cap adjustment.

As Congress continues to debate the best approach for fire budgeting, the Committee has provided robust wildland fire funding in its fiscal year 2018 bill. The bill includes a total of $3,442,207,000 in wildland fire funding for the Department of the Interior and the Forest Service. Fire suppression accounts are fully funded at the ten-year average level. Hazardous fuels reduction program funding, a critical component of an effective overall fire strategy, is funded at $575,000,000, which is $5,000,000 above the fiscal year 2017 enacted level.

PAYMENTS IN LIEU OF TAXES (PILT)

The Payments in Lieu of Taxes (PILT) program provides compensation to local governments for the loss of tax revenue resulting from the presence of Federal land in their county or State. In 2017, 49 states, the District of Columbia, Guam, the Commonwealth of Puerto Rico, and the U.S. Virgin Islands received PILT payments. The Committee includes bill language providing $465,000,000 in PILT funding for fiscal year 2018.

RECREATION FEE AUTHORITY

Enacted in 2004, the Federal Land Recreation Enhancement Act (FLREA) authorized five agencies to collect and expend recreation fees on land they manage: the Department of the Interior's Bureau of Land Management (BLM), Bureau of Reclamation (BOR), National Park Service (NPS), and U.S. Fish and Wildlife Service (FWS), and the U.S. Department of Agriculture's Forest Service

EPA-HQ-2018-009214

(USFS). These fees, which leverage other funding sources and complement appropriated dollars, fund projects that directly benefit the visitor experience.

The authority for FLREA is scheduled to sunset at the end of the current fiscal year. This expiration would impact the Department of the Interior's estimated annual collection of $290 million, of which the National Park Service collects nearly $264 million. In 2016, the recreation fee program collected nearly $376 million from the Forest Service and the Department of the Interior combined. An extension of recreation fee authority is necessary for land managers to plan for upcoming seasons including selling annual passes, hiring seasonal employees, planning projects, organizing volunteers, and accepting reservations. The Committee has included within Title IV General Provisions a one-year extension of the current recreation fee authority as requested.

COST OF LITIGATION

The Committee remains concerned that many of the legitimate goals of the Forest Service, the Department of the Interior, and other agencies under the Committee's jurisdiction—as well as the work of this Committee—are undermined by litigation filed in an effort to shift land management decisions from the agencies to the courts, regardless of merit.

Litigation is a huge unbudgeted cost for land management agencies. The Committee is concerned that, as budgets shrink, agencies are forced to settle lawsuits quickly because they don't have funds available to complete court-imposed work. In addition, the courts are not concerned whether agencies have funding necessary to meet court mandates. As a result, the courts are playing an increasing role in determining how and where agencies use their funding.

Given ongoing concerns, the Department of the Interior, EPA, and the Forest Service are directed to provide to the House and Senate Committees on Appropriations, and to make publicly available no later than 60 days after enactment of this Act, detailed Equal Access to Justice Act (EAJA) fee information as specified in House Report 112–151.

STATE WILDLIFE DATA

The Department of the Interior and U.S. Forest Service are expected to prioritize continued coordination with other Federal agencies and State fish and wildlife agencies to recognize and fully utilize State fish and wildlife data and analyses as a primary source to inform land use, planning, and related natural resource decisions. Federal agencies should not unnecessarily duplicate raw data, but when appropriate, evaluate existing analysis of data prepared by the States, and reciprocally share data with State wildlife managers, to ensure that the most complete data set is available for decision support systems.

PAPER REDUCTION

The Committee urges each agency funded by this Act to work with the Office of Management and Budget to reduce printing and reproduction costs and directs each agency to report to the Com-

ED_001620_00003678-00005

mittee within 90 days of enactment of this Act on what steps have been taken to achieve this goal. The report should specifically identify how much money each agency expects to save by implementing these measures.

EDUCATIONAL AND OUTREACH PROGRAMS

The Committee strongly supports academic internships, partnerships, and educational and outreach programs of the agencies funded through the Interior, Environment, and Related Agencies appropriations bill and encourages them to ensure that their efforts reach the widest possible audience, including but not limited to, Hispanic-Serving Institutions, Historically Black Colleges and Universities, and Tribal Colleges and Universities, as appropriate.

LAND AND WATER CONSERVATION FUND

The Committee recognizes that investments in the Land and Water Conservation Fund (LWCF) support public land conservation and ensure access to the outdoors for all Americans. The recommendation balances bipartisan support for many LWCF programs with the need to address deferred maintenance backlogs at land management agencies, and to do both within the constraints of the budget and other priorities within the bill. Accordingly, the Committee recommends $275,000,000 for LWCF programs.

The recommendation includes $50,000,000 for projects expected to be submitted to the Committee for Congressional consideration in accordance with the direction provided in the explanatory statement accompanying Public Law 115–31. Consistent with the process used in previous fiscal years, the Committee will review and recommend levels of funding based on Congressional priorities including, but not limited to, strong State and local support for the project, leveraging of existing lands, increased access to recreational opportunities, and project-readiness.

Additionally, the recommendation includes no less than $10 million for projects that open or improve access to public lands for hunting, fishing, and other recreational activities and no less than $11 million for projects that consolidate inholdings or alleviate hardships for private landowners. Prior to proceeding with recreation access funding, the agencies should submit a list of the projects to be funded, along with a description of how the projects meet the recreation access criteria as defined by each agency.

COTTONWOOD V. U.S. FOREST SERVICE

The Committee has significant concerns about the effect the Ninth Circuit Court's 2015 decision in *Cottonwood Environmental Law Center v. United States Forest Service* could have on the ability of the Forest Service and the Bureau of Land Management to manage public lands as required by law. The decision has the potential to curtail forest health activities, recreational opportunities, and conservation practices and appears to have exposed the Service and Bureau to the possibility of extensive litigation that will not benefit endangered species or improve the condition of public lands. The Committee strongly encourages the Departments of Agriculture and Interior to work with the Administration and Congress on this issue.

PROFESSIONAL SOCIETIES

The Committee recognizes that maintaining the professional competencies of the Federal workforce is necessary to assure sound scientific management principles are applied to resource management. Professional societies, such as the Society of American Foresters, the Society for Range Management, The Wildlife Society, American Fisheries Society, and others provide opportunities for employees to maintain professional competencies through continuing education, scientific journals, and interaction with other professionals. The Committee encourages the Federal agencies funded in this bill to support the participation of employees in such professional societies in accordance with guidance issued by the Office of Government Ethics through 5 CFR Part 2640.203, Official Participation in Nonprofit Organizations.

REPROGRAMMING GUIDELINES

The Committee retains the reprogramming guidelines contained in the joint explanatory statement accompanying Public Law 114–113.

TITLE I—DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

MANAGEMENT OF LANDS AND RESOURCES

Appropriation enacted, 2017	$1,095,375,000
Budget estimate, 2018	963,163,000
Recommended, 2018	1,074,503,000
Comparison:	
Appropriation, 2017	¥20,872,000
Budget estimate, 2018	+111,340,000

The Committee recommends $1,074,503,000 for Management of Lands and Resources, $20,872,000 below the fiscal year 2017 enacted level and $111,340,000 above the budget request. A detailed table of funding recommendations below the account level is provided at the end of this report.

The Bureau is encouraged to promote and expand the use of agreements with Indian Tribes to protect Indian trust resources from catastrophic wildfire, insect and disease infestation or other threats from adjacent Federal lands, as authorized by law.

Soil, Water, and Air Management.—The Committee recommends $42,497,000 for soil, water, and air management, $1,112,000 below the fiscal year 2017 enacted level and $15,463,000 above the budget request.

The Colorado River Basin Salinity Control Program is funded at $1,500,000. The Committee requests that the Bureau provide a detailed report, which should be made public, on the funds made available to the program and the accomplishments and results related to them, for the past five fiscal years.

The Committee supports the Bureau's work with the State of Utah to develop water resources to benefit the public, wildlife, endangered species, permittees, and other users and encourages the Bureau to continue to work with the State and other interested entities to identify and pursue the highest priority projects.

The Committee encourages the Bureau to continue to work with the State of Idaho to provide appropriate access to Federal lands for the purposes of aquifer recharge projects.

Rangeland Management.—The Committee recommends $76,981,000 for rangeland management, $2,019,000 below the fiscal year 2017 enacted level and $9,228,000 above the budget request.

The Committee directs the agency to focus on reducing the grazing permit backlog and carrying out a systematic program of range monitoring, land health assessments, development and implementation of allotment management plans, and adaptive management.

Forestry Management.—The Committee recommends $9,819,000 for forestry management, $257,000 below the fiscal year 2017 enacted level and $316,000 below the budget request.

Riparian Management.—The Committee recommends $20,777,000 for riparian management, $544,000 below the fiscal year 2017 enacted level and $555,000 above the budget request.

Cultural Resources Management.—The Committee recommends $15,719,000 for cultural resources management, $412,000 below the fiscal year 2017 enacted level and $646,000 below the budget request.

Wild Horse and Burro Management.—The Committee recommends $80,555,000 to implement Public Law 92–195 (16 U.S.C. 1331 et seq.) requiring the protection, management, and control of free-roaming horses and burros on public lands, equal to the fiscal year 2017 enacted level and $9,836,000 above the budget request.

The Committee reminds the Bureau of the directive included in the joint explanatory statement accompanying the Consolidated Appropriations Act, 2017, to provide a comprehensive plan to Congress to address the excess numbers of wild horses and burros and the unsustainable, rising costs of the Wild Horse and Burro program. The Committee encourages the Bureau to include in the plan: increased adoptions; additional research on equine contraceptives; opportunities for private citizens and organizations to support wild horses and burros; rangeland restoration; reductions in herd sizes on the range; and options for reducing the number of animals in long-term holding facilities.

The bill continues a prohibition on funds to implement Section 1333(b)(2)(C) of Title 16, United States Code, requiring the humane destruction of excess animals that are not adopted. The bill continues two general provisions within Title I allowing the Bureau to enter into long-term contracts and agreements for holding facilities off the range and for the humane transfer of excess animals for work purposes.

Wildlife and Fisheries.—The Committee recommends $115,491,000 for wildlife and fisheries, $320,000 below the fiscal year 2017 enacted level and $28,572,000 above the budget request. Within the total provided, the Committee provides $60,900,000 for sage-grouse conservation efforts, equal to the fiscal year 2017 enacted level. The Committee recommends $12,210,000 for fisheries management.

The Committee continues to support the Bureau's plant conservation program and the National Seed Strategy and encourages the Bureau to focus on increasing the availability of appropriate seed to address high-priority restoration needs and to collabo-

ratively work with other Federal agencies, States, researchers, and private partners to implement the strategy.

Recreation Management.—The Committee recommends $69,900,000 for recreation management, $1,829,000 below the fiscal year 2017 enacted level and $7,151,000 above the budget request. The bill includes a general provision in Title IV prohibiting the use of funds to close areas open to recreational hunting and shooting as of January 1, 2013.

The Committee appreciates the work of the California State Office in establishing an independent monitoring pilot program for certain off-highway vehicle events and directs the Bureau to continue to work with the off-highway vehicle community to refine, develop, and implement the pilot program on a broader scale. The Committee encourages the California State Office to conduct additional independent monitoring pilot projects at off-highway vehicle events in 2017 and to report to the Committee on its findings.

Energy and Minerals.—The Committee recommends $168,439,000 for energy and minerals, $4,407,000 below the fiscal year 2017 enacted level and $8,960,000 below the budget request.

The Committee directs the Bureau to collaboratively work with industry, other Federal agencies, States, and interested entities on methane emission issues, as well as to expeditiously approve pending permitting requests.

Resource Protection and Maintenance.—The Committee recommends $114,335,000 for resource protection and maintenance, $95,000 above the fiscal year 2017 enacted level and $30,348,000 above the budget request.

Resource Management Planning.—The Committee recommends $52,125,000 for resource management planning, equal to the fiscal year 2017 enacted level and $13,688,000 above the budget request. Within the total, the Committee recommends $8,000,000 for planning requirements related to greater sage-grouse conservation efforts.

The Committee continues to be concerned about the transportation routes identified in the Draft Resource Management Plan for the Red Cliffs National Conservation Area and lack of resolution of this matter. As such, the Committee directs the Bureau to work with the Fish and Wildlife Service; the State of Utah; Washington County, Utah; the city of St. George, Utah; and other cooperating entities to identify a northern transportation route as directed by the Omnibus Public Land Management Act of 2009, P.L. 111–11.

The Bakersfield Field Office's 2014 Resources Management Plan (RMP) identifies approximately 1,480 acres of private property as part of an Area of Critical Environmental Concern (ACEC). While the Committee understands that under current law the RMP only applies to Federal land in a designated ACEC, it is concerned that the RMP does not clearly draw such a distinction. As such, the Committee encourages the Bureau to work with affected landowners to address concerns about the ACEC designation.

Law Enforcement.—The Committee recommends $27,616,000 for law enforcement, $1,000,000 above the fiscal year 2017 enacted level and $1,908,000 above the budget request. The additional funds are provided to fill vacant ranger positions.

National Landscape Conservation System.—The Committee recommends $35,800,000 for the national landscape conservation sys-

EPA-HQ-2018-009214

tem, $1,019,000 below the fiscal year 2017 enacted level and $8,105,000 above the budget request.

LAND ACQUISITION

Appropriation enacted, 2017	$31,416,000
Budget estimate, 2018	3,609,000
Recommended, 2018	12,800,000
Comparison:	
Appropriation, 2017	¥18,616,000
Budget estimate, 2018	+9,191,000

The Committee recommends $12,800,000 for land acquisition, and a $1,769,000 rescission of unobligated balances from prior appropriations. Prior to implementation, the Bureau is directed to submit the proposed allocation of the rescission for Committee approval. A detailed table of funding recommendations below the account level is provided at the end of this report.

The Committee does not have sufficient information to recommend specific Federal acquisition projects at this time, but will review and recommend levels of funding for projects submitted to the Committee in accordance with the direction provided in the explanatory statement accompanying Public Law 115–31.

OREGON AND CALIFORNIA GRANT LANDS

Appropriation enacted, 2017	$106,985,000
Budget estimate, 2018	89,800,000
Recommended, 2018	104,256,000
Comparison:	
Appropriation, 2017	¥2,729,000
Budget estimate, 2018	+14,456,000

The Committee recommends $104,256,000 for the Oregon and California (O&C) grant lands, $2,729,000 below the fiscal year 2017 enacted level and $14,456,000 above the budget request. A detailed table of funding recommendations below the account level is provided at the end of this report.

The Committee remains concerned with the Bureau's failure to comply with the principles of sustained yield timber harvests under the Oregon and California Revested Lands Act of 1937. Within the funds appropriated for the Oregon and California Grant lands, the Bureau is directed to prioritize funding for timber production to achieve at least the 278 million board feet Allowable Sale Quantity promised in the new Resource Management Plan for Western Oregon. Further, the Committee is troubled by the disparity in timber targets compared with timber awarded and harvested on some districts. The Bureau is directed to prioritize response to administrative protests on timber sales in a timely manner and to report timber sale accomplishments in volume of timber sold and awarded, rather than merely the volume offered for sale.

RANGE IMPROVEMENTS

The Committee recommends an indefinite appropriation of not less than $10,000,000 to be derived from public lands receipts and Bankhead-Jones Farm Tenant Act lands grazing receipts, as requested.

ED_001620_00003678-00010

SERVICE CHARGES, DEPOSITS, AND FORFEITURES

The Committee recommends an indefinite appropriation estimated to be $24,595,000 for Service Charges, Deposits, and Forfeitures, as requested.

MISCELLANEOUS TRUST FUNDS

The Committee recommends an indefinite appropriation estimated to be $24,000,000, as requested.

ADMINISTRATIVE PROVISIONS, BUREAU OF LAND MANAGEMENT

The Committee recommendation includes Administrative Provisions.

UNITED STATES FISH AND WILDLIFE SERVICE

The U.S. Fish and Wildlife Service is the principal Federal agency responsible for conserving, protecting and enhancing fish, wildlife and plants and their habitats. The Service manages more than 150 million acres in the National Wildlife Refuge System, which encompasses 566 national wildlife refuges, thousands of small wetlands and other special management areas, and Marine National Monuments. It also operates 72 national fish hatcheries, 65 fish and wildlife management offices, and 80 ecological services field stations. The agency enforces Federal wildlife laws, administers the Endangered Species Act, manages migratory bird populations, restores nationally significant fisheries, conserves and restores wildlife habitat such as wetlands, and helps foreign governments with their conservation efforts. It also oversees the Federal Assistance program, which distributes hundreds of millions of dollars in excise taxes on fishing and hunting equipment to State fish and wildlife agencies.

RESOURCE MANAGEMENT

Appropriation enacted, 2017	$1,258,761,000
Budget estimate, 2018	1,151,129,000
Recommended, 2018	1,246,409,000
Comparison:	
Appropriation, 2017	¥12,352,000
Budget estimate, 2018	+95,280,000

The Committee recommends $1,246,409,000 for Resource Management. The Service is expected to execute its budget in accordance with the justification submitted to the Congress, except as otherwise directed below or summarized in the table at the end of this report.

Endangered Species Act (ESA).—The Committee recognizes and supports recent bipartisan, State-led efforts to improve implementation of the ESA, and expects the Service to fully engage in these efforts.

The ESA is premised on partnership with the States. Section 6(a) of the ESA says, "In carrying out the program authorized by the Act, the Secretary shall cooperate to the maximum extent practicable with the States." Congress included this mandate in recognition that States have always had primary management responsibility of fish and wildlife within their borders, and in recognition

that the management of any federally listed species will return to the States once recovery criteria are met.

Much of the controversy surrounding the ESA can be traced back to failures to cooperate with the States during the listing and recovery processes. Simply put, the Service needs to do a better job of cooperating. Although final decisions ultimately rest with the Secretary, nothing in law prohibits States from being involved in those decisions.

To that end, the Service should make full use of its authority to cooperate with States to the point that any State affected by a federally listed species has opportunity to involve itself in all administrative actions, and all judicial actions not initiated by that State, concerning any provisions of the ESA except for international trade.

Moreover, the Service needs to do a better job of letting States and other partners lead. Section 4(f)(2) of the ESA says, "The Secretary, in developing and implementing recovery plans, may procure the services of appropriate public and private agencies and institutions, and other qualified persons. Recovery teams appointed pursuant to this subsection shall not be subject to the Federal Advisory Committee Act." By including this authority and recognizing that saving species from extinction is a responsibility shared by all, Congress relieved the Secretary from shouldering much of the burden. States and non-governmental partners can and should lead recovery plan development and implementation—not the Service.

The Service should focus instead on backlogged and inherently Federal ESA actions that cannot be done by States and other partners, including: providing technical assistance when requested; permitting and consultation; publishing documents in the Federal Register; and reporting to Congress. Everything else done by the Service for candidate and listed species should be cost-shared as much as possible through its other existing programs and authorities.

Listing.—The recommendation includes $17,122,000 as requested for Endangered Species Act listings, status assessments, critical habitat determinations, and related activities. Bill language is continued as requested, placing restrictions on the use of funds in order to enable the Service to manage its workload in response to numerous petitions and lawsuits.

The Service is directed to exclude flood control reservoirs from critical habitat determinations, such as for the western distinct population segment of the yellow-billed cuckoo as described in detail in House Report 114–170.

The Committee is concerned about reports from States—regarding the Utah prairie dog, as discussed below, the black-footed ferret, and the lesser prairie chicken—that there remains no certainty that the Service will consider or appropriately include non-regulatory but highly valuable conservation actions on private lands in species status assessments or 12-month findings. Nothing in the Endangered Species Act prioritizes lands held in the public trust or kept in any other sort of "protected" status, as opposed to lands that are privately owned and responsibly managed, and nothing in the Act implies that habitat on such private lands is any more or less threatened with destruction, modification, or curtailment. The Service is further reminded that threatened and endangered species mostly inhabit private lands, and that the Service cannot ac-

complish its mission without fully embracing non-regulatory and voluntary cooperative conservation efforts with private landowners. The Committee expects the Service to work with the States to develop a more reasonable policy whereby the Service's regulatory assurance criteria include responsible land management commitments by private landowners.

Planning and Consultation.—The recommendation includes $104,783,000 for timely evaluations and permitting of development projects that contribute to economic growth and job creation, $6,028,000 above the budget request. The amount above the budget request should be apportioned in accordance with workload needs measured across the Service, rather than by region.

The following programs are supported at not less than the levels requested by the Service: Bay Delta Ecosystem Restoration, $2,854,000; environmental contaminants, $2,767,000; Gulf Coast Restoration, $998,000; energy, $10,334,000; and pesticide consultations, $998,000.

The Committee supports the continuation of collaborative efforts in the Pacific Northwest with the National Marine Fisheries Service, the Washington Department of Fish and Wildlife, and affected Tribes that will result in the completion of all Puget Sound hatchery program consultations by the fall of 2018.

The Committee recognizes the important role of Habitat Conservation Plans (HCPs) in both recovery of species and in providing economic certainty and growth to municipalities affected by listed species. The Service is encouraged to place a priority on providing technical assistance to partners making good faith efforts to develop and implement responsible HCPs.

Any projects funded by disaster settlements and required by law to have technical assistance, consultation, or permits from the Service should have such costs built into the projects. The Service is directed to establish a reimbursement program consistent with similar programs across the Department.

Conservation and Restoration.—The recommendation includes $29,791,000 for Conservation and Restoration, of which: $12,698,000 is for Candidate Conservation and includes $3,250,000 for the sagebrush steppe ecosystem; $5,460,000 is to implement the Marine Mammal Protection Act; $6,772,000 is for environmental contaminants work in support of the Natural Resources Damage Assessment and Restoration program; $3,471,000 is for the National Wetlands Inventory in support of the decadal report to Congress; and $1,390,000 is to implement the Coastal Barrier Resources Act (CBRA).

Based on feedback provided by the States, the Service is commended for its efforts in the Southeast to work with States and others to preclude the need to list many of the hundreds of species recently petitioned for listing. The effort demonstrated that the ESA can work when the Federal government treats States as equal partners and makes full use of flexibilities already inherent in the ESA to minimize regulatory burdens. The Service is expected to expand this model nationwide.

The Service is expected to focus Candidate Conservation funding on two primary activities: (1) preparing and publishing the annual Candidate Notice of Review as required by the ESA; and (2) providing the technical assistance to facilitate voluntary conservation

EPA-HQ-2018-009214

efforts by others and to develop agreements that provide regulatory certainty to landowners in case a candidate species has to be listed. The Service should look to its other programs and its partners to fund and implement conservation activities on-the-ground.

Recovery.—The recommendation includes $85,570,000 for Endangered Species Act recovery activities. Except where noted below, the Service is expected to focus on recovery plan oversight, five-year reviews, and status changes. The Service is commended for striving to fully utilize employee skills regardless of where employees are physically located, in order to more efficiently address the Service's highest priority needs including preparation and publication of documents required by the ESA.

As noted above, the Service is expected to defer to the States and other governmental and non-governmental partners to lead recovery plan development and implementation. To that end, funding for States and localities through the Cooperative Endangered Species Conservation Fund is restored to the fiscal year 2017 enacted level, $34,192,000 above the request. In addition, $5,000,000 is provided in Recovery to enhance and increase partnerships with agencies and organizations implementing genetically-sound breeding, rearing, and reintroduction programs as prescribed in recovery plans, such as for northern aplomado falcon and California condor. The Service is encouraged to propose including this program within the Cooperative Endangered Species Conservation Fund in the fiscal year 2019 budget request.

The Service is directed to report to Congress on any species for which the Secretary and the relevant States find that a recovery plan will not promote the conservation of the species, including the justification.

The Service is directed to complete all five-year reviews within the period required by law, and, for any determination on the basis of such review whether a species should be delisted, downlisted, or uplisted, promulgate an associated regulation prior to initiating the next status review for such species. Not less than $3,000,000 is provided to continue to reduce the backlog of downlistings and delistings.

The Committee is aware the Fish and Wildlife Service obtained a favorable decision in its appeal regarding the Utah prairie dog. However, the Committee remains concerned that the Fish and Wildlife Service has not been proactive in evaluating the effectiveness of its own recovery plan and conservation strategies regarding the Utah prairie dog. There is concern the current recovery plan sets recovery criteria that are unachievable and unnecessary to ensure the species' viability into the foreseeable future. The Committee urges the Fish and Wildlife Service to re-evaluate the threats currently contributing to the Utah prairie dog's threatened status, to focus conservation efforts on those threats, and to recognize population status regardless of land ownership. The Committee recognizes the value of voluntary conservation mechanisms, incentive based programs, and hydrological limitations in evaluating and addressing habitat threats to Utah prairie dogs on private lands. Lastly, the Committee recognizes the importance of the Fish and Wildlife Service coordinating with the State of Utah on developing a new recovery plan or conservation strategy that closely aligns with the Utah management plan that has shown to be

ED_001620_00003678-00014

successful in conserving the species and addressing landowner and community needs. The coordinated plan or strategy should chart a clear path for the expeditious recovery of the species and delisting.

The Wolf-Livestock Loss Demonstration Program is restored to the fiscal year 2017 enacted level of $1,000,000 but is transferred to the Partners for Fish and Wildlife Program. Funding to address white-nose syndrome in bats is transferred to Science Support.

The bill includes language directing the Secretary to reissue the final rule delisting recovered gray wolves in Wyoming and the Western Great Lakes, consistent with congressional action on recovered gray wolves in Idaho and Montana in the fiscal year 2011 appropriation. The bill also includes language prohibiting the use of funds to treat gray wolves range-wide as endangered or threatened. The Committee is compelled to act when egregious lawsuits waste limited resources and threaten the integrity of the Endangered Species Act, which guarantees that the Federal government will return management authority to the States once recovery plan goals are met and scientifically sound State management plans are in place.

The service is directed to, within 60 days of enactment of this Act, review and determine whether Mexican gray wolf (Canis lupus Baileyi) is a genetically valid subspecies designation and whether the red wolf (Canis rufus) is a genetically valid species designation. The Service shall complete its work and publish a report to Congress not later than one year from the date of enactment of this Act.

Partners for Fish and Wildlife.—The recommendation includes $52,776,000 for voluntary, non-regulatory partnerships with private landowners authorized by the Partners for Fish and Wildlife Act. Included in this amount is $1,000,000 to implement the Wolf-Livestock Loss Demonstration Project. States with de-listed wolf populations shall continue to be eligible for funding, provided that those States continue to meet the eligibility criteria contained in Public Law 111–11.

Coastal Programs.—The recommendation includes $13,375,000 for voluntary, non-regulatory coastal habitat restoration partnerships, equal to the fiscal year 2017 enacted level.

National Wildlife Refuge System.—The recommendation includes $483,927,000 for the National Wildlife Refuge System, equal to the total provided in fiscal year 2017.

Wildlife and Habitat Management is maintained at $231,843,000, of which: $196,089,000 is for general program activities; $2,830,000 is for subsistence management as requested; $22,924,000 is for inventory and monitoring; and $10,000,000 is for invasive species. The Service is urged to maintain ideal staffing levels for ongoing nutria eradication efforts on private and national wildlife refuge lands in the Chesapeake Bay watershed, in order to minimize the likelihood that such species will return.

The explanatory statement accompanying Division G of P.L. 115–31 noted the support of the Committees for the directive in House Report 114–632 instituting signage on any individual refuge where trapping occurs and establishing guidance to be included in the refuge manual. The House report also directed the Service to post information on the National Wildlife Refuge System website and the websites of individual refuges where trapping occurs. To date, the

Service has not complied with that directive. The Service has recently informed the Committee that they have set benchmarks of August 15, 2017, to post on its website a list of refuges where trapping occurs, and to issue a Director's Memo directing that no later than December 31, 2017, Regions must post signs at each refuge where trapping occurs. Additionally, by October 15, 2017, the Service plans to include trapping signage in the Refuge System Sign Handbook and ensure individual refuge websites include trapping information for all refuges where trapping occurs. Until the Committee has been informed the Service has fully complied with this directive, $2,000,000 of the funding provided for Wildlife and Habitat Management is not available for obligation.

Visitor Services is maintained at $73,319,000, of which $68,727,000 is for general program activities, $2,500,000 is for urban refuge programs, and $2,092,000 is for volunteer coordination.

Conservation Planning is restored to the fiscal year 2017 enacted level of $2,523,000. The Service is reminded of its backlog and statutory obligation to complete and update comprehensive conservation plans at every national wildlife refuge. Future funding of the National Wildlife Refuge System is contingent upon reducing this backlog. The Service is commended for its efforts to develop plans that are strongly supported by the surrounding communities.

The 2013 Hopper Mountain, Bitter Creek, and Blue Ridge National Wildlife Refuges Comprehensive Conservation Plan and Environmental Assessment (CCP/EA) identifies approximately 5,728 acres of private property for potential future acquisition to expand the Bitter Creek National Wildlife Refuge. The Committee notes that, under current law, national wildlife refuge regulations do not apply to private property included in an approved acquisition boundary, and that the Service only acquires private property from willing sellers. As such, the Committee encourages the Service to work with affected landowners to address concerns about the acquisition boundary.

Refuge Maintenance is restored to the fiscal year 2017 enacted level of $138,188,000, of which $42,297,000 is to continue to reduce the deferred maintenance backlog.

The Everglades Headwaters National Wildlife Refuge and Conservation Area was created to protect one of the last remaining grassland and longleaf pine savanna landscapes in eastern North America while securing water resources for seven million people in south Florida. The Committee supports collaborative efforts to protect, restore, and conserve habitats for one of the greatest ecological treasures of the United States.

The Committee is concerned by delays in implementation of the Comprehensive Everglades Restoration Plan (CERP) caused by ecosystem-level restoration goals that are in conflict with the specific needs of one protected species. Such delays are especially concerning when restoration activities would likely produce net benefits for a species at the system level. The Committee urges the Service to work with the State of Florida, the U.S. Army Corps of Engineers, and local stakeholders to complete the proposed Comprehensive Conservation Plan for the CERP as quickly as possible, and directs the Service to update the Committee on its progress within 180 days of enactment of this Act.

Migratory Bird Management.—The recommendation includes $48,157,000 for migratory bird management, of which: $31,039,000 is for conservation and monitoring, including $350,000 for bird-livestock conflicts; $3,424,000 is for permit processing; and $13,139,000 is for waterfowl management and the joint venture program. The Service is commended for its efforts to work with landowners to reduce black vulture predation on livestock.

Law Enforcement.—The recommendation includes $75,053,000 for law enforcement, equal to the fiscal year 2017 enacted level. The Service is directed to enforce illegal logging violations pursuant to the Lacey Act.

Wildlife trafficking is funded at $7,500,000. Lawful importers and exporters should not shoulder the cost burden of a Service workload that has increased as global markets have expanded and wildlife trafficking has become more sophisticated. Service inspectors not only examine legal declared packages but now must also undertake efforts to interdict illegal shipments of wildlife and wildlife products. Funds appropriated specifically to combat wildlife trafficking may be used to supplement inspections.

The Committee supports efforts to streamline government data collection for international trade transactions and encourages the Service to expedite the re-engineering of the FWS Message Set in the U.S. Customs and Border Protection's Automated Commercial Environment, which is part of the International Trade Data System. Continued collaboration will advance this interface, allow pilot testing to be initiated as soon as is feasible, and ultimately process cargo more expeditiously while protecting against prohibited shipments.

International Affairs.—The recommendation includes $15,816,000 for international affairs. Wildlife trafficking programs are maintained at fiscal year 2017 enacted levels.

The Committee is concerned about illegal trade in rhinoceros horn, elephant ivory, and harvested timber; the large sums of money that these products command on the black market; and the significant source of financing these activities provide for armed insurgencies and groups with links to transnational organized crime and terrorism. These activities threaten the stability and development of African countries and pose a threat to U.S. security interests. The Committee supports Service programs in particular that focus on: (1) site-based law enforcement protection in Africa for the most at-risk populations of forest and savanna elephants; (2) development and implementation of regional wildlife law enforcement networks in Africa and Asia; and (3) training local park guards and other wildlife law enforcement officers. These programs should be carried out in coordination with other U.S. agencies, local governments, and international conservation partners. The Committee encourages coordination between the Service and the Department of Homeland Security at U.S. ports of entry.

The Service is encouraged to continue working with stakeholders affected by recent actions taken by the Parties to the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES) regarding international trade in wood and wood products whose listing in Appendix II became effective January 2, 2017. The Service should review what is necessary to develop a domestic electronic permitting system with the ultimate goal of work-

ing with other countries on a universal electronic system which would expedite processing of licit imports and exports of products made with these materials. The Service should work with the Office of Management and Budget on approval of an electronic form for data collection and report back to the Committee on any resources required for technology upgrades and workload efficiencies.

The Committee recognizes the Service's work with Honduras, El Salvador, Guatemala, and Mexico to conserve priority species and ecosystems, and urges the continuation of these international partnerships in fiscal year 2018.

Fish and Aquatic Conservation.—The recommendation includes $159,714,000 for Fish and Aquatic Conservation. The Service is directed to continue its tradition of improving freshwater subsistence, commercial, and recreational fishing since 1871.

The recommendation includes $55,818,000 for National Fish Hatchery System Operations, of which $1,200,000 is for Aquatic Animal Drug Approval Partnership implementation and $51,167,000 is for general program activities. The Service is encouraged to consider economic return-on-investment in the allocation of funds.

The following programs are supported at not less than the levels requested by the Service: Great Lakes Consent Decree, $549,000; mass marking salmon in the Pacific Northwest, $1,475,000; and wild fish health surveys, $1,427,000.

None of the funds may be used to terminate operations or to close any facility of the National Fish Hatchery System. None of the production programs listed in the March, 2013, National Fish Hatchery System Strategic Hatchery and Workforce Planning Report may be reduced or terminated without advance, informal consultation with affected States and Tribes. The Service is directed not to enter into reimbursable agreements for mitigation hatchery production unless the Service is reimbursed for production costs as well as proportional facilities and administrative costs.

The Service is commended for recommitting to the National Fishery Artifacts and Records Center and the Collection Management Facility in South Dakota, and for sharing the costs nationwide. Vacant positions should be filled and located at the facility.

The recommendation includes $22,920,000 for Maintenance and Equipment, of which: $8,065,000 is for annual maintenance; $13,249,000 is for deferred maintenance; $1,088,000 is for equipment replacement; and $518,000 is for fish and wildlife conservation offices. The Service is commended for its efforts to allocate deferred maintenance funds to facilities with the most severe health and safety deficiencies across the System as a whole, rather than by region. All other funds should continue to be allocated as in prior years.

The recommendation includes $31,555,000 for Habitat Assessment and Restoration. The following programs are funded at the requested levels: Klamath Basin Restoration Agreement, $1,610,000; National Fish Habitat Action Plan, $5,652,000; and the Chehalis Fisheries Restoration Program, $268,000. The National Fish Passage Program is restored to the fiscal year 2017 enacted level of $13,998,000. In addition, the recommendation includes $5,000,000 to begin implementing the Delaware River Basin Con-

EPA-HQ-2018-009214

servation Act; the Service is strongly encouraged to enter into an agreement with an outside party for grant management services.

The recommendation includes $28,392,000 for Population Assessment and Cooperative Management. The following programs are funded at the requested levels: Alaska fisheries subsistence, $9,536,000; Atlantic salmon restoration, $532,000; Great Lakes Consent Decree, $557,000; Great Lakes Fish and Wildlife Restoration Act, $457,000; National Wild Fish Health Survey, $36,000; Penobscot River restoration, $457,000; Regional Mark Processing Center, $225,000; and Yukon River Salmon Treaty, $2,687,000.

The recommendation includes $21,029,000 for Aquatic Invasive Species. The Committee strongly supports efforts coordinated by the Service and the States to prevent the spread of aquatic nuisance species and to minimize their impacts on human health and safety, recreation and transportation, water infrastructure, and ecosystem health.

Of the amounts recommended: $799,000 is for control and management; $1,321,000 is for prevention; $145,000 is for restoration of the Chesapeake Bay ecosystem, as requested; $1,000,000 is for the implementation of State and interstate plans as authorized by the National Invasive Species Act (NISA); $1,566,000 is for NISA administration and coordination; $2,000,000 is for control and prevention of the spread of quagga and zebra mussels; $710,000 is for sea lamprey control administrative costs, as requested; $3,088,000 is to implement subsection (d)(2) of Section 5, of Public Law 106–506, as amended; and $10,400,000 is for controlling Asian carp in the Mississippi and Ohio River Basins, and preventing them from entering the Great Lakes.

Of the amount recommended for Asian carp control and prevention, $2,000,000 is to supplement funding provided through the Great Lakes Restoration Initiative for intensive control efforts via contract fishing pursuant to individual State laws and regulations and as called for in management plans. Contract fishing has proven to be an extremely effective method of control, and the intent of the additional $2,000,000 is to expand and perfect those efforts. This is a management tool that is not meant to develop a sustainable commercial fishery. The Service shall continue to work with its State partners to gather data to analyze the impacts of contract fishing to control abundance and movement of Asian carp.

Of the amount recommended for quagga mussel and zebra mussel control and prevention, $1,000,000 should continue to be allocated to implementation of quagga and zebra mussel control and prevention as called for in State and interstate plans as authorized by NISA, so that the total amount recommended in this bill for State and interstate plans is not less than $2,000,000.

Cooperative Landscape Conservation.—The recommendation includes $12,988,000 for landscape conservation cooperatives (LCCs). The Committee continues to be concerned about a lack of State and Tribal support for LCCs in certain parts of the country. The Service should focus on areas where LCC partnerships are strongest.

Consistent with a recent Inspector General report, the Service is directed to develop internal controls for the LCC grant award process to mitigate duplication in research. Rather than relying on informal and ad hoc coordination, the LCCs should implement written, formal guidance (based on GAO standards) for the award proc-

ED_001620_00003678-00019

EPA-HQ-2018-009214

ess. Such guidance should require: the consistent use of a peer review process; technology that easily identifies duplicative projects; notification from applicants if they submit identical proposals to different agencies; controls for checking information on current and past projects; and certification that proposals have been examined for duplication of research. LCCs should also store past, current, and future project information in a single database so that other LCCs, agencies, and the public may easily access this catalog of information and research on the Internet.

Science Support.—The recommendation includes $16,985,000 for Science Support, of which: $8,517,000 is for Adaptive Science general program activities; $3,968,000 is for Service Science general program activities; and $4,500,000 is to continue the search for a cure for white-nose syndrome in bats and includes $2,000,000 transferred from Recovery. The Service is expected to partner with Cooperative Research Units whenever possible.

General Operations.—The recommendation includes $130,352,000 for General Operations, as requested.

Everglades.—The recommendation includes $11,006,000 across multiple programs for Everglades restoration, as requested, including $2,631,000 to implement the Comprehensive Everglades Restoration Plan (CERP).

Technical assistance for the promotion of hunting and recreational shooting.—The Committee encourages the Secretary to explore the benefits of allowing States to use a portion of funds allocated to them by the Pittman-Robertson Wildlife Restoration Act for any project or activity, including public relations, designed to recruit or retain hunters and recreational shooters.

CONSTRUCTION

Appropriation enacted, 2017	$18,615,000
Budget estimate, 2018	15,800,000
Recommended, 2018	16,540,000
Comparison:	
Appropriation, 2017	¥2,075,000
Budget estimate, 2018	+740,000

The Committee recommends $16,540,000 for Construction, $740,000 above the request. The recommendation restores Dam, Bridge, and Seismic Safety to the fiscal year 2017 enacted level. A detailed table of funding recommendations below the account level is provided at the end of this report.

LAND ACQUISITION

Appropriation enacted, 2017	$59,995,000
Budget estimate, 2018	17,051,000
Recommended, 2018	40,641,000
Comparison:	
Appropriation, 2017	¥19,354,000
Budget estimate, 2018	+23,590,000

The Committee recommends $40,641,000 for land acquisition, and a $4,572,000 rescission of unobligated balances from prior appropriations. Prior to implementation, the Service is directed to submit the proposed allocation of the rescission for Committee approval. A detailed table of funding recommendations below the account level is provided at the end of this report.

ED_001620_00003678-00020

The Committee does not have sufficient information to recommend specific Federal acquisition projects at this time, but will review and recommend levels of funding for projects submitted to the Committee in accordance with the direction provided in the explanatory statement accompanying Public Law 115–31.

In a time when budgetary constraints allow for only a limited number of new land acquisition projects, the Committee is encouraged by programs that leverage public/private partnerships for land conservation like the Highlands Conservation Act, which has a record of more than a 2 to 1 ratio in non-Federal matching funds. Therefore, the Committee recommendation includes $10,000,000 for the Highlands Conservation Act Grants and directs the Fish and Wildlife Service to work with the Highlands States regarding priority projects for fiscal year 2018.

The Committee is concerned about reports of contention between the Service, the State of North Dakota, and private landowners in regard to Federal purchase of easements for waterfowl production areas. The Service is therefore directed not to purchase any easement in the State of North Dakota if such easement exceeds 50 years in duration, consistent with State law. The Committee continues to support Federal land acquisitions only when such acquisitions have strong local, State, and Congressional support.

COOPERATIVE ENDANGERED SPECIES CONSERVATION FUND

The Cooperative Endangered Species Conservation Fund provides matching grants to States and territories for endangered species recovery actions on non-Federal lands, and provides matching funds for non-Federal land acquisition to facilitate habitat protection.

Appropriation enacted, 2017	$53,495,000
Budget estimate, 2018	19,303,000
Recommended, 2017	53,495,000
Comparison:	
Appropriation, 2017	0
Budget estimate, 2018	+34,192,000

The Committee recommends $53,495,000 for the Cooperative Endangered Species Conservation Fund, $34,192,000 above the request. A detailed table of funding recommendations below the account level is provided at the end of this report. The Committee is concerned that the Service is limiting the amount of funds for each Habitat Conservation Plan, resulting in artificially high unobligated balances. The Service is directed to apportion funds to Habitat Conservation Plans based on need in order to increase on-the-ground conservation and eliminate unobligated balances.

NATIONAL WILDLIFE REFUGE FUND

The National Wildlife Refuge Fund shares refuge revenues and makes payments in lieu of taxes to counties in which Service lands are located.

Appropriation enacted, 2017	$13,228,000
Budget estimate, 2018	0
Recommended, 2018	13,228,000
Comparison:	
Appropriation, 2017	0
Budget estimate, 2018	+13,228,000

EPA-HQ-2018-009214

The Committee recommends $13,228,000 for the National Wildlife Refuge Fund, equal to the fiscal year 2017 enacted level. Payments to counties in all 50 States, the Commonwealth of Puerto Rico, Guam, and the U.S. Virgin Islands are estimated to be $18,850,000 in fiscal year 2018 from the net refuge receipts estimated to be collected in fiscal year 2017.

NORTH AMERICAN WETLANDS CONSERVATION FUND

The North American Wetlands Conservation Act of 1989 provided for matching grants to carry out wetlands conservation projects in the United States, Canada, and Mexico for the benefit of wetlands-associated migratory birds and other wildlife. Additional program funding comes from fines, penalties, and forfeitures collected under the Migratory Bird Treaty Act of 1918; from Federal fuel excise taxes on small gasoline engines, as directed by amendments to the Federal Aid in Sport Fish Restoration Act of 1950, to benefit coastal ecosystem projects; and from interest accrued on the fund established under the Federal Aid in Wildlife Restoration Act of 1937. Authorization of appropriations expired in fiscal year 2012.

Appropriation enacted, 2017	$38,145,000
Budget estimate, 2018	33,600,000
Recommended, 2018	38,145,000
Comparison:	
Appropriation, 2017	0
Budget estimate, 2018	+4,545,000

The Committee recommends $38,145,000 for the North American Wetlands Conservation Fund, $4,545,000 above the request. The Service is urged to make wetlands restoration projects that protect hunting and fishing treaty rights a higher priority, and to include a discussion in its annual budget request.

NEOTROPICAL MIGRATORY BIRD CONSERVATION

The Neotropical Migratory Bird Conservation Act of 2000 authorized matching grants for the conservation of neotropical migratory birds in the United States, Latin America, and the Caribbean, with 75 percent of the amounts available to be expended on projects outside the United States. Authorization of appropriations expired in fiscal year 2010.

Appropriation enacted, 2017	$3,910,000
Budget estimate, 2018	3,900,000
Recommended, 2018	3,900,000
Comparison:	
Appropriation, 2017	¥10,000
Budget estimate, 2018	0

The Committee recommends $3,900,000 for neotropical migratory bird conservation as requested.

MULTINATIONAL SPECIES CONSERVATION FUND

The Multinational Species Conservation Fund provides technical assistance and matching grants to countries to strengthen anti-poaching activities; builds community support for conservation near these species' habitats; conducts surveys, monitoring, and applied research; and provides infrastructure and field equipment necessary to conserve habitats. These funds help to leverage work with

ED_001620_00003678-00022

EPA-HQ-2018-009214

partners and other collaborators to conserve and protect African and Asian elephants, rhinoceroses, tigers, great apes, marine turtles, and their habitats. Authorizations of appropriations for the programs within this Fund have all expired.

Appropriation enacted, 2017	$11,061,000
Budget estimate, 2018	9,000,000
Recommended, 2018	11,061,000
Comparison:	
Appropriation, 2017	0
Budget estimate, 2018	+2,061,000

The Committee recommends $11,061,000 for the Multinational Species Conservation Fund, $2,061,000 above the request. A detailed table of funding recommendations below the account level is provided at the end of this report. The Committee recognizes that international wildlife trafficking has national security implications and therefore supports the Service's interagency and international cooperative efforts.

STATE AND TRIBAL WILDLIFE GRANTS

The State and Tribal Wildlife Grants Program provides grants to States and Indian Tribes, the District of Columbia, the Commonwealth of Puerto Rico, and the territories, to conserve fish and wildlife that are at risk of being listed under the Endangered Species Act (ESA). The intent is to avoid the costly and time-consuming process of ESA listings and related regulatory actions.

Appropriation enacted, 2017	$62,571,000
Budget estimate, 2018	52,836,000
Recommended, 2018	62,571,000
Comparison:	
Appropriation, 2017	0
Budget estimate, 2018	+9,735,000

The Committee recommends $62,571,000 for State and Tribal Wildlife Grants, $9,735,000 above the request. A detailed table of funding recommendations below the account level is provided at the end of this report. Funding for State competitive grants is restored. All three grant programs shall place the highest priority on species included in the most recent Candidate Notice of Review so as to preclude the need to list species under the Endangered Species Act. The Service is expected to document and communicate to the Congress whenever an Endangered Species Act downlisting or delisting occurs, or whenever a listing is otherwise no longer warranted, due in large part or in whole to efforts funded through this program.

NATIONAL PARK SERVICE

The mission of the National Park Service (Service) is to preserve unimpaired the natural and cultural resources and values of the national park system for the enjoyment, education, and inspiration of this and future generations. Established in 1916, the National Park Service has stewardship responsibilities for the protection and preservation of the heritage resources of the national park system. The system, consisting of 417 separate and distinct units, is recognized globally as a leader in park management and resource preservation. The national park system represents much of the finest the Nation has to offer in terms of natural beauty and wildlife, his-

ED_001620_00003678-00023

EPA-HQ-2018-009214

torical and archeological relics, and cultural heritage. Through its varied sites, the National Park Service attempts to explain America's history, interpret its culture, preserve examples of its natural ecosystems, and provide recreational and educational opportunities for U.S. citizens and visitors from all over the world. In addition, the National Park Service provides support to Tribal, local, and State governments to preserve culturally significant, ecologically important, and public recreational lands.

OPERATION OF THE NATIONAL PARK SYSTEM

Appropriation enacted, 2017	$2,425,018,000
Budget estimate, 2018	2,225,485,000
Recommended, 2018	2,410,031,000
Comparison:	
Appropriation, 2017	¥14,987,000
Budget estimate, 2018	+184,546,000

The Committee recommends $2,410,031,000 for Operation of the National Park System (ONPS), $14,987,000 below the fiscal year 2017 enacted level and $184,546,000 above the budget request. The amounts recommended by the Committee compared with the budget estimates by activity are shown in the table at the end of this report.

Additional Guidance.—The following additional direction and guidance is provided with respect to funding provided within this account:

Operation of the National Park System.—Maintaining operations and visitor services at our national parks is a core responsibility of the Service. The Committee notes that national parks welcomed a record 323.6 million visitors in fiscal year 2016, an increase of 46.8 million, or 17 percent, from the previous year. In recent years, the Committee has made a concerted effort to direct appropriated funds toward the ONPS account to support a variety of critical priorities. These funds support operations and visitor services including law enforcement; facility operations; new responsibilities and critical needs at new Park Service units including sites associated with the Civil Rights movement; and longstanding deferred maintenance priorities including repair and rehabilitation projects and cyclic maintenance needs on high priority park assets across the entire system.

The Committee opposes reductions as proposed in the budget request that would diminish visitor services and reduce park and program operations system-wide. Such actions would have an immediate impact on day-to-day operations and would result in limiting the use of or closing certain areas, such as campgrounds and facilities, and reducing or eliminating hours of operations and visitor services to the public, at national parks. Proposed reductions to both the seasonal and permanent workforce would also have an immediate impact on park operations. Such proposals do not serve the public well particularly at this time of record National Park Service visitation.

Resource Stewardship.—The bill provides $328,955,000 for resource stewardship, equal to the fiscal year 2017 enacted level. The bill includes $2,000,000 to continue zebra and quagga mussel containment, prevention, and enforcement. This funding was included in the fiscal year 2017 enacted bill but was not proposed in the budget request.

ED_001620_00003678-00024

Visitor Services.—The bill provides $252,103,000 for visitor services. The bill includes funding for the National Capital Area Performing Arts Program which was proposed for termination in the budget request.

Park Protection.—The bill provides $352,443,000 for park protection, $4,200,000 below the fiscal year 2017 enacted level. Reductions are for non-recurring expenses related to the Presidential Inauguration.

Facility Maintenance and Operations.—The bill provides $768,892,000 for facility maintenance and operations, $9,692,000 below the fiscal year 2017 enacted level. The Committee approves the Service's proposal to eliminate the Flex Park program in order to focus resources on critical park operations and programs. The recommendation retains the $25,000,000 increase for repair and rehabilitation projects and the $13,689,000 increase for cyclic maintenance needs included in the Consolidated Appropriations Act, 2017. These funds are critical to addressing longstanding deferred maintenance needs.

Park Support.—The bill provides $528,066,000 for park support, equal to the fiscal year 2017 enacted level.

The Committee recommendation for Operation of the National Park System includes the following additional guidance:

Aquatic Invasive Mussels.—The Committee remains concerned about the spread of quagga and zebra mussels in the western United States. As of 2016, there were nine western parks with established quagga and zebra mussel management or prevention programs. The Committee recognizes and commends the considerable effort and collaboration involving western governors, as well as Federal, State, and Tribal partners, to recently develop a package of actions and initiatives to protect areas in the West from the economic and ecological threats posed by invasive mussels. Inspecting and decontaminating recreational watercraft is one critical element toward preventing and containing the spread of invasive mussels. The Committee urges the Secretary of the Interior to continue to work with State and Tribal partners, and other stakeholders, on containment, prevention, and enforcement efforts at these parks, and NPS-managed waterbodies including Lake Powell and Lake Mead, following the Western Regional Panel on Aquatic Nuisance Species Uniform Minimum Protocols and Standards for Watercraft Inspection and Decontamination Programs and consistent with the Quagga/Zebra Mussel Action Plan for Western U.S. Waters. Further, consistent with fiscal year 2017, the Committee provides the Service with $2,000,000 for quagga and zebra mussel containment, prevention, and enforcement. These funds complement additional funds contained in this bill directed toward protecting our waterways and ecosystems from the serious threat of invasive mussels and other invasive species.

Eastern Legacy Study (Lewis and Clark Trail Study).—The Eastern Legacy Study authorized to determine the feasibility of extending the Lewis and Clark National Historic Trail is now four years overdue. While the Committee appreciates that the study area is approximately 7,400 miles across 14 eastern States and the District of Columbia, the Committee directs the Service to work expeditiously to complete the study in a timely fashion and report back to the Committee on any impediments to completion.

Death Valley National Park.—Scotty's Castle, a historic national landmark in Death Valley National Park, has been closed to the public since flash floods damaged the landmark's visitor center, museum, and nearby roads in 2015. More rain fell in two days than normally occurs in a year resulting in mud and debris measuring four feet thick in some areas. Repairs are necessary to flood control berms, the facility's electrical, sewer, and water system, and to the physical buildings. The Committee is pleased that the budget request includes funding within the Construction account for these critical repairs. The Committee directs the Service to take steps to ensure the security and protection of Scotty's Castle, and the contents of the museum, to protect from theft and trespassing at this iconic historic landmark.

Mississippi National River and Recreation Area.—The Committee directs the Service to report, within 180 days of enactment of this Act, on progress in identifying potential site options and associated costs for the development of a permanent headquarters and visitor use facility at the Mississippi National River and Recreation Area as described in the report accompanying P.L. 114–113. The Service shall work with government and non-government partners to determine the feasibility of potential site options and their suitability to support visitor use and park interpretation in accordance with the themes as outlined in the 2014 Mississippi National River and Recreation Area Foundation Document.

Elwha Water Facilities.—The Committee is concerned that although the Service initiated discussions regarding the transfer of ownership of the Elwha Water Facilities (EWF) to the City of Port Angeles in 2014, the Service and the City have not reached consensus on a Transfer Agreement. Therefore, the Committee directs the Service to work with the City to develop a report outlining how the Service has met or intends to meet its obligations under Section 4(a)(3) of P.L. 102–495 prior to initiating any transfer of the EWF. This report should be transmitted to the Committee six months from the date of the enactment of this Act and must include the following: (1) a plan to assist the City in securing all necessary permits required for the City to operate the EWF; and (2) whether the City believes capital improvements are required to reduce operating costs, and if so, the scope of the capital improvements. The Committee urges the Service to continue operation and maintenance of the EWF using available appropriations through June 2018, pursuant to City requests that the Service continue operations. The Committee urges the parties to reach agreement on transfer within this time period.

Biscayne Bay Park Marine Reserve Zone.—The Committee is pleased with recent efforts by Biscayne National Park (BNP) to reestablish open dialogue and productive coordination with Congress and the State of Florida's Fish and Wildlife Conservation Commission (FWC) regarding special rulemaking for the proposed no-fishing marine reserve zone that was included in the BNP's General Management Plan (GMP).

The Committee urges the Service to collaborate with PWC to consider fisheries regulations and management actions outlined in BNP's current Fishery Management Plan (FMP) as necessary to fully address fishery management needs, including within the proposed no-fishing marine reserve zone, prior to promulgating and

EPA-HQ-2018-009214

implementing any special rules. Such efforts shall include review and consideration of less restrictive management actions that could achieve the intent of Biscayne's GMP in lieu of a blanket fishing moratorium. The Committee also urges the Service to strongly consider the inclusion of scientifically rigorous monitoring and an adaptive management framework to guide data collection and future management as part of any special rules and regulations promulgated and implemented to govern the protection of coral reef resources within the proposed no-fishing marine reserve zone. Such monitoring should include well-planned, extensive, and scientifically rigorous data from appropriate fish and coral communities, collected prior to the establishment of a blanket fishing moratorium.

The Committee recommends that BNP re-establish the Memoranda of Understanding (MOU) with FWC that until its recent expiration had guided a productive Federal-State partnership for the protection of Biscayne's iconic resources. The Committee also encourages Biscayne National Park to re-establish a Fisheries Working Group that includes local representatives from the recreational and commercial fishing communities, and the businesses and nonprofit organizations that support these communities, to engage this user community in the development and implementation of consensus special rules and regulations to achieve the intent of Biscayne's GMP in lieu of a blanket fishing moratorium.

The Committee notes that FWC retains all authorities to implement fishing restrictions in State regulated waters of Biscayne National Park, subject to authority provided the Secretary in the park's enabling legislation.

Everglades Restoration.—The Committee notes the substantial progress made toward restoration of the Everglades ecosystem and continues to support this multi-year effort to preserve one of the great ecological treasures of the United States.

Vicksburg National Military Park.—The Committee is concerned about erosion and soil and ground deterioration affecting historic elements of Vicksburg National Memorial Park, including the Texas State Memorial and the Railroad Redoubt. The Committee urges the Service to assess on-the-ground conditions and take all necessary steps to ensure the park is safe for visitors and employees, and is preserved for future generations.

American Discovery Trail.—The Committee urges the Service, the Bureau of Land Management, and the U.S. Forest Service, in conjunction with all relevant law, regulations, and policies, to work with relevant and appropriate stakeholders to facilitate installing signage for the American Discovery Trail.

Wetumpka Marine Impact Crater.—The Wetumpka Impact Crater, located in Elmore County, Alabama, is a uniquely preserved marine impact crater created approximately 80 million years ago when an asteroid measuring an estimated 350 meters in diameter struck a coastal basin under 300–400 feet of water. The crater is widely considered to be the best preserved marine impact crater ever discovered and one of only about six in the entire world. Given that the crater is an extremely rare and well-preserved geologic feature of national and international significance, the Committee urges the Service to assess the suitability of designating the

EPA-HQ-2018-009214

Wetumpka Marine Impact Crater as a National Natural Landmark.

World War II Memorial.—The Committee recognizes that the World War II Memorial is one of the most visited memorials in our Nation's Capital. To accommodate rising visitation and modern means of creative narrative preservation, similar to other U.S. supported World War II memorials around the world, the Committee urges the Department to report to the Committee within 90 days of enactment of this Act on ongoing plans to upgrade the premises to enhance historical interpretation for veterans and other visitors.

Outreach.—The Committee recognizes that the Service has taken steps to increase outreach, make parks more accessible, and increase recruitment within minority schools and communities. The Committee encourages the Service to continue these efforts and work to develop partnerships and programs with Hispanic Serving Institutions, Historically Black Colleges and Universities, and other Minority Serving Institutions that contribute to the mission of the National Park Service.

World Heritage Sites.—The Committee urges the Service to prioritize funding for the backlog of maintenance and preservation projects including National Park System units designated as World Heritage Sites.

Arlington Memorial Bridge.—Recent inspections of the Arlington Memorial Bridge by the Federal Highway Administration (FHA) revealed severe deterioration that had accelerated since a 2015 inspection. More than 68,000 vehicles traverse the bridge between Virginia and the District of Columbia on a daily basis. Repair and renovation costs to the bridge—the symbolic entry to Washington, DC, as well as the gateway to Arlington National Cemetery—are estimated at $262 million.

The National Park Service and engineers from the FHWA have been monitoring the condition of the bridge for many years, making minor repairs as needed and recently limiting vehicle weight to ensure safe operation. Federal engineering inspectors have determined that significant structural issues including ongoing deterioration of trunnion posts (support structures for the bascule span) and the bridge decking must be addressed within four years or, as the Federal Highway Administration concluded, the bridge will have to be closed in 2021.

The Fixing America's Surface Transportation (FAST) Act (P.L. 114–94), established two Department of Transportation grant programs to address large, complex, nationally significant projects like the Memorial Bridge rehabilitation. The Service and the District submitted a grant application and the project was awarded a $90 million U.S. Department of Transportation grant in September, 2016. Funding challenges remain. According to the Service, the project is planned to be completed in two phases. The first phase includes repairs to the trunnion posts and rehabilitation of the approach spans. The second phase would complete rehabilitation of the bascule span and foundation repairs.

The Memorial Bridge rehabilitation and reconstruction effort will require the active bipartisan support of Federal, State, and local leaders. The Committee understands that the Service, with the District of Columbia as a sponsor, has applied for an additional $60 million grant under the FAST Act, to contribute towards comple-

ED_001620_00003678-00028

EPA-HQ-2018-009214

tion of the second phase of the project. The Committee urges the Department of the Interior and the Service to pursue coalitions and partnerships, modeled after similar projects including the Tamiami Trail bridge project within Everglades National Park, to leverage and secure necessary funding to complete this critical project in a timely manner.

U.S. Capitol Concerts.—The Committee continues its long-standing support for funding for the National Capitol Area Performing Arts Program and directs the Service to maintain funding for the summer concert series staged on the U.S. Capitol grounds at the fiscal year 2017 enacted level.

Ozark National Scenic Riverways.—The Committee understands concerns have been expressed regarding potential access restrictions in certain areas of the Ozark National Scenic Riverways. These concerns over restrictions to access points, trails, and reductions of allowable horsepower for motorized vessels in certain areas of the Ozark National Scenic Riverways merit continued examination and review by the Service. The Service is directed to work collaboratively with affected parties with the intent of honoring traditional access and ensuring that implementation of the General Management Plan for the Ozark National Scenic Riverways addresses the legitimate concerns of affected stakeholders including, but not limited to, local communities and businesses.

Bill Language.—The Committee has, since 2006, included bill language authorizing the Secretary of the Interior to acquire or lease property to facilitate the transportation of visitors to and from Ellis, Governors, and Liberty Islands, NY and NJ. The language was necessitated by the need to establish a screening process for visitors to the Statue of Liberty in the aftermath of the events of September 11, 2001. While the location of future, permanent screening facilities for the ferry operation to the Statue of Liberty and Ellis Island is now uncertain, prior-year bill language is retained as the Service reviews the security risks of alternative sites before making final decisions on the future location of permanent security screening facilities.

NATIONAL RECREATION AND PRESERVATION

The National Recreation and Preservation account provides for outdoor recreation planning, preservation of cultural and national heritage resources, technical assistance to Federal, State and local agencies, and administration of Historic Preservation Fund grants.

Appropriation enacted, 2017	$62,638,000
Budget estimate, 2018	37,001,000
Recommended, 2018	59,629,000
Comparison:	
Appropriation, 2017	¥3,009,000
Budget estimate, 2018	+22,628,000

The Committee recommends $59,629,000 for national recreation and preservation, $3,009,000 below the fiscal year 2017 enacted level and $22,628,000 above the budget request. The amounts recommended by the Committee compared with the budget estimates by activity are shown in the table at the end of this report.

Additional Guidance.—The following additional direction and guidance is provided with respect to funding provided within this account:

ED_001620_00003678-00029

EPA-HQ-2018-009214

Management Efficiencies.—The Committee accepts the program consolidations proposed in the budget request for Recreation Programs and Grants Administration to achieve management efficiencies within the National Recreation and Preservation account.

Heritage Partnership Program.—The bill provides $19,821,000 for the Heritage Partnership Program (HPP), equal to the fiscal year 2017 enacted level. These funds support grants to local nonprofit groups in support of historical and cultural recognition, preservation and tourism activities. The Committee commends the Alliance of National Heritage Areas for, in response to Congressional direction, recently developing an allocation model that maintains core services of more established areas while proposing more resources to newer areas to provide additional economic and cultural opportunities in the communities they serve. The Committee continues to encourage heritage areas to develop plans for long-term self-sufficiency as the Committee fully expects pressure on HPP funding to continue in future years.

Chesapeake Gateways and Trails.—The Committee maintains funding for the Chesapeake Gateways and Trails program at the fiscal year 2017 enacted level.

Native American Graves Protection and Repatriation Grants.—The Committee supports the Native American Graves Protection and Repatriation Grant Program and maintains funding at the fiscal year 2017 enacted level.

Japanese American Confinement Site Grants.—The Committee supports the Japanese American Confinement Site Grant Program and maintains funding at the fiscal year 2017 enacted level. The program leverages proportional funding through partnerships with local preservation groups to preserve Japanese American World War II confinement sites.

American Battlefield Protection Program Assistance Grants.—The Committee supports the American Battlefield Protection Program and maintains funding at the fiscal year 2017 enacted level. The Committee recognizes the importance of public-private partnerships to maintain the preservation of America's battlefields and urges the Service to give priority to projects with broad partner support, including non-profits, academic institutions, and regional, State, Tribal and local government agencies, and in which the partner commits to match the grants on a 1:1 basis. The Committee continues to encourage the timely review and processing of grants.

Maritime Heritage Preservation.—The Committee is aware of the Service's cooperative partnership with the Maritime Administration to promote public awareness and appreciation for the Nation's maritime heritage, including the National Maritime Heritage Grant Program. The Committee supports the efforts of this grant program to advance educational efforts and address preservation of historically significant maritime properties, including historic battleships.

HISTORIC PRESERVATION FUND

The Historic Preservation Fund supports the State historic preservation offices to perform a variety of functions. These include State management and administration of existing grant obligations; review and advice on Federal projects and actions; determinations and nominations to the National Register; Tax Act certifications; and technical preservation services. The States also re-

ED_001620_00003678-00030

EPA-HQ-2018-009214

view properties to develop data for planning use. Funding in this account also supports direct grants to qualifying organizations for individual preservation projects and for activities in support of heritage tourism and local historic preservation.

Appropriation enacted, 2017	$80,910,000
Budget estimate, 2018	51,100,000
Recommended, 2018	74,410,000
Comparison:	
Appropriation, 2017	¥6,500,000
Budget estimate, 2018	+23,310,000

The Committee recommends $74,410,000 for historic preservation, $6,500,000 below the fiscal year 2017 enacted level and $23,310,000 above the budget request.

Additional Guidance.—The following guidance is provided with respect to funding provided within this account:

State and Tribal Historic Preservation Offices.—The bill provides $46,925,000 for State Historic Preservation Offices and $9,485,000 for Tribal Historic Preservation Offices. The bill also provides $11,000,000 for competitive grants of which $500,000 is for grants to underserved communities and $10,500,000 is for competitive grants to document, interpret, and preserve historical sites associated with the Civil Rights Movement. The bill also includes $3,000,000 for competitive grants to Historically Black Colleges and Universities (HBCUs) and $4,000,000 for the Save America's Treasures competitive grant program for preservation of nationally significant sites, structures, and artifacts.

CONSTRUCTION

Appropriation enacted, 2017	$209,353,000
Budget estimate, 2018	226,529,000
Recommended, 2018	219,844,000
Comparison:	
Appropriation, 2017	+10,491,000
Budget estimate, 2018	¥6,685,000

The Committee recommends $219,844,000 for Construction, $10,491,000 above the fiscal year 2017 enacted level and $6,685,000 below the budget request.

Line-Item Construction.—The bill provides $129,011,000 in funding for line-item construction projects. The amount provided fully funds the 16 line-item construction projects in the fiscal year 2018 budget request as prioritized and revised by the Service and provided to the House Committee on Appropriations on June 30, 2017. Requests for reprogramming will be considered pursuant to the guidelines contained in this report.

Bill Language.—The Committee has maintained bill language from prior years providing that a single procurement may be issued which includes the full scope of the project for any project initially funded in a fiscal year with a future phase indicated in the NPS five-year Line-Item Construction program. The solicitation and contract in such procurement shall be subject to availability of funds. Executing a single contract has the potential to increase economies of scale and reduce overall costs.

ED_001620_00003678-00031

EPA-HQ-2018-009214

LAND AND WATER CONSERVATION FUND

RESCISSION

Appropriation enacted, 2017	¥$28,000,000
Budget estimate, 2018	¥28,020,000
Recommended, 2018	¥28,020,000
Comparison:	
Appropriation, 2017	¥20,000
Budget estimate, 2018	0

The Committee recommends the rescission of the annual contract authority provided by 16 U.S.C. 4601–10a. This authority has not been used in years and there are no plans to use it in fiscal year 2018. The Committee does not agree with the Administration's proposal to permanently cancel the authority.

LAND ACQUISITION AND STATE ASSISTANCE

Appropriation enacted, 2017	$162,029,000
Budget estimate, 2018	26,380,000
Recommended, 2018	120,575,000
Comparison:	
Appropriation, 2017	¥41,454,000
Budget estimate, 2018	+94,195,000

The Committee recommends $120,575,000 for land acquisition and state assistance, and a $4,500,000 rescission of unobligated balances from prior appropriations. Prior to implementation, the Service is directed to submit the proposed allocation of the rescission for Committee approval.

The recommendation includes $70,000,000 for State Conservation Grants; $5,000,000 for the competitive Outdoor Recreation Legacy Partnership (ORLP) grant program; and $16,000,000 for acquisitions. Additionally, $10,000,000 is included for the American Battlefield Protection Program (ABPP), equal to the fiscal year 2017 enacted level and $1,519,000 above the budget request. A detailed table of funding recommendations below the account level is provided at the end of this report.

The Committee does not have sufficient information to recommend specific Federal acquisition projects at this time, but will review and recommend levels of funding for projects submitted to the Committee in accordance with the direction provided in the explanatory statement accompanying Public Law 115–31.

The Committee is aware of concerns that State Assistance grants, and particularly the Outdoor Recreation Legacy Partnership (ORLP) grants, are not being processed in a timely manner. Administrative expenses are funded at the fiscal year 2017 enacted level to ensure staffing is not the issue. It is the Committee's expectation that formula grants be announced by the Secretary and apportioned to the States within 90 days of enactment of this Act. While the ORLP is a relatively new program, the process for grant announcement, review and award needs to be improved. The Service is encouraged to work with partners to standardize and improve the annual process.

ED_001620_00003678-00032

CENTENNIAL CHALLENGE

Appropriation enacted, 2017	$20,000,000
Budget estimate, 2018	14,971,000
Recommended, 2018	15,000,000
Comparison:	
Appropriation, 2017	¥5,000,000
Budget estimate, 2018	+29,000

The Committee has provided $15,000,000 for the Centennial Challenge matching grant program. The Committee notes that the $15,000,000 in Centennial Challenge funds provided to the Service in fiscal year 2016 was matched with nearly $33,000,000 from more than 90 partner organizations nationwide. These funds financed 69 projects to improve visitor services at more than 63 parks in 38 states, the District of Columbia, and the U.S. Virgin Islands.

The Committee understands that funds provided will be matched on at least a 1:1 basis and administered under existing Service partnership authorities. Funds provided will be dedicated to supporting signature projects and programs which provide critical enhancements for the parks beyond amounts provided for basic operations. The Committee directs that preference be given to projects that have a clear and immediate visitor benefit as well as a higher partner match. The Committee further encourages the Service to provide consideration to Centennial Challenge projects which have a deferred maintenance component in order to alleviate the sizeable deferred maintenance backlog within the System. The Committee notes that the Service has a long history of working with philanthropic partners and fully supports the use of public-private partnerships wherever feasible.

UNITED STATES GEOLOGICAL SURVEY

The United States Geological Survey (USGS, or "Survey") was established by an Act of Congress on March 3, 1879, to support the mission of the Department of the Interior and its science requirements. The USGS also works in collaboration with other Federal, State, and Tribal cooperators to conduct research and provide scientific data and information to describe and understand the Earth; minimize loss of life and property from natural disasters; manage water, biological, energy, and mineral resources; and enhance and protect our quality of life. The USGS is the Federal government's largest earth-science research agency and the primary source of data on the Nation's surface and ground water resources. For more than a century, the diversity of scientific expertise and collaborative partnerships with universities, research institutions, and major public and private laboratories has enabled USGS to carry out large-scale, multi-disciplinary investigations and provide impartial scientific information to resource managers, planners, policymakers, and the public.

SURVEYS, INVESTIGATIONS, AND RESEARCH

Appropriation enacted, 2017	$1,085,167,000
Budget estimate, 2018	922,168,000
Recommended, 2018	1,038,922,000
Comparison:	
Appropriation, 2017	¥46,245,000
Budget estimate, 2018	+116,754,000

EPA-HQ-2018-009214

The Committee recommends $1,038,922,000 for Surveys, Investigations, and Research, $46,245,000 below the fiscal year 2017 enacted level and $116,754,000 above the budget request. A detailed table of funding recommendations below the account level is provided at the end of this report.

Congressional Budget Justification.—The Committee directs the Survey to include in future justifications base funding for any subactivity, program, project, or study proposed for increases or reductions.

Ecosystems.—The Committee recommends $153,032,000 for ecosystem programs, $6,700,000 below the fiscal year 2017 enacted level and $20,904,000 above the budget request. The Survey provides critical scientific research and data to land and water managers in priority landscapes including the California Bay Delta, the Everglades, the Chesapeake Bay and the Great Lakes, and the Committee expects this work to continue. The Greater Everglades and the Chesapeake Bay Research and Monitoring programs are funded at fiscal year 2017 enacted levels.

The Committee recognizes that other Interior bureaus, Federal, State, Tribal and local partners rely on the Survey's Species-Specific Wildlife and Species-Specific Fisheries Research, and recommends these programs continue to be funded at fiscal year 2017 enacted levels.

The recommendation includes Contaminants Research funding at fiscal year 2017 enacted levels.

The Committee continues to be concerned about the economic, ecologic, and health threats posed by invasive species. The recommendation includes no less than $5,620,000 for Asian carp control.

The Survey is encouraged to pursue innovative solutions for continued curation of collections housed at the Smithsonian Institution.

The Committee recognizes the value of the Cooperative Research Units (CRUs) program and encourages the Department to develop a plan to address and fill open positions at research institutions and at CRUs as quickly as practicable so as to not jeopardize the educational pipeline.

Land Resources.—The Committee accepts the budget restructure as proposed in the request and recommends $120,603,000 for the Land Resources mission area. The recommendation includes an additional $8,300,000 for the continued development of a ground system for Landsat-9. Within funds provided for the National Land Imaging program, $4,847,000 is included for the National Civil Applications Center.

Energy, Mineral, and Environmental Health.—The Committee recommends $96,091,000 for energy, mineral resources and environmental health. The Containment Biology program is funded at the fiscal year 2017 enacted level.

The Toxic Substances Hydrology program is funded at $11,398,000. The Committee supports the continuation of USGS research on understanding the prevalence of toxins in the nation's natural bodies of water by expanding its understanding of cyanobacteria and toxins in stream and wetland ecosystems. The recommendation includes an increase of $350,000 for the Survey to study cyanobacteria, increase our understanding of harmful algal

ED_001620_00003678-00034

EPA-HQ-2018-009214

blooms, and strengthen our ability to respond to outbreaks. USGS is encouraged to participate in interagency efforts to expedite the development and deployment of remote sensing tools to assist with early event warning delivered through mobile devices and web portals.

Natural Hazards.—The Committee recommends $141,504,000 for natural hazards programs, of which $64,303,000 is provided for earthquake hazards.

The Committee recommends $10,200,000 for continued development, expansion, and upgrading of the infrastructure necessary for an earthquake early warning system. The Committee is also concerned about the lack of knowledge and offshore real-time instrumentation available for the Cascadia subduction zone. Our scientific understanding of earthquakes and the ocean environment will benefit from the wealth of offshore data that should be collected. The continued development of an early earthquake warning system for the Cascadia system would help prepare for and mitigate the negative human and economic impacts to the Pacific Northwest.

The recommendation includes $800,000 for the Central and Eastern U.S. Seismic Network (CEUSN) and $6,250,000 for support for regional earthquake monitoring, assessments, and research.

The Committee recommends $26,521,000 for the Volcano Hazards program of which $1,000,000 is to continue necessary work on next-generation lahar detection systems at very high threat volcanoes. The Survey is directed to keep the Committee informed on progress made with the additional funding provided for volcano hazards in the Consolidated Appropriations Act, 2017 (P.L. 115–31).

Water Resources.—The Committee recommends $210,754,000 for Water Resources. The recommendation does not support reductions to the National Research Program which would reduce research at the 32 USGS Water Science Centers across the country. Regional Groundwater Evaluations in the Coastal Lowlands and California Coastal Basin Aquifers, and the Groundwater Model Development, Maintenance, and Sustainability program are funded at fiscal year 2017 levels.

The Cooperative Matching Funds program is designed to bring State, Tribal, and local partners together to respond to emerging water issues through shared efforts and funding. The recommendation provides $59,927,000, equal to the fiscal year 2017 enacted level.

Streamgages are crucial to early warning and flood damage reduction efforts across the United States. The Committee recommends $73,173,000 for the groundwater and streamflow information program, with a $500,000 increase for additional streamgage capacity and rapid deployable streamgages necessary during severe weather events. The National Groundwater Monitoring Network is funded at the fiscal year 2017 enacted level.

The Committee recommends $89,029,000 for the National Water Quality program, and directs no less than $2,000,000 to harmful algal bloom (HAB) science. The Urban Waters Federal Partnership is funded at the fiscal year 2017 enacted level of $717,000. The National Atmospheric Deposition Program is funded at $1,576,000.

ED_001620_00003678-00035

EPA-HQ-2018-009214

The Water Resources Research Act was designed to provide more effective coordination of the nation's water research by establishing Water Resources Research Institutes at universities in each state, territory, and the District of Columbia. These institutes provide vital support to stakeholders, States and Federal agencies for long-term water planning, policy development, and resource management. The program is funded at the fiscal year 2017 enacted level of $6,500,000.

Core Science Systems.—The Committee recommends $114,737,000 for core science systems, of which $24,397,000 is for the National Cooperative Geologic Mapping program. The recommendation includes $67,354,000 for the National Geospatial program, of which $22,500,000 is for 3DEP National Enhancement. Landscape level assessments—Chesapeake Bay, Geospatial Research and 3DEP Technical Support, 3DEP Program Functions, and the Federal Geographic Data Committee Functions are funded at fiscal year 2017 enacted levels.

Science Support.—The Committee recommends $100,331,000 for science support.

Facilities.—The recommendation includes $94,604,000 for rental payments and operations and maintenance. The Committee needs more information about the additional $10,500,000 requested for the rent increase at the GSA-owned Menlo Park campus. The Committee understands that the Survey is working with GSA on a rent deviation plan, and is preparing to relocate to the NASA Ames Research Center at Moffett Field to save costs. The Survey is directed to work with GSA to develop a multi-year cost plan for Menlo Park and to brief the Committee once it is completed.

Bill Language.—The bill modifies an administrative proviso to clarify that the Survey may use appropriations for the placement of seismic equipment, in addition to gauging stations and observation wells.

BUREAU OF OCEAN ENERGY MANAGEMENT

The Bureau of Ocean Energy Management is responsible for the development of the Nation's offshore energy and mineral resources. The Bureau's management of these resources helps meet the Nation's energy needs by providing access to—and fair return to the American taxpayer for—offshore energy and mineral resources through strategic planning and resource and economic evaluation. Conventional energy activities include development of the Five-Year Outer Continental Shelf (OCS) Oil and Gas Leasing Program; assessment of mineral resource potential, tracking of inventories of oil and gas reserves, and development of production projections; and economic evaluation to ensure the receipt of fair value through lease sales and lease terms.

OCEAN ENERGY MANAGEMENT

(INCLUDING RESCISSION OF FUNDS)

Appropriation enacted, 2017	$169,560,000
Budget estimate, 2018	171,000,000
Recommended, 2018	171,000,000
Comparison:	
Appropriation, 2017	+1,440,000
Budget estimate, 2018	0

ED_001620_00003678-00036

EPA-HQ-2018-009214

The Committee recommends $171,000,000 for Ocean Energy Management, as requested. This amount will be partially offset with the estimated collection of rental receipts and cost recovery fees totaling $56,834,000.

The Committee supports the proposed increases for the five-year leasing review, and encourages an expeditious and thorough review.

The Committee notes the continued decline in rental receipts in fiscal year 2018, and the budget fails to offer a corrective action plan to mitigate. The Committee rescinds $25,000,000 in unobligated prior year balances in order to partially offset the need for increased discretionary spending. The Bureau should not expect that the Committee will substitute increased appropriated funds for lower offsetting collections in future years.

Further, the Committee recommendation does not provide funding for National Ocean Policy Coastal and Marine Spatial Planning.

Finally, the Committee encourages the Bureau to work with North Carolina stakeholders, industry and State task forces with respect to any change in the approach to wind lease sales in the Wilmington Wind Energy Area.

BUREAU OF SAFETY AND ENVIRONMENTAL ENFORCEMENT

The Bureau of Safety and Environmental Enforcement is responsible for oversight of exploration, development, and production operations for oil, gas, and other marine minerals on the Outer Continental Shelf (OCS). Leases in Federal waters off the shores of California, Alaska, and the Gulf of Mexico provide about 16 percent of the Nation's oil production and about 5 percent of domestic natural gas production. The Bureau facilitates the safe and environmentally responsible development of oil and gas and the conservation of offshore resources. The Bureau's safety and environmental compliance activities include oil and gas permitting; facility inspections, regulations and standards development; safety and oil spill research; field operations; environmental compliance and enforcement; review of operator oil spill response plans; production and development; and operation of a national training center for inspectors and engineers.

OFFSHORE SAFETY AND ENVIRONMENTAL ENFORCEMENT

(INCLUDING RESCISSION OF FUNDS)

Appropriation enacted, 2017	$189,772,000
Budget estimate, 2018	192,182,000
Recommended, 2018	186,411,000
Comparison:	
Appropriation, 2017	¥3,361,000
Budget estimate, 2018	¥5,771,000

The Committee recommends $186,411,000 for Offshore Safety and Environmental Enforcement. This amount will be partially offset with the estimated collection of offsetting rental receipts, cost recovery fees and inspection fees totaling $77,871,000. The Committee notes the continued decline in rental receipts in fiscal year 2018, and the budget fails to offer a corrective action plan to mitigate. The Committee rescinds $12,000,000 in unobligated prior

ED_001620_00003678-00037

year balances in order to partially offset the need for increased discretionary spending. The Bureau should not expect that the Committee will substitute increased appropriated funds for lower offsetting collections in future years. The Bureau will need to prioritize program activities accordingly.

OIL SPILL RESEARCH

Appropriation enacted, 2017	$14,899,000
Budget estimate, 2018	12,700,000
Recommended, 2017	12,700,000
Comparison:	
Appropriation, 2017	¥2,199,000
Budget estimate, 2018	0

The Committee recommends $12,700,000 for Oil Spill Research, as requested.

OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

The Office of Surface Mining Reclamation and Enforcement (OSM), through its regulation and technology account, regulates surface coal mining operations to ensure that the environment is reclaimed once mining is completed. The OSM accomplishes this mission by providing grants and technical assistance to those States that maintain their own regulatory and reclamation programs and by conducting oversight of State programs. Further, the OSM administers the regulatory programs in the States that do not have their own programs and on Federal and Tribal lands. Through its Abandoned Mine Land (AML) reclamation program, the OSM provides funding for environmental restoration at abandoned coal mines based on fees collected from current coal production operations. In their un-reclaimed condition these abandoned sites endanger public health and safety, and prevent the beneficial use of land and water resources. Mandatory appropriations provide funding for the abandoned coal mine sites as required under the 2006 amendments to the Surface Mining Control and Reclamation Act.

REGULATION AND TECHNOLOGY

Appropriation enacted, 2017	$121,017,000
Budget estimate, 2018	109,432,000
Recommended, 2018	113,790,000
Comparison:	
Appropriation, 2017	¥7,227,000
Budget estimate, 2018	+4,358,000

The Committee recommends $113,790,000 for Regulation and Technology, $7,227,000 below the fiscal year 2017 enacted level and $4,358,000 above the budget request. The Committee maintains funding for State regulatory grants at $68,590,000, equal to the fiscal year 2017 enacted level.

ABANDONED MINE RECLAMATION FUND

Appropriation enacted, 2017	$132,163,000
Budget estimate, 2018	20,007,000
Recommended, 2018	99,672,000
Comparison:	
Appropriation, 2017	¥32,491,000
Budget estimate, 2018	+79,665,000

The Committee recommends $99,672,000 for the Abandoned Mine Reclamation Fund $32,491,000 below the fiscal year 2017 enacted level and $79,665,000 above the budget request. Of the funds provided, $24,672,000 shall be derived from the Abandoned Mine Reclamation Fund, and $75,000,000 shall be derived from the General Fund.

The Committee provides a total of $75,000,000 for grants to States for the reclamation of abandoned mine lands in conjunction with economic and community development and reuse goals. States shall use these funds to accelerate the remediation of AML sites with economic and community development end uses in mind. In doing so, the Committee envisions a collaborative partnership between the State AML programs and their respective State and local economic and community development programs that will explore ways to return legacy coal sites to productive reuse. The Committee notes that these grants are provided from the General Fund and are therefore separate from the mandatory payments from the Abandoned Mine Land fund in fiscal year 2018.

For fiscal year 2018, $75,000,000 shall be provided to the three Appalachian states with the largest unfunded needs for the reclamation of Priority 1 and Priority 2 sites as delineated in the Abandoned Mine Land Inventory System. State AML programs, in consultation with State economic and community development authorities, shall develop a list of eligible AML projects in Appalachian counties that have a nexus to economic and community development, and select qualifying AML projects that have the potential to create long-term economic benefits. State AML programs should consider whether a model similar to the Appalachian Regional Commission grants process could streamline project selection, and whether an interagency agreement or other contracting mechanisms could streamline program implementation. Eligible grant recipients are limited to State and local governmental entities who may subcontract project-related activities as appropriate.

BUREAU OF INDIAN AFFAIRS AND BUREAU OF INDIAN EDUCATION

The Bureau of Indian Affairs, the Bureau of Indian Education, and the Office of the Assistant Secretary—Indian Affairs (together, "Indian Affairs") provide services directly or through contracts, grants, or compacts to a service population of more than 1.7 million American Indians and Alaska Natives (AI/AN) who are enrolled members of 567 federally recognized Tribes in the 48 contiguous United States and Alaska. While the role of the organization has changed significantly in the last four decades in response to a greater emphasis on Indian self-determination, Tribes still look to Indian Affairs for a broad spectrum of services. Almost 85 percent of all appropriations are expended at the local level, and over 62 percent of appropriations provided directly to Tribes and Tribal organizations through grants, contracts, and compacts.

In preparation for the fiscal year 2018 appropriation bill, the Subcommittee held two days of hearings and received testimony from over 75 witnesses on a variety of topics pertaining to AI/AN programs. The Federal government has a legal and moral obligation to provide quality services to American Indians and Alaska Natives. On a nonpartisan basis, the Committee continues to protect and, where possible, strengthen the budgets for Indian Coun-

EPA-HQ-2018-009214

try programs in this bill in order to address longstanding and underfunded needs.

OPERATION OF INDIAN PROGRAMS

(INCLUDING TRANSFER OF FUNDS)

Appropriation enacted, 2017	$2,339,346,000
Budget estimate, 2018	2,082,506,000
Recommended, 2018	2,360,911,000
Comparison:	
Appropriation, 2017	+21,565,000
Budget estimate, 2018	+278,405,000

The Committee recommends $2,360,911,000 for Operation of Indian programs. Indian Affairs is expected to execute its budget in accordance with the justification submitted to the Congress, except as otherwise directed below and summarized in the table at the end of this report.

Fixed Costs and Transfers.—The recommendation includes all requested fixed costs and transfers.

Tribal Government.—The recommendation includes $312,600,000 for Tribal government programs. All programs continue to operate at fiscal year 2017 enacted levels except for the following: Tribal government program oversight is funded at the requested level; and road maintenance is funded at $31,653,000, an increase of $1,346,000 above the fiscal year 2017 enacted level. Not less than $1,000,000 must be used to improve the condition of gravel roads and bridges used by school buses transporting students.

Human Services.—The recommendation includes $159,540,000 for human services programs, $35,591,000 above the request. Proposed cuts to social services, welfare assistance, the Indian Child Welfare Act, housing improvement, and the Tiwahe (family) initiative have all been restored. The Committee continues to recognize the importance of providing culturally-appropriate services with the goals of empowering individuals and families through health promotion, family stability, and strengthening Tribal communities as a whole. Indian Affairs is urged to make services available to law enforcement officers, in coordination with the Indian Health Service.

Trust—Natural Resources.—The recommendation includes $200,340,000 for natural resources programs, $34,878,000 above the request. The following programs are funded at or above fiscal year 2017 enacted levels: irrigation operations and maintenance, $14,009,000 as requested; rights protection implementation, $40,161,000; cooperative landscape conservation, $9,956,000; agriculture and range, $31,096,000; forestry, $55,232,000, of which $26,895,000 is for projects; water resources, $10,581,000, of which $390,000 is to continue the Seminole and Miccosukee water study as requested; fish, wildlife, and parks, $15,260,000, of which $9,933,000 is for projects.

The Committee supports the Bureau of Indian Affairs' efforts to address the resiliency needs of Tribal communities by working to address threats to public safety, natural resources, and sacred sites. Consistent with the Federal government's treaty and trust obligations, the Committee directs the Bureau of Indian Affairs to work with at-risk Tribes to identify and expedite the necessary resources.

ED_001620_00003678-00040

EPA-HQ-2018-009214

The Department of the Interior is expected to promote and expand the use of agreements with Indian Tribes to protect Indian trust resources from catastrophic wildland fire, insect and disease infestation, or other threats from adjacent Federal lands, as authorized by law.

Trust—Real Estate Services.—The recommendation includes $126,708,000 for real estate services, $14,662,000 above the budget request. All proposed cuts are restored except for central oversight, which is funded at $3,160,000 as requested. The following programs each receive a $500,000 program increase and are funded at the following levels: land title and records offices, $14,774,000; land records improvement—regional, $2,444,000; and regional oversight, $10,977,000.

The Committee directs the Bureau of Indian Affairs (BIA) to have no outstanding title conveyance requests older than 12 months, including those who have been initially rejected by the Land Titles and Record Offices for insufficient or incorrect documentation in TAAMS, by September, 2018. The Committee expects an update on the status of their outstanding conveyances by September, 2018 and a report on what the BIA will be changing in their operations policy to ensure these backlogs and documentation related rejections do not occur in the future.

The Committee directs the Secretary, or his designee, to work with the Lower Elwha Klallam Tribe to identify appropriate lands in Clallam County, WA to satisfy the requirements of Sec. 7 of the Elwha River Ecosystem and Fisheries Restoration Act (P.L. 102–495).

Public Safety and Justice.—The recommendation includes $390,417,000 for Public Safety and Justice, $41,103,000 above the budget request. All proposed cuts are restored. The following programs receive a program increase and are funded at the following levels: detention/corrections, $98,056,000; law enforcement special initiatives, $11,000,000, all of which is to be used to hire additional drug enforcement agents to assist Tribes in the fight against drugs, particularly opioids; and law enforcement program management, $6,530,000.

For the purpose of addressing the needs of juveniles in custody at Tribal detention centers operated or administered by the BIA, educational and health-related services to juveniles in custody are allowable costs for detention/corrections program funding. Indian Affairs is urged to provide mental health and substance abuse services when needed by juvenile and adult detainees and convicted prisoners.

Community and Economic Development.—The recommendation includes $45,447,000 for Community and Economic Development, $5,983,000 above the budget request. All proposed cuts are restored. A program increase of $3,400,000 is recommended in Community Development Central Oversight to implement the Native American Tourism Improvement and Visitor Experience Act of 2016 (NATIVE Act), including via cooperative agreements with Tribes or Tribal organizations. Indian Affairs is expected to submit a budget request for fiscal year 2019 for the next phase of the energy office.

Executive Direction and Administrative Services.—The recommendation includes $223,947,000 for Executive Direction and

ED_001620_00003678-00041

EPA-HQ-2018-009214

Administrative Services, $8,355,000 above the budget request. The following programs are funded above the budget request: executive direction Tribal priority allocations, $15,119,000; administrative services Tribal priority allocations, $12,866,000; regional safety management, $2,240,000; information resources technology, $44,782,000; and regional facilities management, $4,229,000. Indian Affairs is directed to complete annual health and safety inspections of all BIE system facilities, and to submit quarterly updates on the status of such inspections to the Committee.

The Committee is deeply disappointed by continued GAO reports of shortcomings and delays in school safety inspections and repairs. Self-determination does not absolve the Federal government of the responsibility to inspect and repair buildings it owns. The Bureau is urged to exercise its authority to reassume the operation of federally-owned but tribally-operated schools when necessary.

Bureau of Indian Education.—The recommendation includes $901,912,000 for the Bureau of Indian Education. All proposed program reductions are restored. Tribal grant support costs continue to be fully funded. A one-time increase is provided to complete the transition to a school year funding cycle for all Tribal colleges and universities, including those operated by the BIE.

Of the amounts provided: $402,906,000 is for ISEP formula funds; $5,457,000 is for ISEP program adjustments; $12,248,000 is for education program enhancements; $2,500,000 is for the development and operation of Tribal departments or divisions of education (TEDs) as authorized by 25 U.S.C. 2020; $56,285,000 is for student transportation; $18,810,000 is for early child and family development which should focus on the Family and Child Education (FACE) program; $80,168,000 is to fully fund Tribal grant support costs; $66,608,000 is for facilities operations; $59,552,000 is for facilities maintenance; $500,000 is for juvenile detention education program grants; $14,778,000 is for Johnson-O'Malley grants; $69,793,000 is forward funding for Tribal colleges and universities; $14,403,000 is forward funding for Tribal technical colleges and includes the requested transfer; $27,890,000 is for the Bureau-owned and operated Haskell Indian University and Southwestern Indian Polytechnic Institute (SIPI), including a one-time forward funding increase of $5,377,000; $1,220,000 is for TCU supplements; $34,996,000 is for scholarships and adult education; $2,992,000 is for special higher education scholarships; $2,450,000 is for the science post-graduate scholarships; $24,957,000 is for education program management; and $10,297,000 is for information technology.

The Committee supports efforts to revitalize and maintain Native languages and expand the use of language immersion programs and has provided $2,000,000 within education program enhancements for capacity building grants for Bureau and tribally operated schools to expand existing language immersion programs or to create new programs. Prior to distributing these funds, the Bureau shall coordinate with the Department of Education and Department of Health and Human Services to ensure that Bureau investments compliment, but do not duplicate, existing language immersion programs. The Bureau is also directed to submit a report to the Committees on Appropriations within 180 days of enactment of this Act regarding the distribution of these funds and the status

EPA-HQ-2018-009214

of Native language classes and immersion programs offered at Bureau-funded schools.

The Johnson O'Malley program is funded at the fiscal year 2017 enacted level. The Committee remains concerned that the distribution of funds is not an accurate reflection of the distribution of students. The Bureau is reminded of the reporting requirement contained in the explanatory statement accompanying the Consolidated Appropriations Act, 2017.

Indian education remains among the Committee's top priorities because it is a fundamental trust responsibility and because elementary and secondary students in particular have fallen far behind their peers for reasons now well documented by the Government Accountability Office (GAO), the Department of Education, and others. The BIE system is undergoing a major transformation in direct response to these reports, in order to meet the changing needs of schools now that most schools are tribally-run, and in order to improve accountability. With the concurrence of elected Tribal leaders and major interTribal organizations, the Committee continues to support this transformation. All of the education-related responsibilities under Indian Affairs, including procurement, human resources, budget and finance, and BIE facilities operations, maintenance, and inspections, should be consolidated under the BIE, which should be led by an experienced and proven superintendent selected from a pool of qualified candidates inside and outside the BIE system.

The Committee remains concerned about recent GAO reports detailing problems within the K–12 Indian education system at the Department of the Interior, in particular as they pertain to organizational structure, accountability, finance, health and safety, and ultimately student performance. As the Department takes steps to reform the system, the Secretary is reminded that future support from Congress will continue to be based in large part upon successful implementation of GAO report recommendations. In particular, consistent with GAO report 13–774, the Secretary is urged to reorganize Indian Affairs so that control and accountability of the BIE system is consolidated within the BIE, to present such reorganization proposal in the fiscal year 2019 budget request, and to submit to the Committees on Appropriations a corresponding updated workforce plan. Consistent with GAO testimonies 15–389T, 15–539T, 15–597T, and any subsequent reports, the Secretary is urged to personally oversee immediate actions necessary to ensure the continued health and safety of students and employees at BIE schools and facilities.

Without question, high speed internet access is essential for student success and economic development in modern society. However, the GAO recently identified Tribal internet access as an area of fragmentation, overlap, or duplication (GAO–16–375SP). Indian Affairs is urged to coordinate with larger, existing broadband access programs funded by the Federal Communications Commission and the U.S. Department of Agriculture.

The BIE is encouraged to coordinate with the Indian Health Service to integrate preventive dental care and mental health care at schools within the BIE system.

The recommendation modifies bill language limiting the expansion of grades and schools in the BIE system, including charter

ED_001620_00003678-00043

EPA-HQ-2018-009214

schools. The intent of the language is to prevent already limited funds from being spread further to additional schools and grades. The intent is not to limit Tribal flexibility at existing schools. Nothing in the bill is intended to prohibit a Tribe from converting a tribally-controlled school already in the BIE system to a charter school in accordance with State and Federal law. The modification removes the grade expansion limitation of one grade.

The recommendation continues bill language providing the Secretary with the authority to approve satellite locations of existing BIE schools if a Tribe can demonstrate that the establishment of such locations would provide comparable levels of education as are being offered at such existing BIE schools, and would not significantly increase costs to the Federal government. The intent is for this authority to be exercised only in extraordinary circumstances to provide Tribes with additional flexibility regarding where students are educated without compromising how they are educated, and to significantly reduce the hardship and expense of transporting students over long distances, all without unduly increasing costs that would otherwise unfairly come at the expense of other schools in the BIE system.

CONTRACT SUPPORT COSTS

Appropriation enacted, 2017	$278,000,000
Budget estimate, 2018	241,600,000
Recommended, 2018	241,600,000
Comparison:	
Appropriation, 2017	¥36,400,000
Budget estimate, 2018	0

The Committee recommends an indefinite appropriation estimated to be $241,600,000 for contract support costs incurred by the agency as required by law. The bill includes language making available for two years such sums as are necessary to meet the Federal government's full legal obligation, and prohibiting the transfer of funds to any other account for any other purpose.

CONSTRUCTION

(INCLUDING TRANSFER OF FUNDS)

Appropriation enacted, 2017	$192,017,000
Budget estimate, 2018	143,262,000
Recommended, 2018	202,213,000
Comparison:	
Appropriation, 2017	+10,196,000
Budget estimate, 2018	+58,951,000

The Committee recommends $202,213,000 for Construction, $58,951,000 above the budget request. Details are contained in the justification submitted to the Congress, except as otherwise discussed below.

Education.—The recommendation includes $138,245,000 for Education Construction, of which $45,504,000 is for campus-wide replacement, $11,935,000 is for component facilities replacement, $7,574,000 is for employee housing repair, and $73,232,000 is for facilities improvement and repair. The Bureau is directed to submit an allocation plan to the Committee for campus-wide replacement and facilities replacement within 30 days of enactment of this Act.

ED_001620_00003678-00044

EPA-HQ-2018-009214

The Committee recognizes the School Facilities and Construction Negotiated Rulemaking Committee established under Public Law 107–110 for the equitable distribution of funds. Appropriations in this bill for campus-wide replacement are limited to the 10 schools selected via the rulemaking committee process and published by Indian Affairs on April 5, 2016.[1] The BIE should submit a similar list for facilities with the fiscal year 2019 budget request.

The Committee continues to strongly support innovative financing options to supplement annual appropriations and accelerate repair and replacement of Bureau of Indian Education schools, including through the use of construction bonds, tax credits, and grant programs. The Department is urged to revise and resubmit its proposal to reconstitute the National Fund for Excellence in American Indian Education, and to include authority for the Fund to facilitate public-private partnership construction projects.

Public Safety and Justice.—The Committee is concerned that Indian Affairs' focus on alternatives to incarceration has come at a cost to justice facilities construction. Indian Affairs, in coordination with the Department of Justice, is therefore urged to consider including with its fiscal year 2019 budget a legislative proposal for a joint venture demonstration program for regional justice centers, similar to the Shoshone-Bannock Tribes' Justice Center, and modeled after the joint venture program for Indian health facilities.

Indian Affairs is urged to improve officer safety by eliminating radio tower communications dead zones.

INDIAN LAND AND WATER CLAIM SETTLEMENTS AND MISCELLANEOUS PAYMENTS TO INDIANS

Appropriation enacted, 2017	$45,045,000
Budget estimate, 2018	13,999,000
Recommended, 2018	55,457,000
Comparison:	
Appropriation, 2017	+10,412,000
Budget estimate, 2018	+41,458,000

The Committee recommends $55,457,000 for Indian Land and Water Claim Settlements and Miscellaneous Payments to Indians. A detailed table of funding recommendations below the account level is provided at the end of this report. The recommended level enables Indian Affairs to meet statutory deadlines of all authorized settlement agreements to date.

INDIAN GUARANTEED LOAN PROGRAM ACCOUNT

Appropriation enacted, 2017	$8,757,000
Budget estimate, 2018	6,692,000
Recommended, 2018	9,272,000
Comparison:	
Appropriation, 2017	+515,000
Budget estimate, 2018	+2,580,000

The Committee recommends $9,272,000 for the Indian Guaranteed Loan Program Account, $2,580,000 above the budget request. The Indian Guaranteed Loan Program is the most effective Federal program tailored, dedicated to, and capable of facilitating greater access to private capital for Indian Tribes and Indian-owned economic enterprises.

[1] www.bia.gov/WhoWeAre/AS-IA/OFFCR/inds.htm.

EPA-HQ-2018-009214

DEPARTMENTAL OFFICES

OFFICE OF THE SECRETARY

The Office of the Secretary supports a wide-range of Departmental business, policy, and oversight functions.

DEPARTMENTAL OPERATIONS

Appropriation enacted, 2017	$271,074,000
Budget estimate, 2018	123,940,000
Recommended, 2018	122,940,000
Comparison:	
Appropriation, 2017	¥ 148,134,000
Budget estimate, 2018	¥ 1,000,000

The Committee recommends $122,940,000 for Departmental Operations. The Committee accepts the proposal in the budget request to transfer the Office of Natural Resources Revenue from Departmental Operations to a separate account within Department-wide Programs. The Office of Valuation Services is funded at $9,000,000.

National Monument Designations.—The Department is directed to work collaboratively with interested parties, including but not limited to, the Congress, States, local communities, Tribal governments and others prior to planning, implementing, or making national monument designations.

Chief Standing Bear.—The Committee recognizes the importance of Chief Standing Bear as one of America's earliest civil rights leaders. The Committee supports the work on the State and local level to establish a multi-state trail commemorating his accomplishments and urges the Secretary to assist in these efforts.

American Discovery Trail.—The Committee encourages the Secretary to work with the National Park Service, the Bureau of Land Management and other appropriate agencies, in conjunction with all relevant law, regulations, and policies, to work with appropriate stakeholders to facilitate installing signage for the American Discovery Trail.

Tamarisk Eradication.—The Committee encourages the Secretary to coordinate with the Department of Agriculture, other Federal agencies, States, Tribes, private entities, and communities to establish a scientifically based and watershed-focused pilot program to eradicate tamarisk in the southwestern United States.

Departmental Documents.—The Committee directs the Secretary to ensure departmental documents, such as boundary maps and resource management plans, clearly delineate Federal, State, and private land; state that Federal land management documents apply only to Federal lands; do not include private land, unless authorized by law and approved by landowner; and to adjust such documents as necessary.

INSULAR AFFAIRS

ASSISTANCE TO TERRITORIES

The Office of Insular Affairs (OIA) was established on August 4, 1995, through Secretarial Order No. 3191, which also abolished the former Office of Territorial and International Affairs. The OIA has important responsibilities to help the United States government fulfill its responsibilities to the four U.S. territories of Guam,

ED_001620_00003678-00046

EPA-HQ-2018-009214

American Samoa (AS), U.S. Virgin Islands (USVI) and the Commonwealth of the Northern Mariana Islands (CNMI) and also the three freely associated States: the Federated States of Micronesia (FSM), the Republic of the Marshall Islands (RMI) and the Republic of Palau. The permanent and trust fund payments to the territories and the compact nations provide substantial financial resources to these governments. During fiscal year 2004, financial arrangements for the Compacts of Free Association with the FSM and the RMI were implemented. These also included mandatory payments for certain activities previously provided in discretionary appropriations as well as Compact impact payments of $30,000,000 per year split among Guam, CNMI, AS, and Hawaii.

Appropriation enacted, 2017	$91,925,000
Budget estimate, 2018	80,967,000
Recommended, 2018	90,930,000
Comparison:	
Appropriation, 2017	¥995,000
Budget estimate, 2018	+9,963,000

The Committee recommends $90,930,000 for Assistance to Territories, $995,000 below the fiscal year 2017 enacted level and $9,963,000 above the budget request. A detailed table of funding recommendations below the account level is provided at the end of this report.

Coral Reef Initiative.— The Coral Reef Initiative is funded at $1,218,000. Within the Coral Reef Initiative program, $250,000 is provided for the Office of Insular affairs to continue work on the 2015 strategic plan developed in coordination with Federal and local partners to help prevent, manage, and control invasive species in the United States Pacific region. The Committee directs the Office to include in future budget justifications a summary of the Department's role in the development and implementation activities of the plan. The annual report should include a table of prior fiscal year activities, upcoming fiscal year activities, and, if applicable, estimates of funding to be used or needed for planned activities.

American Samoa Operations Grants.—The recommendation includes $23,002,222 for American Samoa Operations grants, $250,000 above the fiscal year 2017 enacted level. The increase is provided to assist grantees in complying with Federal mandates.

COMPACT OF FREE ASSOCIATION

Appropriation enacted, 2017	$16,465,000
Budget estimate, 2018	3,286,000
Recommended, 2018	3,300,000
Comparison:	
Appropriation, 2017	¥13,165,000
Budget estimate, 2018	+14,000

The Committee recommends $3,300,000 for Compact of Free Association, $13,165,000 below the fiscal year 2017 enacted level and $14,000 above the budget request. A detailed table of funding recommendations below the account level is provided at the end of this report.

ED_001620_00003678-00047

EPA-HQ-2018-009214

OFFICE OF THE SOLICITOR

SALARIES AND EXPENSES

Appropriation enacted, 2017	$65,769,000
Budget estimate, 2018	65,675,000
Recommended, 2018	65,675,000
Comparison:	
Appropriation, 2017	¥94,000
Budget estimate, 2018	0

The Committee recommends $65,675,000 for salaries and expenses of the Office of the Solicitor, as requested.

OFFICE OF INSPECTOR GENERAL

SALARIES AND EXPENSES

Appropriation enacted, 2017	$50,047,000
Budget estimate, 2018	49,952,000
Recommended, 2018	49,952,000
Comparison:	
Appropriation, 2017	¥95,000
Budget estimate, 2018	0

The Committee recommends $49,952,000 for salaries and expenses of the Office of Inspector General, as requested.

OFFICE OF THE SPECIAL TRUSTEE FOR AMERICAN INDIANS

FEDERAL TRUST PROGRAMS

(INCLUDING TRANSFER OF FUNDS)

Congress has designated the Secretary of the Interior as the trustee delegate with responsibility for approximately 55 million surface acres of land, 57 million acres of subsurface mineral interests, and nearly $4.4 billion that is held in trust by the Federal government on behalf of American Indians, Alaska Natives, and federally recognized Indian Tribes. The Office of the Special Trustee's trust management of these assets includes conserving, maintaining, accounting, investing, disbursing, and reporting to individual Indians and federally recognized Tribes and Tribal organizations on asset transactions generated from sales, leasing and other commercial activities on these lands.

Appropriation enacted, 2017	$139,029,000
Budget estimate, 2018	119,400,000
Recommended, 2018	119,400,000
Comparison:	
Appropriation, 2017	¥19,629,000
Budget estimate, 2018	0

The Committee recommends $119,400,000 for Federal trust programs, as requested. A detailed table of funding recommendations below the account level is provided at the end of this report.

DEPARTMENT-WIDE PROGRAMS

WILDLAND FIRE

The Department's Wildland Fire Management account supports fire activities for the Bureau of Land Management, the National Park Service, the Fish and Wildlife Service, and the Bureau of In-

ED_001620_00003678-00048

dian Affairs. The Committee recommends a total of $935,850,000 for the Department's wildland fire accounts. This fully funds the fire accounts at the 10-year average of expenditures. The Committee accepts the proposal to provide all funding for wildland fire suppression costs in the Wildland Fire Management account.

WILDLAND FIRE MANAGEMENT

Appropriation enacted, 2017	$942,671,000
Budget estimate, 2018	873,518,000
Recommended, 2018	935,850,000
Comparison:	
Appropriation, 2017	¥6,821,000
Budget estimate, 2018	+62,332,000

The Committee recommends $935,850,000 for Wildland Fire Management at the Department of the Interior. The detailed allocation of funding for these accounts is included in the table at the end of this report.

Wildland Fire Preparedness.—The Committee recommends $332,784,000 for Wildland Fire Preparedness, equal to the fiscal year 2017 enacted level and $10,605,000 above the budget request. The Department should immediately notify the Committees on Appropriations if it appears that funding shortfalls may limit needed firefighting capacity.

Wildland Fire Suppression.—The Committee recommends $389,406,000, for Wildland Fire Suppression, $5,594,000 below the fiscal year 2017 enacted level and equal to the budget request.

Fuels Management.—The Committee recommends $182,500,000 for the Fuels Management program, $2,500,000 above the fiscal year 2017 enacted level and $33,034,000 above the budget request.

Burned Area Rehabilitation.—The Committee recommends $19,948,000 for the Burned Area Rehabilitation program, $522,000 below the fiscal year 2017 enacted level and $10,481,000 above the budget request. The Committee notes that funding for Burned Area Rehabilitation is meant to supplement emergency stabilization funding provided under suppression, not replace it.

The Committee encourages the Department to investigate new approaches to fire science, such as techniques for analyzing fire data to improve forecasts and treatments to reduce accumulated fuel loads, as well as to continue its efforts to incorporate Unmanned Aircraft Systems into its fire-fighting strategy.

FLAME WILDFIRE SUPPRESSION RESERVE FUND

Appropriation enacted, 2017	$65,000,000
Budget estimate, 2018	0
Recommended, 2018	0
Comparison:	
Appropriation, 2017	¥65,000,000
Budget estimate, 2018	0

The Committee recommends $0 for the FLAME Wildfire Suppression Reserve Fund, $65,000,000 below the fiscal year 2017 enacted level and equal to the budget request. As discussed above, the Committee accepts the proposal to provide all funding for wildland fire suppression costs in the Wildland Fire Management account.

CENTRAL HAZARDOUS MATERIALS FUND

Appropriation enacted, 2017	$10,010,000
Budget estimate, 2018	2,000,000
Recommended, 2018	10,010,000
Comparison:	
Appropriation, 2017	0
Budget estimate, 2018	+8,010,000

The Committee recommends $10,010,000 for the Central Hazardous Materials Fund, equal to the fiscal year 2017 enacted level and $8,010,000 above the budget request.

NATURAL RESOURCE DAMAGE ASSESSMENT AND RESTORATION

NATURAL RESOURCE DAMAGE ASSESSMENT FUND

Appropriation enacted, 2017	$7,767,000
Budget estimate, 2018	4,600,000
Recommended, 2018	7,568,000
Comparison:	
Appropriation, 2017	¥199,000
Budget estimate, 2018	+2,968,000

The Committee recommends $7,568,000 for the Natural Resource Damage Assessment Fund, $199,000 below the fiscal year 2017 enacted level and $2,968,000 above the budget request. A detailed table of funding recommendations below the account level is provided at the end of this report.

WORKING CAPITAL FUND

Appropriation enacted, 2017	$67,100,000
Budget estimate, 2018	59,472,000
Recommended, 2018	65,388,000
Comparison:	
Appropriation, 2017	¥1,712,000
Budget estimate, 2018	+5,916,000

The Committee recommends $65,388,000 for the Working Capital Fund, $1,712,000 below the fiscal year 2017 enacted level and $5,916,000 above the budget request.

OFFICE OF NATURAL RESOURCES REVENUE

NATURAL RESOURCES REVENUE

Appropriation enacted, 2017	$0
Budget estimate, 2018	137,757,000
Recommended, 2018	137,757,000
Comparison:	
Appropriation, 2017	+137,757,000
Budget estimate, 2018	0

The Committee provides $137,757,000 for the Office of Natural Resources Revenue, as requested, and accepts the Department's proposal to create a separate account for the Office of Natural Resources Revenue to improve transparency.

PAYMENTS IN LIEU OF TAXES (PILT)

Appropriation enacted, 2017	$465,000,000
Budget estimate, 2018	396,880,000
Recommended, 2018	465,000,000
Comparison:	
Appropriation, 2017	0
Budget estimate, 2018	+68,120,000

EPA-HQ-2018-009214

The bill includes $465,000,000 for Payments in Lieu of Taxes (PILT), equal to the fiscal year 2017 enacted level and $68,120,000 above the budget request. The projected full-year cost estimate for PILT for fiscal year 2018 is not yet available and will be considered by the Committee at such time as the Department conveys this information to the Committee prior to the enactment of this Act.

GENERAL PROVISIONS, DEPARTMENT OF THE INTERIOR

(INCLUDING TRANSFERS OF FUNDS)

Section 101 continues a provision providing for emergency transfer authority (intra-bureau) with the approval of the Secretary.

Section 102 continues a provision providing for emergency transfer authority (Department-wide) with the approval of the Secretary.

Section 103 continues a provision providing for the use of appropriations for certain services.

Section 104 continues a provision permitting the transfer of funds between the Bureau of Indian Affairs and Bureau of Indian Education, and the Office of the Special Trustee for American Indians.

Section 105 continues a provision permitting the redistribution of Tribal priority allocation and Tribal base funds to alleviate funding inequities.

Section 106 continues a provision authorizing the acquisition of lands for the purpose of operating and maintaining facilities that support visitors to Ellis, Governors, and Liberty Islands, NJ and NY.

Section 107 continues a provision allowing Outer Continental Shelf inspection fees to be collected by the Secretary of the Interior.

Section 108 continues a provision allowing for the reorganization of the Bureau of Ocean Energy Management, Regulation and Enforcement only in conformance with Committee reprogramming guidelines.

Section 109 continues a provision allowing the Bureau of Land Management (BLM) to enter into long-term cooperative agreements for long-term care and maintenance of excess wild horses and burros on private land.

Section 110 continues a provision dealing with the U.S. Fish and Wildlife Service's responsibilities for mass marking of salmonid stocks.

Section 111 modifies a provision addressing BLM actions regarding grazing on public lands.

Section 112 continues a provision allowing the Bureau of Indian Affairs and Bureau of Indian Education to more efficiently and effectively perform reimbursable work.

Section 113 prohibits the use of funds to change the status of sage-grouse as a threatened or endangered species.

Section 114 permits the humane transfer of excess wild horses and burros for work purposes.

Section 115 prohibits the use of funds to list in the National Register of Historic Places property deemed crucial to national security and military training.

Section 116 directs the Secretary to reissue two final rules removing recovered wolves in Wyoming and the Great Lakes from the endangered species list.

ED_001620_00003678-00051

EPA-HQ-2018-009214

Section 117 prohibits the treatment of gray wolves range-wide as an endangered or threatened species.

TITLE II—ENVIRONMENTAL PROTECTION AGENCY

The Environmental Protection Agency (EPA) was created by Reorganization Plan No. 3 of 1970, which consolidated nine programs from five different agencies and departments. Major EPA programs include air and water quality, drinking water, hazardous waste, research, pesticides, radiation, toxic substances, enforcement and compliance assurance, pollution prevention, Inland oil spill, Superfund, Brownfields, and the Leaking Underground Storage Tank program. In addition, EPA provides Federal assistance for wastewater treatment, sewer overflow control, drinking water facilities, other water infrastructure projects, and diesel emission reduction projects. The Agency is responsible for conducting research and development, establishing environmental standards through the use of risk assessment and cost-benefit, monitoring pollution conditions, seeking compliance through enforcement actions, managing audits and investigations, and providing technical assistance and grant support to States and Tribes, which are delegated authority for much of the program implementation. Under existing statutory authority, the Agency contributes to specific homeland security efforts and may participate in international environmental activities.

Among the statutes for which the Environmental Protection Agency has sole or significant oversight responsibilities are:

National Environmental Policy Act of 1969, as amended.

Federal Insecticide, Fungicide, and Rodenticide Act, as amended.

Toxic Substances Control Act, as amended.

Clean Water Act [Federal Water Pollution Control Act], as amended.

Federal Food, Drug and Cosmetic Act, as amended.

Ocean Dumping Act [Marine Protection, Research, and Sanctuaries Act of 1972], as amended.

Oil Pollution Act of 1990.

Safe Drinking Water Act [Public Health Service Act (Title XIV)], as amended.

Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act.

Clean Air Act, as amended.

Great Lakes Legacy Act of 2002.

Bioterrorism Preparedness and Response Act of 2002.

Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended.

Small Business Liability Relief and Brownfields Revitalization Act of 2002 (amending CERCLA).

Emergency Planning and Community Right-to-Know Act of 1986.

Pollution Prevention Act of 1990.

Pollution Prosecution Act of 1990.

Pesticide Registration Improvement Act of 2003.

Energy Policy Act of 2005.

Energy Independence and Security Act of 2007.

For fiscal year 2018, the Committee recommends $7,530,087,000 for the Environmental Protection Agency, $528,401,000 below the fiscal year 2017 enacted level and $1,875,087,000 above the budget

ED_001620_00003678-00052

request. Comparisons to the budget request and 2017 enacted levels are shown by account in the table at the end of this report.

Reprogramming.—The Agency is held to the reprogramming limitation of $1,000,000. This limitation will be applied to each program area in every account at the levels provided in the table at the end of this report. This will allow the Agency the flexibility to reprogram funds within a set program area. However, where the Committee has cited funding levels for certain program projects or activities within a program area, the reprogramming limitation continues to apply to those funding levels. Further, the Agency may not use any amount of de-obligated funds to initiate a new program, office, or initiative without the prior approval of the Committee.

Congressional Budget Justification.—The Committee directs the Agency to include in future justifications the following items: (1) a comprehensive index of programs and activities within the program projects; (2) the requested bill language, with changes from the enacted language highlighted, at the beginning of each account section; (3) a justification for every program/project, including those proposed for elimination; (4) a comprehensive, detailed explanation of all changes within a program project; (5) a table showing consolidations, realignments or other transfers of resources and personnel from one program project to another such that the outgoing and receiving program projects offset and clearly illustrate a transfer of resources; and, (6) a table listing the budgets and FTE by major office within each National Program Management area with pay/non-pay breakouts. Further, if EPA is proposing to change State allocation formulas for the distribution of appropriated funds, then EPA should include such proposals in the Congressional justification.

SCIENCE AND TECHNOLOGY

The Science and Technology (S&T) account funds all Environmental Protection Agency research (including Superfund research activities paid with funds moved into this account from the Hazardous Substance Superfund account). This account includes programs carried out through grants, contracts, and cooperative agreements, cooperative research and development agreements, and interagency agreements, with other Federal agencies, States, universities, nonprofit organizations, and private business, as well as in-house research. It also funds personnel compensation and benefits, travel, supplies and operating expenses, including rent, utilities and security, for all Agency research. Research addresses a wide range of environmental and health concerns across all environmental media and encompasses both long-term basic and near-term applied research to provide the scientific knowledge and technologies necessary for preventing, regulating, and abating pollution, and to anticipate emerging environmental issues.

Appropriation enacted, 2017	$706,473,000
Budget estimate, 2018	450,812,000
Recommended, 2018	602,238,000
Comparison:	
Appropriation, 2017	¥104,235,000
Budget estimate, 2018	+151,426,000

EPA-HQ-2018-009214

The bill provides $602,238,000 for Science and Technology, $104,235,000 below the fiscal year 2017 enacted level and $151,426,000 above the budget request. The Committee recommends that $15,496,000 be paid to this account from the Hazardous Substance Superfund account for ongoing research activities. A detailed table of funding recommendations below the account level is provided at the end of this report, and the Committee provides the following additional detail by program area:

Indoor Air and Radiation.—The recommendation includes $5,097,000. The Committee recommendation maintains the radon program at the fiscal year 2017 enacted level.

Operations and Administration.—The recommendation includes $79,334,000, as requested. The bill concurs with the Agency's proposed allocation of resources for workforce reshaping through buyouts and voluntary separation agreements offered to employees.

Research: Chemical Safety and Sustainability.—The Committee recommends $107,891,000 and funds the computational toxicology and endocrine disruptor programs at the fiscal year 2017 enacted levels. The Committee supports EPA's computational toxicology research activities to advance the next generation of risk assessment methods to enable integration of tiered toxicity evaluation strategies, advanced high throughput molecular biological assays and computational methods with exposure information to support risk-based decisions for prioritization and screening.

Research: National Priorities.—The bill provides $4,100,000 which shall be used for extramural research grants, independent of the Science to Achieve Results (STAR) grant program, to fund high-priority water quality and availability research by not-for-profit organizations who often partner with the Agency. Because these grants are independent of the STAR grant program, the Agency should strive to award grants in as large an amount as is possible to achieve the most scientifically significant research. Funds shall be awarded competitively with priority given to partners proposing research of national scope and who provide a 25 percent match. The Agency is directed to allocate funds to grantees within 180 days of enactment of this Act.

Research: Safe and Sustainable Water Resources.—The Committee recommends $90,318,000. Further, augmenting drinking water supplies through artificial or enhanced recharge into aquifers, represents a cost-effective way of increasing the availability of water. Enhanced Aquifer Recharge (EAR) also represents a key practice for the management and restoration of ecosystems. Therefore, the Committee directs EPA to coordinate with other Federal research efforts in this area.

Additional Guidance.—The Committee has included the following additional guidance with respect to funding provided under this account:

Alternatives Testing.—The Committee commends EPA for developing new scientific methods, removing barriers, and fostering cooperation in implementing the toxicity testing agenda included in the 2007 National Academy of Sciences (NAS) report, "Toxicity Testing in the 21st Century." The Committee is also aware that the Agency is incorporating an alternative scientific approach to screen chemicals within its Endocrine Disruptor Screening Program as called for in fiscal year 2015 (House Report 113–551). The Com-

EPA-HQ-2018-009214

mittee is interested in how the Agency is implementing the same approach in all of its programs that involve toxicity testing and recommends that the Agency submit to the Committee a report that outlines (1) progress to date to research, develop, validate and translate innovative non-animal chemical testing methods that characterize toxicity pathways, (2) efforts to coordinate this across Federal agencies, and (3) future plans to continue to implement the toxicity testing vision outlined in the January 2017 NAS report, "Using 21st Century Science to Improve Risk-Related Evaluations" on all Agency programs that involve toxicity testing.

Innovative Research Partnerships.—Interest continues to grow to identify innovative, technologically feasible solutions that will lead to air and water quality improvements and better environmental outcomes. The Committee has consistently supported partnerships with respect to research areas of national importance, and the Committee encourages EPA to identify partnerships with institutes, foundations and universities that would leverage scientific expertise and funding. EPA is encouraged to present the Committee with options for new or expanded partnerships within the context of the fiscal year 2019 budget. Such topics could include but are not limited to innovative approaches to fill key gaps in assessing exposure, enhanced aquifer recharge, toxicity testing without the use of animals, accurate measurement and capture of methane or other fugitive emissions, assessment and cleaning of produced water and other activities from oil and gas operations, rural community water treatment, and efficiencies to improve manufacturing operations. To help inform this effort, the Committee encourages EPA to solicit input from all interested parties.

Water Security Test Bed.—For both fiscal year 2019 and future budget requests, the Committee recommends that EPA include adequate funding for advancing full scale applied research and testing capabilities to address threats to drinking water and drinking water infrastructure.

ENVIRONMENTAL PROGRAMS AND MANAGEMENT

The Environmental Programs and Management account encompasses a broad range of abatement, prevention, enforcement, and compliance activities, and personnel compensation, benefits, travel, and expenses for all programs of the Agency except Science and Technology, Hazardous Substance Superfund, Leaking Underground Storage Tank Trust Fund, Inland Oil Spill Programs, and the Office of Inspector General.

Abatement, prevention, and compliance activities include setting environmental standards, issuing permits, monitoring emissions and ambient conditions and providing technical and legal assistance toward enforcement, compliance, and oversight. In most cases, the States are directly responsible for actual operation of the various environmental programs, and the Agency's activities include oversight and assistance.

In addition to program costs, this account funds administrative costs associated with the operating programs of the Agency, including support for executive direction, policy oversight, resources management, general office and building services for program operations, and direct implementation of Agency environmental pro-

ED_001620_00003678-00055

EPA-HQ-2018-009214

grams for headquarters, the ten EPA regional offices, and all non-research field operations.

Appropriation enacted, 2017	$2,597,999,000
Budget estimate, 2018	1,717,484,000
Recommended, 2018	2,363,840,000
Comparison:	
Appropriation, 2017	¥234,159,000
Budget estimate, 2018	+646,356,000

The bill provides $2,363,840,000 for Environmental Programs and Management, $234,159,000 below the fiscal year 2017 enacted level and $646,356,000 above the budget request. A detailed table of funding recommendations below the account level is provided at the end of this report, and the Committee provides the following additional detail by program area:

Clean Air.—The Committee recommends $227,142,000. Within this amount, the Committee includes $3,000,000 to enhance the efficiency and effectiveness of both preconstruction and operating permitting programs. In addition, the Committee continues to support the EnergySTAR program and does not terminate the program as proposed. However, program adjustments or reforms may be warranted. In 2009, EPA and the Department of Energy signed a Memorandum of Understanding that reallocated roles and responsibilities between the Department and the Agency. The Committee believes those responsibilities should be reviewed. In addition, EPA appropriately took action to restructure the program in 2011 following questions about program integrity. The Agency established third party certification requirements that directed many product review responsibilities to outside vendors. As such, the Committee finds that historical funding levels exceed the needs for internal product reviews leading to the recommended level of $31,000,000 for fiscal year 2018. Further, the Committee does not support the termination of voluntary programs such as Natural GasSTAR, AgSTAR, and other partnership programs where EPA works collaboratively with non-governmental entities to identify beneficial methods to reduce emissions, pollution, and increase efficiency.

Compliance.—The Committee recommends $96,665,000. Tracking the import and export of hazardous waste shipment remains a key priority for the Committee.

Environmental Protection: National Priorities.—The bill provides $12,700,000 for a competitive grant program to provide technical assistance for improved water quality or safe drinking water, adequate waste water to small systems or individual private well owners. The Agency shall provide $10,000,000 for Grassroots Rural and Small Community Water Systems Assistance Act, for activities specified under Section 1442(e) of the Safe Drinking Water Act (42 U.S.C. 300j–1(e)(8)). The Agency is also directed to provide $1,700,000 for grants to qualified not-for-profit organizations for technical assistance for individual private well owners, with priority given to organizations that currently provide technical and educational assistance to individual private well owners. The Agency is directed to provide on a national and multi-State regional basis, $1,000,000 for grants to qualified organizations excluding institutions of higher education, for the sole purpose of providing on-site training and technical assistance for wastewater systems. The Agency shall require each grantee to provide a minimum 10 per-

ED_001620_00003678-00056

EPA-HQ-2018-009214

cent match, including in kind contributions. The Agency is directed to allocate funds to grantees within 180 days of enactment of this Act.

Geographic Programs.—The bill provides $397,000,000. The Committee has provided funding for programs that support restoration and protection of our Nation's most important water bodies, as protection of these resources continues to be a priority. From within the amount provided, the Committee directs the following:

Great Lakes Restoration Initiative.—The Committee recommends $300,000,000 for the Great Lakes Restoration Initiative (GLRI), equal to the fiscal year 2017 enacted level and $300,000,000 above the budget request. The Agency shall continue to follow the direction as provided in House Report 112–589. The Committee supports ongoing work to reduce the growth of harmful algal blooms and encourages continued targeting of watersheds that could pose a threat to human health in drinking water.

Chesapeake Bay.—The Committee recommends $60,000,000 for the Chesapeake Bay program, $13,000,000 below the fiscal year 2017 enacted level and $60,000,000 above the budget request. From within the amount provided, $5,000,000 is for nutrient and sediment removal grants and $5,000,000 is for small watershed grants to control polluted runoff from urban, suburban and agricultural lands.

Puget Sound.—The Committee recommends $25,000,000 for Puget Sound, $3,000,000 below the fiscal year 2017 enacted level and $25,000,000 above the budget request. Funds shall be allocated in the same manner as directed in House Report 112–331. The Committee directs EPA to expeditiously obligate funds, in a manner consistent with the authority and responsibilities under Section 320 and the National Estuary Program.

Indoor Air and Radiation.—The Committee recommends $25,637,000, and the Agency should continue to operate the program following the priorities and direction under this heading in House Report 114–632 to implement the National Radon Action Plan.

Operations and Administration.—The recommendation includes $496,483,000, as requested. The bill concurs with the Agency's proposed allocation of resources for workforce reshaping through buyouts and voluntary separation agreements offered to employees.

Resource Conservation and Recovery Act (RCRA).—The Committee recommends $100,877,000, $4,000,000 below the fiscal year 2017 enacted level and $27,784,000 above the budget request. Of the funds provided, not less than $2,000,000 should be allocated toward implementation of the provisions under section 2301 of the WIIN Act (P.L. 144–322) for the expeditious development of guidance for State and Federal plans to address the management of coal combustion residuals. The Committee anticipates that additional State grants will be necessary to implement a permitting program as authorized under the WIIN Act. Since States are still waiting on guidance from EPA on how to best establish those programs, the Committee will continue to monitor progress and intends to revisit the question of additional State grant resources in a final fiscal year 2018 appropriations bill. This is a key priority for the Committee. Further, the Committee does not support the proposed modification of cleanups under the RCRA Waste Manage-

ED_001620_00003678-00057

EPA-HQ-2018-009214

ment program nor the proposed elimination of the RCRA Waste Minimization and Recycling program.

Toxics risk review and prevention.—The Committee recommends $92,521,000, equal to the fiscal year 2017 enacted level. The budget proposes an aggressive schedule for developing the new TSCA fee rule, and for the transition of FTE to be covered by new fee collections. The Committee is concerned the proposed schedule may be too aggressive. The recommended level provides for a more gradual transition to fee funded FTE for fiscal year 2018 so as to avoid a funding lapse that could impact implementation. Further, the Committee does not support the elimination of the Pollution Prevention program.

Water: Ecosystems.—The Committee recommends $47,788,000, equal to the fiscal year 2017 enacted level. From within the amount provided, the recommendation includes $16,800,000 to provide $600,000 to each National Estuary Program (NEP) funded under Section 320 of the Clean Water Act. Further, in the Administrative Provisions section, the Committee directs that $1,500,000 in competitive grants be made available for additional projects, and encourages EPA to work in consultation with the NEP directors to identify worthy projects and activities.

Water Quality Protection.—The Committee recommends $178,855,000 and rejects the proposed elimination of the WaterSENSE program. The Committee supports ongoing activities related to integrated planning, which will be increasingly necessary as States and communities evaluate wastewater systems for lead contamination issues and pipe replacement. Further, the Committee is aware that more than one quarter of the U.S. population relies on onsite-decentralized systems to treat wastewater. The Committee urges the Agency to designate additional technical assistance, resources and expertise toward onsite wastewater recycling issues within the Decentralized Wastewater Program.

Additional Guidance.—The Committee has included the following additional guidance with respect to funding provided under this account:

Administrator Priorities.—EPA is directed to submit a report within 90 days of enactment of this Act that identifies how any fiscal year 2016 and 2017 funding was used, by account, program area, and program project. Each activity funded should include a justification for the effort and any anticipated results.

Antimicrobial Solutions for Citrus Disease.—The Committee recognizes the importance of antimicrobial crop protection tools in combating citrus greening and continues to support EPA's cooperation with the U.S. Department of Agriculture's Multi-Agency Coordination Group.

Coal Combustion Residuals.—Section 2301 of the WIIN Act (P.L. 114–322) amended the Solid Waste Disposal Act to authorize the Agency to review and approve, as appropriate, State programs for permits or other systems of prior approval and conditions under State law for the regulation of coal combustion residuals. To expedite the process for reviewing and approving such State programs, the Agency should establish, as expeditiously as is practicable, streamlined procedures for prompt approval of those State programs.

ED_001620_00003678-00058

Exempt Aquifers.—For fiscal year 2018, the Committee anticipates that EPA will continue to receive exempt aquifer applications from the State of California for processing and approval. The Committee continues to support protecting underground sources of drinking water and promoting robust economic development. Accordingly, EPA is urged to work expeditiously to process exempt aquifer applications and use the existing regulatory framework to process these applications as provided in House Report 114–170 and House Report 114–632.

Glider Kits.—The Committee notes that the Phase 2 rule for Medium and Heavy-Duty Engines and Vehicles is generally supported by the trucking industry. However, under the Phase 2 rule, the Agency defined a glider kit as a new motor vehicle for the purposes of regulation. The Committee recognizes that glider kits typically do not incorporate new engines; therefore, classifying a glider kit as a new motor vehicle raises a number of valid concerns. The Committee also understands the intent of the provisions in the Phase 2 rule is to promote the removal of older, dirtier engines from the vehicle fleet in order to make air quality improvements. This is a policy that the Committee has strongly supported over a number of years albeit in a non-regulatory manner through the use of grants to encourage engine retrofits. The Committee urges EPA to study the emissions impact of remanufactured engines used in glider kits, compared to new engines, and issue a report to the Committee when available.

Restrictions on Certain Communications.—In 2015, the Government Accountability Office (GAO) concluded that EPA violated prohibitions against publicity or propaganda and grassroots lobbying contained in appropriations Acts. The Committee is also aware that grant funds were used to support billboards, websites and other advocacy efforts in the Pacific Northwest. The Committee reminds EPA that funding may not be used in a manner contrary to Section 401 of this bill.

Science Advisory Board.—The Agency is directed to develop updated policy statements in order to fulfill previous Congressional directives.

Significant New Alternatives Policy (SNAP) Program.—The Committee reiterates the direction contained within the explanatory statement associated with the Consolidated Appropriations Act, 2017 to consider harmonizing the status of any previously approved refrigerant or foam-blowing agent with other domestic and international programs for refrigeration and commercial air conditioning applications, and corresponding deadlines for military, space- and aeronautics-related applications.

TSCA Risk Evaluations and Risk Management.—The Committee directs EPA to implement the Frank R. Lautenberg Chemical Safety for the 21st Century Act in a manner that reflects the best available science as now required under TSCA sections 6 and 26. In December 2016 and January 2017, EPA proposed rules under section 6(a) to prohibit certain chemical uses that rely on risk assessments completed by the Agency in 2014 that may not comply with TSCA section 26(l)(4). Rather than continuing with those rulemakings, the Committee encourages EPA to consider those chemical uses as part of the risk evaluation process for the ten priority compounds recently designated by EPA under TSCA section 6(b)(2)(A), which

EPA-HQ-2018-009214

include the chemicals in question. Further, in order to support the ongoing and upcoming TSCA risk evaluation workload, the Committee would support the realignment and consolidation of risk assessment resources if proposed in future budget requests.

Worker Protection Standards.—The Committee directs the Agency to engage the U.S. Department of Agriculture, farmers, farm workers, industry and other interested organizations as it implements its standards.

Hazardous Waste Electronic Manifest System Fund

This account supports all activities necessary for the development of the system established by the Hazardous Waste Electronic Manifest Establishment Act (P.L. 112–195).

Appropriation enacted, 2017	$3,178,000
Budget estimate, 2018	3,674,000
Recommended, 2018	3,674,000
Comparison:	
Appropriation, 2017	+496,000
Budget estimate, 2018	0

The bill provides $3,674,000 which is expected to be fully offset by fees for a net appropriation of $0. The Committee continues to support the expeditious development of a system that would allow for the electronic tracking of hazardous waste shipments pursuant to P.L. 112–195.

Office of Inspector General

The Office of Inspector General (OIG) provides audit, evaluation, and investigation products and advisory services to improve the performance and integrity of EPA programs and operations. The Inspector General (IG) will continue to perform the function of IG for the Chemical Safety and Hazard Investigation Board. This account funds personnel compensation and benefits, travel, and expenses (excluding rent, utilities, and security costs) for the Office of Inspector General. In addition to the funds provided under this heading, this account receives funds from the Hazardous Substance Superfund account.

Appropriation enacted, 2017	$41,489,000
Budget estimate, 2018	37,475,000
Recommended, 2018	40,000,000
Comparison:	
Appropriation, 2017	¥1,489,000
Budget estimate, 2018	+2,525,000

The bill provides $40,000,000, which is $1,489,000 below the fiscal year 2017 enacted level and $2,525,000 above the budget request. In addition, the Committee recommends $7,778,000 as a payment to this account from the Hazardous Substance Superfund account. The Inspector General is directed to prioritize funds to projects that prevent and detect fraud, waste and abuse at the Environmental Protection Agency.

Buildings and Facilities

The Buildings and Facilities account provides for the design and construction of EPA-owned facilities as well as for the repair, extension, alteration, and improvement of facilities used by the Agen-

ED_001620_00003678-00060

cy. The funds are used to correct unsafe conditions, protect health and safety of employees and Agency visitors, and prevent deterioration of structures and equipment.

Appropriation enacted, 2017	$34,467,000
Budget estimate, 2018	39,553,000
Recommended, 2018	39,553,000
Comparison:	
Appropriation, 2017	+5,086,000
Budget estimate, 2018	0

The bill provides $39,553,000 as requested, and $5,086,000 above the fiscal year 2017 enacted level. The Committee supports proposed projects that will reduce Agency operational and rent costs. EPA should prioritize projects based on anticipated cost savings and allocate funds accordingly.

HAZARDOUS SUBSTANCE SUPERFUND

The Hazardous Substance Superfund (Superfund) program was established in 1980 by the Comprehensive Environmental Response, Compensation, and Liability Act to clean up emergency hazardous materials, spills, and dangerous, uncontrolled, and/or abandoned hazardous waste sites. The Superfund Amendments and Reauthorization Act (SARA) expanded the program substantially in 1986, authorizing approximately $8,500,000,000 in revenues over five years. In 1990, the Omnibus Budget Reconciliation Act extended the program's authorization through 1994 for $5,100,000,000 with taxing authority through calendar year 1995.

The Superfund program is operated by EPA subject to annual appropriations from a dedicated trust fund and from general revenues. Enforcement activities are used to identify and induce parties responsible for hazardous waste problems to undertake cleanup actions and pay for EPA oversight of those actions. In addition, responsible parties have been required to cover the cost of fund-financed removal and remedial actions undertaken at spills and waste sites by Federal and State agencies. Funds are paid from this account to the Office of Inspector General and Science and Technology accounts for Superfund related activities.

Appropriation enacted, 2017	$1,088,769,000
Budget estimate, 2018	762,063,000
Recommended, 2018	1,116,374,000
Comparison:	
Appropriation, 2017	+27,605,000
Budget estimate, 2018	+354,311,000

The bill provides $1,116,374,000 for the Hazardous Substance Superfund program, which is $27,605,000 above the fiscal year 2017 enacted level and $354,311,000 above the budget request. Unless otherwise stated herein or in the table at the end of this report, the recommendation continues funding for all Superfund programs, activities, and subactivities at the fiscal year 2017 enacted level.

Operations and Administration.—The recommendation includes $123,105,000, which is $5,000,000 below the fiscal year 2017 enacted level based upon estimates for rent, facility, and security savings. The recommendation does not concur with the Agency's proposed allocation of resources for workforce reshaping.

Superfund Cleanup.—The Committee recommends $766,167,000, which is $47,605,000 above the fiscal year 2017 enacted level. The Committee appreciates the Administration's commitment to streamline and improve the program, and concurs with the designation of the program as a national infrastructure priority. The Committee expects the recommended resources will accelerate remediation at highly contaminated, orphan sites. Further, the Committee expects the additional funding will also support pipeline activities such as remedial investigations, feasibility studies, and remedial designs which are critical steps prior to construction.

Additional Guidance.—The Committee has included the following additional guidance with respect to funding provided under this account:

Financial Assurance.—The Committee is aware of concerns raised by States, stakeholders, and the Small Business Administration's Office of Advocacy regarding the Agency's proposed rule on financial assurance for hardrock mining. Those comments indicate the rule as proposed in January 2017 was duplicative of other financial assurance programs and unworkable. Accordingly the Committee has included bill language to prevent the proposed rule from being finalized in its current form.

LEAKING UNDERGROUND STORAGE TANK TRUST FUND PROGRAM

Subtitle I of the Solid Waste Disposal Act, as amended by the Superfund Amendments and Reauthorization Act, authorized the establishment of a response program for cleanup of releases from leaking underground storage tanks. Owners and operators of facilities with underground tanks must demonstrate financial responsibility and bear initial responsibility for cleanup. The Federal trust fund is funded through the imposition of a motor fuel tax of one-tenth of a cent per gallon.

In addition to State resources, the Leaking Underground Storage Tank (LUST) Trust Fund provides funding to clean up sites, enforces necessary corrective actions, and recovers costs expended from the Fund for cleanup activities. The underground storage tank response program is designed to operate primarily through cooperative agreements with States. Funds are also used for grants to non-State entities, including Indian Tribes, under Section 8001 of the Resource Conservation and Recovery Act. The Energy Policy Act of 2005 expanded the authorized activities of the Fund to include the underground storage tank program. In 2006, Congress amended section 9508 of the Internal Revenue Code to authorize expenditures from the trust fund for prevention and inspection activities.

Appropriation enacted, 2017	$91,941,000
Budget estimate, 2018	47,429,000
Recommended, 2018	91,874,000
Comparison:	
Appropriation, 2017	¥67,000
Budget estimate, 2018	+44,445,000

The bill provides $91,874,000 for the Leaking Underground Storage Tank (LUST) Trust Fund Program, $67,000 below the fiscal year 2017 enacted level and $44,445,000 above the budget request.

INLAND OIL SPILL PROGRAMS

This appropriation, authorized by the Federal Water Pollution Control Act, as amended by the Oil Pollution Act of 1990, provides funds to prepare for and prevent releases of oil and other petroleum products in navigable waterways. In addition, EPA is reimbursed for incident specific response costs through the Oil Spill Liability Trust Fund managed by the United States Coast Guard.

EPA is responsible for directing all cleanup and removal activities posing a threat to public health and the environment; conducting site inspections; providing a means to achieve cleanup activities by private parties; reviewing containment plans at facilities; reviewing area contingency plans; pursuing cost recovery of fund-financed cleanups; and conducting research of oil cleanup techniques. Funds for this appropriation are provided through the Oil Spill Liability Trust Fund which is composed of fees and collections made through provisions of the Oil Pollution Act of 1990, the Comprehensive Oil Pollution Liability and Compensation Act, the Deepwater Port Act of 1974, the Outer Continental Shelf Lands Act Amendments of 1978, and the Federal Water Pollution Control Act, as amended. Pursuant to law, the Trust Fund is managed by the United States Coast Guard.

Appropriation enacted, 2017	$18,209,000
Budget estimate, 2018	15,717,000
Recommended, 2018	18,047,000
Comparison:	
Appropriation, 2017	¥162,000
Budget estimate, 2018	+2,330,000

The bill provides $18,047,000 for the Inland Oil Spill program, $162,000 below the fiscal year 2017 enacted level and $2,330,000 above the budget request.

STATE AND TRIBAL ASSISTANCE GRANTS

The State and Tribal Assistance Grants (STAG) account provides grant funds for programs operated primarily by State, local, Tribal and other governmental partners. The account includes two broad types of funds: (1) Infrastructure Assistance, which is used primarily by local governments for projects supporting environmental protection; and (2) Categorical Grants, which assist State and Tribal governments and other environmental partners with the operation of environmental programs. The account also includes specific program grants such as competitive Brownfields grants and diesel emissions reduction grants.

In the STAG account, EPA provides funding for infrastructure projects through two State Revolving Funds (Clean Water and Drinking Water), geographic specific projects in Alaskan Native Villages and on the United States-Mexico Border, Brownfields revitalization projects, diesel emission reduction grants, and other targeted infrastructure projects.

The State Revolving Funds (SRFs) provide Federal financial assistance to protect the Nation's water resources. The Clean Water SRF helps eliminate municipal discharge of untreated or inadequately treated pollutants and thereby helps maintain or restore the country's water to a swimmable and/or fishable quality. The Clean Water SRF provides resources for municipal, inter-munic-

EPA-HQ-2018-009214

ipal, State, and interstate agencies and Tribal governments to plan, design, and construct wastewater facilities and other projects, including non-point source, estuary, stormwater, and sewer overflow projects. The Safe Drinking Water SRF finances improvements to community water systems so that they can achieve compliance with the mandates of the Safe Drinking Water Act and continue to protect public health.

Many of the major Federal environmental statutes include provisions that allow the Federal government, through EPA, to delegate to the States and Tribes the day-to-day management of environmental programs or to approve State and Tribal environmental programs. The Federal statutes were designed to recognize the States as partners and co-regulators, allowing the States to issue and enforce permits, carry out inspections and monitoring, and collect data. To assist the States in this task, the statutes also authorized EPA to provide grants to the States and Tribes. These grants, which cover every major aspect of environmental protection, include those programs authorized by sections 319 and 106 of the Clean Water Act (Federal Water Pollution Control Act, as amended) (for non-point source pollution and the water quality permits programs), sections 105 and 103 of the Clean Air Act (for State and Local air quality management programs), section 128 of CERCLA (for State and Tribal response programs), section 1443(a) of the Safe Drinking Water Act (for public water system supervision), and section 3011 of RCRA (for the implementation of State hazardous waste programs).

Appropriation enacted, 2017	$3,527,161,000
Budget estimate, 2018	2,933,467,000
Recommended, 2018	3,288,161,000
Comparison:	
Appropriation, 2017	¥239,000,000
Budget estimate, 2018	+354,694,000

The bill provides $3,288,161,000 for the State and Tribal Assistance Grants account, $239,000,000 below the fiscal year 2017 enacted level and $354,694,000 above the budget request. The Committee provides the following additional detail by program area:

Infrastructure Assistance.—The Committee notes that more than $6 billion is currently revolving in the system and available for drinking water and wastewater infrastructure loans. The Committee believes that EPA and the States must aggressively allocate existing funds to projects in order to address the pressing infrastructure needs facing the country. In addition, the Committee continues to encourage EPA and water infrastructure stakeholders to promote alternate financing mechanisms for water infrastructure at local, State and Federal levels as it is widely accepted that Federal financing through the State Revolving Funds remains an important yet insufficient tool to address the Nation's water needs.

Public-private partnerships, greater access to financing from private activity bonds, and improved asset management are just a few of the mechanisms that the Committee believes could serve to increase investment in a complementary way to Federal appropriations and reduce costs.

In addition, the Committee continues bill language to allow EPA and the States to provide additional forms of subsidy to those com-

ED_001620_00003678-00064

EPA-HQ-2018-009214

munities which cannot afford the below market rates provided by an SRF loan.

The Committee has a history of including a provision affording a procurement preference for iron and steel products produced in the United States in projects receiving funds from the State Revolving Funds or, now, the Water Infrastructure Finance and Innovation Act.

The Committee emphasizes that any coating processes that are applied to the external surface of iron and steel components that otherwise qualify under the procurement preference shall not render such products ineligible for the procurement preference regardless of where the coating processes occur, provided that final assembly of the products occurs in the United States. The Committee directs EPA to consider U.S. manufacturing costs, including labor, machining, coating, assembly, and testing, when determining if a product is primarily iron or steel.

Brownfields Program.—The bill provides $90,000,000 for brownfields grants and directs that at least 10 percent of such grants be provided to areas in which at least 20 percent of the population has lived under the poverty level over the past 30 years as determined by censuses and the most recent Small Area Income and Poverty Estimates.

Diesel Emissions Reductions Grants (DERA).—The bill provides $75,000,000 for DERA grants. More than 10 million older, heavily polluting diesel engines remain in use that have yet to be retrofitted, repowered, or replaced, and over one million are expected to remain in use in 2030. For fiscal year 2018, the Committee directs EPA to continue to make at least 70 percent of DERA grants available to improve air quality in non-attainment areas.

Targeted Airshed Grants.—The bill provides $40,000,000 for targeted airshed grants to reduce air pollution in non-attainment areas. These grants shall be distributed on a competitive basis to non-attainment areas that EPA determines are ranked as the top five most polluted areas relative to annual ozone or particulate matter 2.5 standards as well as the top five areas based on the 24-hour particulate matter 2.5 standard where the design values exceed the 35 μ/m3 standard. To determine these areas, the Agency shall use the most recent design values calculated from validated air quality data. The Committee notes that these funds are available for emission reduction activities deemed necessary for compliance with national ambient air quality standards and included in a State Implementation Plan submitted to EPA. Not later than the end of fiscal year 2017, EPA should provide a report to the Committees on Appropriations that includes a table showing how fiscal year 2016 and 2017 funds were allocated. The table should also include grant recipients and metrics for anticipated or actual results.

Categorical Grants.—For categorical grants to States and other environmental partners for the implementation of delegated programs, the bill provides $1,066,041,000.

Radon.—The Committee continues to support state radon program efforts that raise awareness about the associated risks of radon exposure as ongoing, unmitigated exposures result in over 21,000 radon-induced lung cancer deaths per year. The Committee provides $8,051,000, equal to the fiscal year 2017 enacted level,

ED_001620_00003678-00065

EPA-HQ-2018-009214

and the Agency shall allocate radon grants in fiscal year 2018 following the direction in House Report 114–632.

WATER INFRASTRUCTURE FINANCE AND INNOVATION PROGRAM

Appropriation enacted, 2017	10,000,000
Budget estimate, 2018	20,000,000
Recommended, 2018	30,000,000
Comparison:	
Appropriation, 2017	+20,000,000
Budget estimate, 2018	+10,000,000

The bill provides $30,000,000 for the Water Infrastructure Finance and Innovation Act (WIFIA) Program. This level is equal to the fiscal year 2017 level when compared to funding provided from both the Consolidated Appropriations Act, 2017 (P.L. 115–31) and the Further Continuing and Security Assistance Appropriations Act (P.L. 114–254). From within the amount provided, the Committee directs $5,000,000 to assist with the administrative expenses for the WIFIA program.

Greater investment in the replacement of aging infrastructure will help mitigate nationwide issues the Committee is tracking related to contaminants such as lead and arsenic, help address Combined Sewer Overflows and Sanitary Sewer Overflows, and allow systems to improve water delivery for residents. Of the recommended amount, $25,000,000 is provided for direct loan subsidization which may translate into a potential loan capacity in excess of $3 billion to eligible entities for water infrastructure projects. The Committee expects that EPA will issue loans for the first time in fiscal year 2018 and the Committee intends to closely monitor implementation.

ADMINISTRATIVE PROVISIONS

(INCLUDING TRANSFERS AND RESCISSION OF FUNDS)

The Committee continues the language, carried in prior years, concerning Tribal Cooperative Authority, the collection and obligation of pesticides fees, and transfer authorities for the purposes of implementing the Great Lakes Restoration Initiative.

The bill includes language expanding the eligible activities that pesticide fees may cover.

The bill authorizes the collection and obligation of TSCA user fees.

The bill continues language authorizing up to $150,000 to be spent for facility repairs at any one time.

The bill authorizes certain uses for Section 319 non-point source grants.

The bill rescinds $60,000,000 of unobligated balances from the State and Tribal Assistance Grants account.

The bill directs the availability of not less than $1,500,000 of funds for the National Estuary program as competitive grants.

ED_001620_00003678-00066

EPA-HQ-2018-009214

TITLE III—RELATED AGENCIES

DEPARTMENT OF AGRICULTURE

FOREST SERVICE

The U.S. Forest Service manages 193 million acres of National Forests, Grasslands, and a Tallgrass Prairie, including lands in 44 States and the Commonwealth of Puerto Rico, and cooperates with States, other Federal agencies, Tribes and private landowners to sustain the Nation's forests and grasslands. The Forest Service administers a wide variety of programs, including forest and rangeland research, State and private forestry assistance, cooperative forest health programs, an international program, National Forest System, and wildland fire management. The National Forest System (NFS) includes 155 national forests, 20 national grasslands, 20 national recreation areas, a national Tallgrass prairie, six national monuments, and six land utilization projects. The NFS is managed for multiple uses, beginning with wood, water and forage, and expanded under the Multiple Use Sustained Yield Act to include recreation, grazing, fish and wildlife habitat management.

Challenges of the National Forests.—The national forests are facing some of the greatest challenges in their history. These include invasive species, regional drought and watershed degradation, fuel buildups and severe wildland fires, habitat fragmentation, and devastating outbreaks of insects and disease. For example, the southern pine beetle is the most destructive insect killer of pine trees in the southeastern United States. The last major outbreak in 2011 affected nearly one million acres across eight States and caused an estimated $1,500,000,000 in damage. Today there are more than 100 million dead and dying trees, the result of a severe four-year drought and insect and disease infestation, in California. Many of these acres are at risk for catastrophic wildland fire. As such, the Service is directed to aggressively work to improve the health of the national forests in California and around the Nation, using all available authorities and strategies. The Service also is directed to increase its collaboration with States and partners to address the forest health crisis before it worsens, putting lives and property at risk of catastrophic wildland fire.

OFFICE OF THE UNDER SECRETARY FOR NATURAL RESOURCES AND ENVIRONMENT

Appropriation enacted, 2017	$0
Budget estimate, 2018	0
Recommended, 2018	875,000
Comparison:	
Appropriation, 2017	+875,000
Budget estimate, 2018	+875,000

The Committee recommends $875,000 for the Office of the Under Secretary for Natural Resources and Environment.

The Committee is funding the Office of the Under Secretary for Natural Resources and Environment in the Interior, Environment, and Related Agencies bill instead of the Agriculture, Rural Development, Food and Drug Administration, and Related Agencies bill.

Forest Service Accounting, Budgeting, and Management.—The Committee appreciates the Service's efforts to improve its account-

ED_001620_00003678-00067

EPA-HQ-2018-009214

ing, budgeting, and management systems and practices but believes additional steps are necessary to ensure the Service is fully accountable and transparent with taxpayer dollars. The Committee has included bill language and directives relating to the administrative control of funds, budgeting practices and cost pools, and the Integrated Resource Restoration (IRR) pilot program. The Committee requests that the Secretary of Agriculture fully engage on these issues and designate a senior staff member with budgeting and management expertise to assist the Service on these matters.

The Committee has learned the Service has outdated, unofficial policy and guidance documents directing the administrative control of funds; that in some cases control practices have been developed in an ad hoc manner; and that the practices vary across regions, forests, and districts. This is contrary to current law (31 U.S.C. 1514) and Office of Management and Budget requirements (OMB Circular No. A–11). Without internal controls, accountability and transparency are impossible to achieve. The Committee includes bill language to require the Service to develop an administration control of funds system, as required by 31 U.S.C. 1514). The Committee expects the system will apply consistently across the Service. The Committee also requests the Service to provide a report to the House and Senate Committees on Appropriations, as soon as practicable, on the estimated cost, staffing, and time requirements for developing and implementing this system.

The Committee would like to assist the Service in its efforts to improve its accounting and budgeting processes. As such, the Committee requests a report by December 31, 2017, on the feasibility of restructuring the Service's budget request. The Committee envisions a request that allocates funding for the Service's major programs between salaries and expenses and project funds. This would allow for the elimination of cost pools, which the Committee believes complicate the Service's accounting and budgeting processes, and increase confidence that funds are used for the purposes Congress intended. The Committee looks forward to working with the Service on this request.

The Committee discontinues the set asides for the IRR pilot. The goal of IRR was to improve the integration and prioritization of the forest restoration program, increase the flexibility of the regions in the pilot to focus on high-priority projects, and to create budgetary and implementation efficiencies. In some cases, the flexibility provided by the pilot allowed regions to better integrate budgeting and project planning. However, budgetary and implementation efficiencies were not realized. The Committee believes that providing national forests the flexibility to identify and focus on high-priority projects will ultimately improve forest health. As such, the Committee directs the Service to identify the positive results of the IRR pilot, such as improved priority-setting and greater cooperation between forests and regions, and to apply them uniformly across the Service.

Fiscal Year 2019 Budget Request.—The Committee appreciates the Service's work to provide project statements showing total available funding, including mandatory and discretionary funds; justifications of increases and decreases; and classifications of objects for each account in its fiscal year 2018 budget request, and directs the Service to provide the same information in greater de-

EPA-HQ-2018-009214

tail in the fiscal year 2019 budget request. The Committee encourages the Service to work with the Office of Budget and Program Analysis to conform its budget requests to those of other Department of Agriculture agencies and offices.

Indian Trust Lands.—The Service is encouraged to promote and expand the use of agreements with Indian Tribes to protect Indian trust resources from catastrophic wildfire, insect and disease infestation or other threats from adjacent Federal lands, as authorized by law.

Knutsen-Vandenberg Program.—The Committee is concerned that the Service is not fully utilizing the Knutson-Vandenberg fund as authorized by 16 U.S.C. 576b, including the amendments made by this Committee in P.L. 109–54, to accomplish important restoration activities with funds generated from timber sales. The Service is directed to fully utilize this authority and limit the deduction of any agency overhead cost pools to fund personnel of the responsible Ranger District for the planning and implementation of activities authorized and funded under the Act.

American Discovery Trail.—The Committee encourages the Service to work with interested parties to facilitate the installation of signage for the American Discovery Trail, in accordance with current law and regulation.

Superior National Forest.—The Committee encourages the Service to coordinate with the Bureau of Land Management to complete a thorough environmental impact statement evaluating the proposal to withdraw nearly 235,000 acres of National Forest System lands in the Rainy River Watershed from mineral leasing for a period of 20 years, considering the economic, environmental, public health, and other related issues raised during the scoping process.

FOREST AND RANGELAND RESEARCH

Appropriation enacted, 2017	$288,514,000
Budget estimate, 2018	259,000,000
Recommended, 2018	278,368,000
Comparison:	
Appropriation, 2017	¥10,146,000
Budget estimate, 2018	+19,368,000

The Committee recommends $278,368,000 for Forest and Rangeland Research, $10,146,000 below the fiscal year 2017 enacted level and $19,368,000 above the budget request.

The Committee recommends $75,037,000 for the FIA program and does not accept the proposed reduction for invasive species research.

Forest Products Laboratory.—The Committee recommends $23,900,000, as requested, for the Forest Products Lab.

Wood Products Research.—The Committee supports continued research to improve the environmental performance, resiliency, and affordability of mass timber and other wood products and directs the Service to engage public safety, regulatory agencies, and any other interested parties to ensure public safety issues are appropriately addressed.

Bighorn Sheep Research.—The Service is urged to collaborate with the Bureau of Land Management and the Agricultural Research Service on research involving the risk of disease transmission between domestic and bighorn sheep.

ED_001620_00003678-00069

EPA-HQ-2018-009214

Forest Carbon Research.—The Committee encourages the Service to work with other U.S. Department of Agriculture agencies and offices to establish the methods and tools needed to quantify forest carbon as a resource.

Water, Air, and Soil Research.—The Committee notes that the Service's research program has the potential to improve air quality monitoring technologies and air quality data and encourages the Service to collaborate with other Federal agencies and research partners in this field.

Forest Health and Fire Research.—The Committee recognizes the valuable research contributions that other Federal agencies and State and private colleges and universities make on forest health and fire issues and encourages the Service to expand these partnerships where feasible.

Previously Requested Reports.—The Committee reminds the Service of the Post-fire Treatment Report and Technical Report Update required by House report 114–632 and encourages their expeditious completion.

Research Program Report.—The Committee appreciates the information provided on the Service's research program in the fiscal year 2018 budget request and directs the Service to continue to provide this information in the fiscal year 2019 request.

STATE AND PRIVATE FORESTRY

Appropriation enacted, 2017	$216,921,000
Budget estimate, 2018	118,010,000
Recommended, 2018	198,710,000
Comparison:	
Appropriation, 2017	¥18,211,000
Budget estimate, 2018	+80,700,000

The Committee recommends $198,710,000 for State and Private Forestry, $18,211,000 below the fiscal year 2017 enacted level and $80,700,000 above the budget request.

Landscape Scale Restoration.—The Committee recommends $13,643,000 for Landscape Scale Restoration, $357,000 below the fiscal year 2017 level and $13,643,000 above the budget request.

Forest Health Management.—The Committee recommends $92,084,000 for Forest Health Management, $2,416,000 below the fiscal year 2017 enacted level and $1,694,000 above the budget request.

Forest Stewardship Program.—The Committee recommends $19,525,000 for the Forest Stewardship Program, $511,000 below the fiscal year 2017 enacted level and $975,000 below the budget request.

Forest Legacy.—The recommendation includes $36,184,000 for Forest Legacy. Not later than the start of the fiscal year, the Service is directed to submit to the Committee the list of fiscal year 2018 projects that have been prioritized in accordance with the existing, competitive national selection process.

Community Forest and Open Space Conservation.—The Committee recommends $1,950,000 for Community Forest and Open Space Conservation, $50,000 below the fiscal year 2017 enacted level and $1,950,000 above the budget request.

Urban and Community Forestry.—The Committee recommends $27,324,000 for Urban and Community, $716,000 below the fiscal year 2017 enacted level and $27,324,000 above the budget request.

ED_001620_00003678-00070

EPA-HQ-2018-009214

International Forestry.—The Committee recommends $8,000,000 for International Forestry, equal to the fiscal year 2017 enacted level and $880,000 above the budget request.

NATIONAL FOREST SYSTEM

(INCLUDING TRANSFER OF FUNDS)

Appropriation enacted, 2017	$1,513,318,000
Budget estimate, 2018	1,747,442,000
Recommended, 2018	1,885,827,000
Comparison:	
Appropriation, 2017	+372,509,000
Budget estimate, 2018	+138,385,000

The Committee recommends $1,885,827,000 for the National Forest System, $372,509,000 above the fiscal year 2017 enacted level and $138,385,000 above the budget request. The Committee accepts the proposal to transfer Hazardous Fuels from the Wildland Fire Management account to the National Forest System account.

Land Management Planning, Assessment, and Monitoring.—The Committee recommends $178,263,000 for Land Management Planning, Assessment, and Monitoring, $4,665,000 below the fiscal year 2017 enacted level and $13,263,000 above the budget request.

The Committee is aware that the Service, Bureau of Reclamation and others worked together during fiscal years 2016 and 2017 to initiate a multi-year study to generate new knowledge to quantitatively establish the benefits of forest management practices in the Sierra Nevada that could potentially generate water supply and other benefits to the Central Valley Project and the State Water Project. The Committee supports the Service's continued participation, through the Western Watershed Enhancement Partnership program, in the analysis of science-based fuel reductions that are mutually beneficial to national forest health and water supply yield and, if merited, recommendations for further Congressional action.

Recreation, Heritage and Wilderness.—The Committee recommends $257,848,000 for Recreation, Heritage and Wilderness, $6,747,000 below the fiscal year 2017 enacted level and $4,968,000 above the budget request. Of the funds available to Manage Recreation Operations, $750,000 shall be for the maintenance of rural airstrips.

Palisades Wilderness Study Area.—Congress intended for existing and historic motorized recreational uses to continue in wilderness study areas as designated in the 1984 Wyoming Wilderness Act. The Committee is aware that recent decisions by the Service have misconstrued this intent, which has had the effect of limiting previously established winter motorized uses. The Committee directs the Service to review its decisions and provide a report within 30 days of enactment of this Act to the Committee on its plan to remedy the concerns.

Off-Highway Vehicle Report.—The Committee directs the Service to provide a report on its off-highway vehicle (OHV) mixed-use analysis. The report should include information on how OHV access to forest roads would affect recreational opportunities and related economic activity in forest communities; how many miles potentially could become available; estimated budget needs for expanded access; plans for opening new routes; and how other vehicles, such as all-terrain vehicles, could be utilized by wounded veterans and

ED_001620_00003678-00071

EPA-HQ-2018-009214

disabled citizens. The Committee reminds the Service of the importance of making the national forests as accessible as possible to the American people and requests that the Service work with States, local officials, communities, and partners as it implements the travel analysis process.

Special-use Permits.—The Committee encourages the Service to increase the pace and scale of its evaluation of special-use permits in order to improve access to public lands and generate additional economic activity in the national forests and forest communities.

Kisatchie National Forest.—The Committee is concerned about reports that the Service has insufficiently scoped the Breezy Hill Trail construction proposal and failed to adequately consider public comments, as required by the National Environmental Policy Act (NEPA). As such, the Committee directs the Service to provide a report within 30 days of enactment of this Act on how it intends to comply with all NEPA requirements, ensure public participation, and engage local communities regarding this proposal.

Grazing Management.—The Committee recommends $56,856,000 for Grazing Management, equal to the fiscal year 2017 enacted level and $6,256,000 above the budget request.

The Committee encourages the Service to improve its monitoring of grazing permits in allotments where riparian streamside health is a concern for listed or threatened species. The Committee also requests each Forest Service region increase transparency and reporting on how their monitoring resources are used on the ground to satisfy monitoring requirements or for other purposes.

Hazardous Fuels.—The Committee recommends $392,500,000 for hazardous fuels, $2,500,000 above the fiscal year 2017 level and $38,212,000 above the budget request. The Committee accepts the proposal to move Hazardous Fuels to the National Forest System from Wildland Fire Management.

The Committee directs the Service to use the best available science that takes into account historical fire data, landscape characteristics, and forest composition as well as the effects of past and current human influences, such as development and land-use patterns, and climatic conditions to identify the highest priority areas for hazardous fuel reduction and forest health and management treatments. The Committee also recommends prioritizing funding for proactive hazardous fuels management and fire mitigation in high-priority areas to protect life and property.

Forest Products.—The Committee recommends $370,305,000 for Forest Products, $2,500,000 above the fiscal year 2017 enacted level and $11,184,000 above the budget request.

The Committee believes timber sales are a vital component of forest health. The budget request assumes 3.2 billion board feet of timber volume will be sold in fiscal year 2018. The Committee encourages the Service to work toward sales of 4 billion board feet.

Vegetation and Watershed Management.—The Committee recommends $180,000,000 for Vegetation and Watershed Management, $4,716,000 below the fiscal year 2017 enacted level and $5,600,000 above the budget request.

The Committee directs the Service to establish a pilot program to promote voluntary vegetation management along electric transmission and distribution rights-of-way to reduce the threat of catastrophic wildfire.

ED_001620_00003678-00072

EPA-HQ-2018-009214

Wildlife and Fisheries Habitat Management.—The Committee recommends $136,430,000 for Wildlife and Fisheries Habitat Management, $4,036,000 below the fiscal year 2017 enacted level $11,430,000 above the budget request.

Collaborative Forest Landscape Restoration Fund.—The Committee recommends $38,980,000, for the Collaborative Forest Landscape Restoration Fund, $1,020,000 below the fiscal year 2017 enacted level and $38,980,000 above the budget request.

The Committee recognizes the need to ensure forest resiliency and support multiple uses on national forest lands. The Committee urges the Service to incorporate a variety of landscapes, including wet forests, as it develops future projects for the Collaborative Forest Landscape Restoration Program.

Minerals and Geology Management.—The Committee recommends $73,642,000 for Minerals and Geology Management, $1,927,000 below the fiscal year 2017 enacted level and $5,642,000 above the budget request.

The Committee expects that the Service will not promulgate regulations under the authority provided by section 2508 of Public Law 102–486 regarding certain oil and gas activities where the Federal government has acquired an interest in surface lands but not in oil and gas deposits that may be present under these lands. The Committee intends that the Third Circuit Court of Appeals decision in *Minard Run Oil Co.* v. *U.S. Forest Serv.,* 670 F.3d 236 (3d Cir. 2011) will continue to apply to all Forest Service actions regarding oil and gas development of outstanding and reserved mineral rights on the Allegheny National Forest.

Landownership Management.—The Committee recommends $71,850,000 for Landownership Management, $1,880,000 below the fiscal year 2017 enacted level and $2,850,000 above the budget request.

The Committee is concerned about significant delays in processing rights-of-way and property access requests and directs the Service to update its regulations and processes related to these requests to ensure they are efficient, fair, and standardized across the Nation.

Law Enforcement Operations.—The Committee recommends $129,153,000 for Law Enforcement Operations, $2,500,000 above the fiscal year 2017 enacted level and equal to the budget request.

Avalanche Mitigation.—The Committee is concerned about avalanche dangers in the National Forest System, including the Cottonwood Canyons in Utah, and encourages the Service to continue efforts to work cooperatively with other Federal and State agencies to mitigate avalanches.

Bill Language.—The Committee includes the following bill language in Title IV General Provisions: Section 407, allowing forest management plans to expire if the Forest Service has made a good faith effort to update plans commensurate with appropriated funds; Section 410, regarding timber sales of Alaskan western red cedar; Section 423, allowing the Forest Service to renew grazing permits; Section 425, extending the Federal Lands Recreation Enhancement Act for one year; Section 435, prohibiting the use of appropriated funds to close areas open to recreational hunting and shooting as of January 1, 2013; and Section 436, making vacant allotments for permittees affected by drought or wildfire.

ED_001620_00003678-00073

EPA-HQ-2018-009214

CAPITAL IMPROVEMENT AND MAINTENANCE

(INCLUDING TRANSFER OF FUNDS)

Appropriation enacted, 2017	$364,014,000
Budget estimate, 2018	99,693,000
Recommended, 2018	354,733,000
Comparison:	
Appropriation, 2017	¥9,281,000
Budget estimate, 2018	+255,040,000

The Committee recommends $354,733,000 for Capital Improvement and Maintenance, $9,281,000 below the fiscal year 2017 enacted level and $255,040,000 above the budget request.

Facilities Maintenance and Construction.—The Committee recommends $69,570,000 for Facilities Maintenance and Construction, $1,820,000 below the fiscal year 2017 enacted level and $57,820,000 above the budget request.

Road Maintenance and Construction.—The Committee recommends $170,630,000 for Road Maintenance and Construction, $4,464,000 below the fiscal year 2017 enacted level and $95,387,000 above the budget request.

The Committee encourages the Service to seek out and work with partners to address access and congestion issues and provide additional transit options for visitors to the national forests.

Trail Maintenance and Construction.—The Committee recommends $75,553,000 for Trail Maintenance and Construction, $1,977,000 below the fiscal year 2017 enacted level and $62,853,000 above the budget request.

Legacy Roads and Trail Remediation.—The Committee recommends $38,980,000 for Legacy Roads and Trails, $1,020,000 below the fiscal year 2017 enacted level and $38,980,000 above the budget request.

The Committee did not include bill language for legacy roads and trails remediation as it is not needed. The Service is expected to allocate this funding in a manner proportionate to the distribution of roads in need of attention across the National Forest System and to direct funds to regions most in need of road remediation.

LAND ACQUISITION

Appropriation enacted, 2017	$54,415,000
Budget estimate, 2018	7,000,000
Recommended, 2018	25,000,000
Comparison:	
Appropriation, 2017	¥29,415,000
Budget estimate, 2018	+18,000,000

The Committee recommends $25,000,000 for Land Acquisition, $29,415,000 below the fiscal year 2017 enacted level and $18,000,000 above the budget request. A detailed table of funding recommendations below the account level is provided at the end of this report.

The Committee does not have sufficient information to recommend specific Federal acquisition projects at this time, but will review and recommend levels of funding for projects submitted to the Committee in accordance with the direction provided in the explanatory statement accompanying Public Law 115–31.

The Committee is pleased with the cooperative agreement between the USFS and local authorities in Skamania County and en-

ED_001620_00003678-00074

EPA-HQ-2018-009214

courages the Service to remain supportive of the agreement and to move forward with the land transfer process.

The Committee supports the continuation of efforts to resolve the long-standing management challenges regarding school trust lands within the Boundary Waters Canoe Area in the Superior National Forest in Minnesota and encourages the Service to collaborate with nonprofit partners on the private forestland exchange alternative, which will provide the added benefit of preserving valuable forestlands outside of Superior National Forest.

ACQUISITION OF LANDS FOR NATIONAL FORESTS SPECIAL ACTS

Appropriation enacted, 2017	$950,000
Budget estimate, 2018	850,000
Recommended, 2018	850,000
Comparison:	
Appropriation, 2017	¥ 100,000
Budget estimate, 2018	0

The Committee recommends $850,000 for Acquisition of Lands for National Forests Special Acts, equal to the budget request.

ACQUISITION OF LANDS TO COMPLETE LAND EXCHANGES

Appropriation enacted, 2017	$216,000
Budget estimate, 2018	192,000
Recommended, 2018	192,000
Comparison:	
Appropriation, 2017	¥ 24,000
Budget estimate, 2018	0

The Committee recommends $192,000 for Acquisition of Lands to Complete Land Exchanges under the Act of December 4, 1967 (16 U.S.C. 484a), equal to the budget request. The Committee provides no-year funding authority for this account and includes the Ozark-St. Francis and Ouchita National Forests in Arkansas, as requested.

RANGE BETTERMENT FUND

Appropriation enacted, 2017	$2,320,000
Budget estimate, 2018	2,065,000
Recommended, 2018	2,065,000
Comparison:	
Appropriation, 2017	¥ 255,000
Budget estimate, 2018	0

The Committee recommends $2,065,000 for the Range Betterment Fund, equal to the budget request, to be derived from grazing receipts from national forests (Public Law 94–579) and to be used for range rehabilitation, protection, and improvements including seeding, reseeding, fence construction, weed control, water development, and fish and wildlife habitat enhancement in 16 western States.

GIFTS, DONATIONS AND BEQUESTS FOR FOREST AND RANGELAND RESEARCH

Appropriation enacted, 2017	$45,000
Budget estimate, 2018	45,000
Recommended, 2018	45,000
Comparison:	
Appropriation, 2017	0
Budget estimate, 2018	0

ED_001620_00003678-00075

EPA-HQ-2018-009214

The Committee recommends $45,000 for Gifts, Donations and Bequests for Forest and Rangeland Research, equal to the budget request.

MANAGEMENT OF NATIONAL FOREST LANDS FOR SUBSISTENCE USES

Appropriation enacted, 2017	$2,500,000
Budget estimate, 2018	2,225,000
Recommended, 2018	2,225,000
Comparison:	
Appropriation, 2017	¥275,000
Budget estimate, 2018	0

The Committee recommends $2,225,000 for the Management of National Forest Lands for Subsistence Uses in Alaska, equal to the budget request.

WILDLAND FIRE

The Wildland Fire Management account supports the wildland fire activities of the Forest Service. The Committee recommends a total of $2,506,357,000 for the Forest Service wildland fire accounts. This fully funds the fire accounts at the 10-year average of expenditures. The Committee accepts the proposal to transfer Hazardous Fuels from the Wildland Fire Management account to the National Forest System account.

WILDLAND FIRE MANAGEMENT

(INCLUDING TRANSFERS OF FUNDS)

Appropriation enacted, 2017	$2,833,415,000
Budget estimate, 2018	2,495,038,000
Recommended, 2018	2,506,357,000
Comparison:	
Appropriation, 2017	¥327,058,000
Budget estimate, 2018	+11,319,000

The Committee recommends $2,506,357,000 for Wildland Fire Management, $327,058,000 below the fiscal year 2017 enacted level and $11,319,000 above the budget request.

The Committee accepts the proposal to include all costs for suppression in the Wildland Fire Management account and notes that most of the decrease is related to the proposal to move hazardous fuels from the Wildland Fire Management account to the National Forest System account.

The Committee directs the Service to update the Large Airtanker Modernization Strategy, dated January 17, 2012, to reflect current needs and trends in its wildland fire management program.

Wildland Fire Preparedness.—The Committee recommends $1,339,620,000 for Wildfire Preparedness, $257,000,000 above the fiscal year 2017 enacted level and equal to the budget request. The Committee supports the Service's plan to account for "Base 8" staff costs in the preparedness budget line item.

Wildland Fire Suppression Operations.—The Committee recommends $1,056,818,000 for Wildfire Suppression Operations, $191,182,000 below the fiscal year 2017 enacted level and equal to the budget request. The Committee recommendation fully meets the 10-year average expenditure on all suppression activities.

Fire Plan Research and Development.—The Committee recommends $19,290,000 for Fire Plan Research and Development,

ED_001620_00003678-00076

EPA-HQ-2018-009214

$505,000 below the fiscal year 2017 enacted level and $1,690,000 above the budget request.

State Fire Assistance.—The Committee recommends $76,011,000 for State Fire Assistance, $1,989,000 below the fiscal year 2017 enacted level and $6,611,000 above the budget request.

Volunteer Fire Assistance.—The Committee recommends $14,618,000 for Volunteer Fire Assistance, $382,000 below the fiscal year 2017 enacted level and $3,018,000 above the budget request.

FLAME WILDFIRE SUPPRESSION RESERVE FUND

Appropriation enacted, 2017	$342,000,000
Budget estimate, 2018	0
Recommended, 2018	0
Comparison:	
Appropriation, 2017	¥342,000,000
Budget estimate, 2018	0

The Committee recommends $0 for the FLAME Wildfire Suppression Reserve Fund, $342,000,000 below the fiscal year 2017 enacted level and equal to the budget request. As noted above, the Committee accepts the proposal to include all costs for suppression in the Wildland Fire Management account.

ADMINISTRATIVE PROVISIONS, FOREST SERVICE

(INCLUDING TRANSFERS OF FUNDS)

The Committee has included administrative provisions as requested, unless otherwise stated below.

The Committee has included new administrative provisions regarding the availability of the FLAME Wildfire Suppression Fund and the development of an Administrative Control of Funds regulation.

DEPARTMENT OF HEALTH AND HUMAN SERVICES

INDIAN HEALTH SERVICE

The provision of Federal health services to Indians is based on a relationship between Indian Tribes and the U.S. Government first set forth in the 1830s by the U.S. Supreme Court under Chief Justice John Marshall. Numerous treaties, statutes, constitutional provisions, and international laws have reconfirmed this relationship. Principal among these is the Snyder Act of 1921, which provides the basic authority for most Indian health services provided by the Federal government to American Indians and Alaska Natives (AI/AN). The Indian Health Service (IHS) provides direct health care services in 28 hospitals, 61 health centers, three school health centers, and 34 health stations. Tribes and Tribal groups, through contracts and compacts with the IHS, operate 17 hospitals, 249 health centers, six school health centers, and 70 health stations (including 164 Alaska Native village clinics).

ED_001620_00003678-00077

EPA-HQ-2018-009214

INDIAN HEALTH SERVICES

Appropriation enacted, 2017	$3,694,462,000
Budget estimate, 2018	3,574,365,000
Recommended, 2018	3,867,260,000
Comparison:	
Appropriation, 2017	+172,798,000
Budget estimate, 2018	+292,895,000

The Committee recommends $3,867,260,000 for Indian Health Services. All proposed cuts are restored and IHS is expected to continue all programs at fiscal year 2017 enacted levels except as otherwise discussed below and summarized in the table at the end of this report.

Current Services.—The recommendation includes an increase of $23,543,000 above the fiscal year 2017 enacted level to cover estimated pay cost increases.

Indian Health Care Improvement Fund.—The recommendation includes $130,000,000 for the Indian Health Care Improvement Fund in order to reduce health care disparities across the IHS system.

Staffing for New Facilities.—The recommendation includes $17,978,000 for the staffing of newly opened health facilities, as requested. Funds for the staffing of new facilities are limited to facilities funded through the Health Care Facilities Construction Priority System or the Joint Venture Construction Program that have opened in fiscal year 2017 or will open in fiscal year 2018. None of these funds may be allocated to a facility until such facility has achieved beneficial occupancy status.

Accreditation Emergencies.—The Committee considers the loss or potential loss of a Medicare or Medicaid agreement with the Centers for Medicare and Medicaid Services (CMS) at any facility to be an accreditation emergency. The recommendation includes a total of $29,000,000 for accreditation emergencies at an alarming number of facilities over the past year. Funds may be used for personnel or other expenses essential for sustaining operations of an affected service unit, including but not to exceed $4,000,000 for Purchased/Referred Care. These are not intended to be recurring base funds. The Director should reallocate the funds annually as necessary to ensure that agreements with CMS are reinstated, and to restore third-party collection shortfalls. Shortfalls should be calculated relative to a baseline, which should be the average of the collections in each of the two fiscal years preceding the year in which an agreement with CMS was terminated or put on notice of termination.

Domestic Violence Prevention Program.—The recommendation includes $12,967,278 for the Domestic Violence Prevention Program, equal to the fiscal year 2017 enacted level.

Prescription Drug Monitoring.—The recommendation includes $1,000,000 for Prescription Drug Monitoring, equal to the fiscal year 2017 enacted level.

Village Built Clinics.—The recommendation includes $11,000,000 for the village built clinics leasing program, equal to the fiscal year 2017 enacted level.

Dental Health.—The recommendation includes $185,920,000 for Dental Health, $6,169,000 above the budget request and $3,323,000 above the fiscal year 2017 enacted level. The Service is encouraged

ED_001620_00003678-00078

EPA-HQ-2018-009214

to coordinate with the Bureau of Indian Education (BIE) to integrate preventive dental care at schools within the BIE system.

The Committee has recognized for many years the dire need to increase oral health care to American Indians/Alaska Natives. Because of funding increases, an additional 263,565 dental services were provided in fiscal year 2016. However, the demand for dental treatment remains overwhelming due to the high incidence of dental caries (cavities) in AI/AN children. Over 80 percent of AI/AN children ages 6–9 and 13–15 years suffer from dental caries, while less than 50 percent of the U.S. population in the same age cohort have experienced tooth decay. The Committee recognizes that more needs to be done to fully address the need for oral health care.

Purchased/Referred Care (formerly Contract Health Services).—The recommendation includes $928,830,000 for Purchased/Referred Care (PRC), equal to the fiscal year 2017 enacted level. The Committee remains concerned about the inequitable distribution of funds as reported by the Government Accountability Office (GAO–12–446).

The IHS is encouraged to evaluate the feasibility of entering into reimbursable agreements with Federal health facilities outside of the IHS system for patient referrals. Such agreements should be considered only when such referrals save costs and patient travel times relative to referrals to the nearest non-Federal health facilities, and when such referrals do not significantly increase patient wait times at such Federal facilities.

Urban Indian Health.—The recommendation includes $47,943,000 for Urban Indian Health, $3,202,000 above the budget request. IHS is expected to continue to include current services estimates for Urban Indian Health in future budget requests.

Seven out of ten American Indians/Alaska Natives live in urban centers and receive vital culturally appropriate health services from urban Indian health organizations. As such, many Indian veterans obtain their health care services from these organizations. Currently the Veterans' Administration (VA) and the Indian Health Service are operating under a memorandum of understanding (MOU) which is effective through June 30, 2019. Under this agreement, VA reimburses care provided to Indian veterans at IHS facilities and Tribal health programs.

The MOU recognizes the importance of a coordinated and cohesive effort on a national scope to meet the needs of individual tribes, villages, islands, and communities, through VA, IHS, Tribal and Urban Indian health programs; however, to date, there has not been equitable reimbursement for the culturally appropriate services provided to Native individuals, including Native veterans.

This year, House Report 115–188 accompanying the fiscal year 2018 Military Construction, Veterans' Administration, and Related Agencies Appropriation bill included a directive requiring the VA to prepare a report for the Appropriations Committee examining the impact of Indian veterans receiving health services at urban clinics and the annual estimated cost differential for VA to reimburse IHS rather than provide services directly in these urban areas. The report is also to estimate the capacity of Indian urban clinics to treat increased Indian veteran caseloads and include any data supporting the use of the higher negotiated reimbursement rate in urban settings versus rural areas. The report is due 90 days

EPA-HQ-2018-009214

after enactment of the Act, and the Committee directs IHS to work with the VA to complete this report.

Indian Health Professions.—The recommendation includes $49,363,000 for Indian Health Professions, $6,021,000 above the budget request. The American Indians into Psychology Program is continued at not less than $715,077.

Loan repayment has proven to be the Service's best recruitment tool for staffing health professionals. The Committee was dismayed to learn that the Service has three thousand vacancies for health professionals. Overall, this is a vacancy rate of 20 percent, with a physician shortage rate of 30 percent and a dentist rate of 18 percent. The Committee has included $49,363,000 to better enable the Service to recruit and retain health providers. The Service is urged to consider making health administrators a higher priority for loan repayments, in consultation with Tribes.

Governing Boards.—The accreditation crisis in the Great Plains and the subsequent House provision have highlighted the need for IHS facilities to be significantly more inclusive of Tribes in the decision-making process. The Committees on Appropriations are encouraged by the IHS's own recent initiative to reform its governing boards, but reforms are limited under existing statutes. The Committees are aware that the authorizing committees of jurisdiction are examining this issue and support these efforts to improve the communication and collaboration between the IHS and Tribes at direct service facilities.

Indian Health Care Improvement Act.—It has been over six years since the permanent reauthorization of the Indian Health Care Improvement Act (IHCIA), yet many of the provisions in the law remain unfunded. Tribes have specifically requested that priority areas for funding focus on diabetes treatment and prevention, behavioral health, and health professions. The Committee requests that the Service provide, no later than 90 days after the date of enactment of this Act, a detailed plan with specific dollars identified to fully fund and implement the IHCIA.

Reimbursable Funding.—The Committee directs the Service to report, within 180 days of enactment of this Act, on patient population and service growth over the past ten years and the funding sources used to provide for these medical services. The IHS is to include a breakdown, by dollar amount and percentage, of funding sources which supplement appropriated dollars to cover the provision of medical services at IHS operated and tribally contracted and compacted facilities. The Committee is interested in detailed information on whether medical services have been able to expand over this time period as a result of increases in the ability to charge medical services to supplementary funding sources. As a point of comparison, and to the extent possible, the Service shall compare these impacts across the twelve IHS areas, with the degree to which patient populations services in the respective states has increased.

ED_001620_00003678-00080

CONTRACT SUPPORT COSTS

Appropriation enacted, 2017	$800,000,000
Budget estimate, 2018	717,970,000
Recommended, 2018	717,970,000
Comparison:	
Appropriation, 2017	¥82,030,000
Budget estimate, 2018	0

The Committee recommends an indefinite appropriation estimated to be $717,970,000 for contract support costs incurred by the agency as required by law. The bill includes language making available for two years such sums as are necessary to meet the Federal government's full legal obligation, and prohibiting the transfer of funds to any other account for any other purpose.

INDIAN HEALTH FACILITIES

Appropriation enacted, 2017	$545,424,000
Budget estimate, 2018	446,956,000
Recommended, 2018	551,643,000
Comparison:	
Appropriation, 2017	+6,219,000
Budget estimate, 2018	+104,687,000

The Committee recommends $551,643,000 for Indian Health Facilities, $6,219,000 above the fiscal year 2017 enacted level and $104,687,000 above the budget request. All proposed cuts are restored and IHS is expected to continue all programs at fiscal year 2017 enacted levels except as otherwise discussed below and summarized in the table at the end of this report.

Staffing for New Facilities.—The recommendation includes $2,022,000 for the staffing of newly opened health facilities. The stipulations included in the Indian Health Services account regarding the allocation of funds pertain to this account as well.

Current Services.—The recommendation includes an increase of $2,440,000 above the fiscal year 2017 enacted level to cover estimated pay cost increases.

Indian Health Care Improvement Fund.—The bill includes language allowing funds in the Indian Health Care Improvement Fund to be used for activities in the Facilities account.

Health Care Facilities Construction.—The recommendation includes $117,991,000 for health care facilities construction, $17,991,000 above the budget request and equal to the fiscal year 2017 enacted level.

The Committee remains dedicated to providing access to health care for IHS patients across the system. The IHS is expected to aggressively work down the current Health Facilities Construction Priority System list, as well as work with the Department and Tribes to examine alternative financing arrangements and meritorious regional demonstration projects authorized under the Indian Health Care Improvement Act that that would effectively close the service gap. Within 60 days of enactment of this Act, the Service shall submit a spending plan to the Committees on Appropriations that details the project-level distribution of funds provided for healthcare facilities construction.

The IHS has no defined benefit package and is not designed to be comparable to the private sector health care system. IHS does not provide the same health services in each area. Health services provided to a community depend upon the facilities and services

available in the local area, the facilities' financial and personnel resources (42 CFR 136.11 (c)), and the needs of the service population. In order to determine whether IHS patients across the system have comparable access to healthcare, the IHS is directed to conduct and publish a gap analysis of the locations and capacities of patient health facilities relative to the IHS user population. The analysis should include: facilities within the IHS system, including facilities on the Health Facilities Construction Priority System list and the Joint Venture Construction Program list; and where possible facilities within private or other Federal health systems for which arrangements with IHS exist, or should exist, to see IHS patients.

NATIONAL INSTITUTES OF HEALTH

NATIONAL INSTITUTE OF ENVIRONMENTAL HEALTH SCIENCES

The National Institute of Environmental Health Sciences, an agency within the National Institutes of Health, was authorized in section 311(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 and in section 126(g) of the Superfund Amendments and Reauthorization Act of 1986 to conduct certain research and worker training activities associated with the Nation's Hazardous Substance Superfund program.

Appropriation enacted, 2017	$77,349,000
Budget estimate, 2018	59,607,000
Recommended, 2018	75,370,000
Comparison:	
Appropriation, 2017	¥1,979,000
Budget estimate, 2018	+15,763,000

The Committee recommends $75,370,000 for the National Institute of Environmental Health Sciences, $1,979,000 below the fiscal year 2017 enacted level and $15,763,000 above the budget request.

AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY

TOXIC SUBSTANCES AND ENVIRONMENTAL PUBLIC HEALTH

The Agency for Toxic Substances and Disease Registry (ATSDR), an agency in the Department of Health and Human Services, was created in section 104(i) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980. The Agency's mission is to serve the public through responsive public health actions to promote healthy and safe environments and prevent harmful toxic exposures. ATSDR assesses hazardous exposures in communities near toxic waste sites and advises the Environmental Protection Agency (EPA) and other government agencies, community groups and industry partners on actions needed to protect people's health. In addition, ATSDR conducts toxicological and applied research to support environmental assessments, supports health surveillance systems and registries, develops and disseminates information on hazardous substances, provides education and training on hazardous exposures, and responds to environmental emergencies. Through a national network of scientists and public health practitioners in State health departments, regional EPA offices and headquarters, ATSDR helps to protect people from acute toxic exposures that occur from hazardous leaks and spills,

EPA-HQ-2018-009214

environment-related poisonings, and natural and terrorism-related disasters.

Appropriation enacted, 2017	$74,961,000
Budget estimate, 2018	62,000,000
Recommended, 2018	72,780,000
Comparison:	
Appropriation, 2017	¥1,911,000
Budget estimate, 2018	+10,780,000

The Committee recommends $72,780,000 for the Agency for Toxic Substances and Disease Registry, $1,911,000 below the fiscal year 2017 level and $10,780,000 above the budget request.

OTHER RELATED AGENCIES

EXECUTIVE OFFICE OF THE PRESIDENT

COUNCIL ON ENVIRONMENTAL QUALITY AND OFFICE OF ENVIRONMENTAL QUALITY

The Council on Environmental Quality (CEQ) was established by Congress under the National Environmental Policy Act of 1969 (NEPA). The Office of Environmental Quality (OEQ), which provides professional and administrative staff for the Council, was established in the Environmental Quality Improvement Act of 1970. The Council on Environmental Quality has statutory responsibility for overseeing Federal agency implementation of the requirements of NEPA. CEQ also assists in coordinating environmental programs among the Federal agencies in the Executive Branch.

Appropriation enacted, 2017	$3,000,000
Budget estimate, 2018	2,994,000
Recommended, 2018	2,994,000
Comparison:	
Appropriation, 2017	¥6,000
Budget estimate, 2018	0

The Committee recommends $2,994,000 for the Council on Environmental Quality and Office of Environmental Quality, $6,000 below the fiscal year 2017 enacted level and equal to the budget request.

CHEMICAL SAFETY AND HAZARD INVESTIGATION BOARD

SALARIES AND EXPENSES

The Chemical Safety and Hazard Investigation Board (CSB) is an independent Federal agency charged with investigating industrial chemical accidents. The board members are appointed by the President and confirmed by the Senate. The CSB conducts root-cause investigations of chemical accidents at fixed industrial facilities. Root causes are usually deficiencies in safety management systems, but can be any factor that would have prevented the accident if that factor had not occurred. Other accident causes often involve equipment failures, human errors, unforeseen chemical reactions or other hazards. CSB does not issue fines or citations, but does make recommendations to plants, regulatory agencies such as the Occupational Safety and Health Administration and the Environmental Protection Agency, industry organizations, and labor groups. Congress designed the CSB to be non-regulatory and inde-

ED_001620_00003678-00083

EPA-HQ-2018-009214

pendent of other agencies so that its investigations might, where appropriate, review the effectiveness of regulations and regulatory enforcement.

Appropriation enacted, 2017	$11,000,000
Budget estimate, 2018	9,420,000
Recommended, 2018	11,000,000
Comparison:	
Appropriation, 2017	0
Budget estimate, 2018	+1,580,000

The bill provides $11,000,000 for Salaries and Expenses of the Chemical Safety and Hazard Investigation Board. The Board has the important responsibility of independently investigating industrial chemical accidents and collaborating with industry and professional organizations to share safety lessons that can prevent catastrophic incidents and the Committee expects this work to continue.

OFFICE OF NAVAJO AND HOPI INDIAN RELOCATION

SALARIES AND EXPENSES

(INCLUDING TRANSFER OF FUNDS)

The Office of Navajo and Hopi Indian Relocation was established by Public Law 93–531 to plan and conduct relocation activities associated with the settlement of a land dispute between the Navajo Nation and the Hopi Tribe.

Appropriation enacted, 2017	$15,431,000
Budget estimate, 2018	14,970,000
Recommended, 2018	15,431,000
Comparison:	
Appropriation, 2017	0
Budget estimate, 2018	+461,000

The Committee recommends $15,431,000 for the Office of Navajo and Hopi Indian Relocation (Office), equal to the fiscal year 2017 enacted level. Of this amount, $200,000 shall be transferred to the Inspector General of the Department of the Interior for continued oversight of planning, transition, and closure of the Office.

The Committee has directed the Office to begin to communicate with Congress, the affected Tribes, and the Department of the Interior about what will be required to ensure relocation benefits and necessary support services are provided in accordance with the specifications in Public Law 93–531 and to initiate closure of the Office. The Committee requests continuation of the quarterly reports and a comprehensive plan for closing the Office, as outlined in House Report 114–632. Legal analysis on whether any enacting legislation is required to transfer or maintain any identified functions to another agency or organization should also be included. The Office should be transparent about the path forward and should actively consult with all affected parties and agencies.

ED_001620_00003678-00084

EPA-HQ-2018-009214

INSTITUTE OF AMERICAN INDIAN AND ALASKA NATIVE CULTURE AND ARTS DEVELOPMENT

PAYMENT TO THE INSTITUTE

Appropriation enacted, 2017	$15,212,000
Budget estimate, 2018	11,596,000
Recommended, 2018	9,835,000
Comparison:	
Appropriation, 2017	¥5,377,000
Budget estimate, 2018	¥1,761,000

The Committee recommends $9,835,000 in direct appropriations for the Institute of American Indian and Alaska Native Culture and Arts Development. The Committee notes that the budget request failed to account for a one-time funding increase in fiscal year 2017 to put the Institute's budget on a school year cycle instead of a fiscal year cycle. The total operating level appropriated in fiscal year 2017 for the Institute was $9,835,000. The Committee recommends the same amount for 2018.

SMITHSONIAN INSTITUTION

The Smithsonian Institution is the world's largest museum and research complex, with 19 museums and galleries, numerous research centers, libraries, archives, and the National Zoological Park. Funded by both private and Federal sources, the Smithsonian is unique in the Federal establishment. Created by an Act of Congress in 1846 to carry out the trust included in James Smithson's will, it has been engaged for 171 years in the "increase and diffusion of knowledge." Last year, the Smithsonian attracted over 29 million visits to its museums, galleries, and zoological park. Additional millions also view Smithsonian traveling exhibitions and participate in the annual Folklife Festival on the National Mall. As custodian of the National Collections, the Smithsonian is responsible for more than 156 million art objects, natural history specimens, and artifacts. These scientific and cultural collections are a vital resource for global research and conservation efforts. The collections are displayed for the enjoyment and education of visitors and are available for research by the staff of the Institution and by thousands of visiting students, scientists, and historians each year.

SALARIES AND EXPENSES

Appropriation enacted, 2017	$729,444,000
Budget estimate, 2018	719,000,000
Recommended, 2018	716,600,000
Comparison:	
Appropriation, 2017	¥12,844,000
Budget estimate, 2018	¥2,400,000

The Committee recommends $716,600,000 for Salaries and Expenses of the Smithsonian Institution, $12,844,000 below the fiscal year 2017 enacted level and $2,400,000 below the budget request.

Additional Guidance.—The following additional direction and guidance is provided with respect to funding provided within this account:

Collections Care.—The Committee maintains its longstanding commitment to the preservation of priceless, irreplaceable Smithsonian Institution collections and has provided funds for the collec-

ED_001620_00003678-00085

EPA-HQ-2018-009214

tions care initiative. The Committee is pleased with continuing efforts to improve the long-term inventory, preservation, and storage of historical collections.

National Museum of African American History and Culture.—The Committee maintains its longstanding support of the National Museum of African American History and Culture (NMAAHC). The Committee has provided funds for museum maintenance, facility operations, and security, as requested.

Latino Programs, Exhibitions, Collections and Public Outreach.—The Committee supports the Smithsonian Latino Center's goal of promoting the inclusion of Latino contributions in Smithsonian Institution programs, exhibitions, collections and public outreach. The Committee urges collaboration among interested parties to advance these goals more fully by utilizing existing Smithsonian Institution museum locations for the expansion of the Smithsonian Latino Center's programming, exhibition and collection space. The Committee has provided funds, as requested, to support the Institution's Latino initiatives.

Asian Pacific American Initiatives and Outreach.—The Smithsonian is directed to continue its efforts, at the fiscal year 2017 enacted funding level, toward developing programs and expanding outreach to promote a better understanding of the Asian Pacific American experience.

Historical flag collection.—The Committee is aware that the Smithsonian Institution may have the potential opportunity to acquire a rare, historically significant private collection of American flags and ephemera that would substantially enhance the Museum's permanent collection. The Committee understands that the Smithsonian is not currently seeking Congressional funding for this acquisition and encourages private/public partnerships that would be beneficial to the Smithsonian's effort to acquire these flags and artifacts that are of significant educational value and reflect our Nation's history.

FACILITIES CAPITAL

Appropriation enacted, 2017	$133,903,000
Budget estimate, 2018	228,000,000
Recommended, 2018	168,500,000
Comparison:	
Appropriation, 2017	+34,597,000
Budget estimate, 2018	¥59,500,000

The Committee recommends $168,500,000 for the Facilities Capital account, $34,597,000 above the fiscal year 2017 enacted level.

The recommendation includes funding as requested to complete construction of the Dulles Storage Module at the National Air and Space Museum's Udvar-Hazy Center. This critical addition of collections storage space at the Smithsonian's Dulles site will establish a permanent facility to gather collections from the antiquated buildings at the Garber facility in Suitland, Maryland, which are being phased out after 60 years of service. In the near term, this storage module will serve the Smithsonian's immediate need for temporary collections swing space during the National Air and Space Museum's Revitalization Project, and will provide critically needed collections consolidation space for the Institution's long-term storage needs.

ED_001620_00003678-00086

EPA-HQ-2018-009214

The Committee supports revitalization of Smithsonian Institution facilities and the planning and design of future projects. Within funds provided, the Committee urges the Smithsonian to support the highest priority projects on the Facilities Capital Program list, including the multi-year revitalization of the National Air and Space Museum (NASM), scheduled to begin in fiscal year 2018.

The NASM faces mechanical, structural, and security challenges that necessitate action to ensure the facility's long-term viability. The NASM is the most visited museum in the United States and second most visited museum in the world with between seven and eight million visitors annually. The Committee remains concerned, however, that the multi-year cost-estimates for the project exceed $600 million.

Given the scope and scale of this effort, this project is likely to place additional pressure on Smithsonian annual budgets for the foreseeable future. The Committee urges the Smithsonian to evaluate potential partnership and philanthropic opportunities that may provide additional non-Federal sources of funding to assist in offsetting the costs of this and other revitalization projects.

NATIONAL GALLERY OF ART

The National Gallery of Art is one of the world's great galleries. Its magnificent works of art, displayed for the benefit of millions of visitors annually, and its two iconic buildings and sculpture garden, serve as an example of a successful cooperative endeavor between private individuals and institutions and the Federal government. With the special exhibitions shown in the Gallery, and through the many exhibitions which travel across the country, the Gallery brings great art treasures to Washington, DC, and to the Nation. Through its educational and teacher training programs and its website, the Gallery provides art history materials, rich online educational materials, direct loans, and broadcast programs to millions of Americans in every State.

SALARIES AND EXPENSES

Appropriation enacted, 2017	$132,961,000
Budget estimate, 2018	130,000,000
Recommended, 2018	132,961,000
Comparison:	
Appropriation, 2017	0
Budget estimate, 2018	+2,961,000

The Committee recommends $132,961,000 for Salaries and Expenses of the National Gallery of Art, equal to the fiscal year 2017 enacted level and $2,961,000 above the budget request.

Bill Language.—The Committee has included bill language specifying the amount provided for Special Exhibitions.

REPAIR, RESTORATION AND RENOVATION OF BUILDINGS

Appropriation enacted, 2017	$22,564,000
Budget estimate, 2018	17,000,000
Recommended, 2018	22,564,000
Comparison:	
Appropriation, 2017	0
Budget estimate, 2018	+5,564,000

The Committee recommends $22,564,000 for Repair, Restoration and Renovation of buildings at the National Gallery of Art, equal

ED_001620_00003678-00087

EPA-HQ-2018-009214

to the fiscal year 2017 enacted level and $5,564,000 above the budget request.

Bill Language.—The Committee has included bill language, as requested, relating to lease agreements of no more than 10 years that addresses space needs created by ongoing renovations in the Master Facilities Plan.

JOHN F. KENNEDY CENTER FOR THE PERFORMING ARTS

The John F. Kennedy Center for the Performing Arts is a living memorial to the late President Kennedy and is the National Center for the Performing Arts. The Center houses nine stages and seven theaters which have a total of more than 7,300 seats. The Center consists of over 1.5 million square feet of usable floor space with visitation averaging 8,000 on a daily basis. The support systems in the building often operate at capacity 18 hours a day, seven days a week, 365 days a year.

OPERATIONS AND MAINTENANCE

Appropriation enacted, 2017	$22,260,000
Budget estimate, 2018	23,740,000
Recommended, 2018	23,740,000
Comparison:	
Appropriation, 2017	+1,480,000
Budget estimate, 2018	0

The Committee recommends $23,740,000 for Operations and Maintenance, as requested.

CAPITAL REPAIR AND RESTORATION

Appropriation enacted, 2017	$14,140,000
Budget estimate, 2018	13,000,000
Recommended, 2018	13,000,000
Comparison:	
Appropriation, 2017	¥1,140,000
Budget estimate, 2018	0

The Committee recommends $13,000,000 for Capital Repair and Restoration, as requested.

WOODROW WILSON INTERNATIONAL CENTER FOR SCHOLARS

SALARIES AND EXPENSES

The Woodrow Wilson International Center for Scholars promotes policy-relevant research and dialogue to increase understanding and enhance the capabilities and knowledge of leaders, citizens, and institutions worldwide. The Center hosts scholars and policy makers to do their own advanced study, research and writing and facilitates debate and discussions among scholars, public officials, journalists and business leaders from across the country on relevant, major long-term issues facing this Nation and the world.

Appropriation enacted, 2017	$10,500,000
Budget estimate, 2018	7,474,000
Recommended, 2018	10,000,000
Comparison:	
Appropriation, 2017	¥500,000
Budget estimate, 2018	+2,526,000

The Committee recommends $10,000,000 for Salaries and Expenses of the Woodrow Wilson International Center for Scholars,

ED_001620_00003678-00088

EPA-HQ-2018-009214

$500,000 below the fiscal year 2017 enacted level and $2,526,000 above the budget request.

NATIONAL FOUNDATION ON THE ARTS AND THE HUMANITIES

NATIONAL ENDOWMENT FOR THE ARTS

GRANTS AND ADMINISTRATION

Appropriation enacted, 2017	$149,849,000
Budget estimate, 2018	29,019,000
Recommended, 2018	145,000,000
Comparison:	
Appropriation, 2017	¥4,849,000
Budget estimate, 2018	+115,981,000

The Committee recommends $145,000,000 for the National Endowment for the Arts (NEA), $4,849,000 below the fiscal year 2017 enacted level and $115,981,000 above the budget request.

The Committee notes the broad bipartisan support of the NEA in commending the NEA's participation in the National Initiative on Arts and the Military. This collaborative effort involving Federal agencies, the military, and nonprofit and private sector partners is working to advance the policy, research, and practice of arts therapy for military veterans and their families. Through the innovative program, "Creative Forces: NEA Military Healing Arts Network," the NEA is partnering with the Departments of Defense and Veterans Affairs to place creative arts therapies at the core of patient-centered care and increase access to therapeutic arts activities in local communities.

The Committee commends the NEA for its ongoing collaboration with the National Intrepid Center of Excellence at Walter Reed National Military Medical Center. Since 2011, this unique partnership has supported creative and innovative arts therapies for service members. In 2013, this collaborative relationship expanded to bring art therapy to military patients at the Fort Belvoir Community Hospital Brain Injury Clinic in Virginia to evaluate the potential health benefits of creative arts therapy interventions for service members with Traumatic Brain Injury and Post Traumatic Stress. Today, the NEA is engaged in this transformative approach to healing at 11 clinical sites across the country.

The Committee values greatly the longstanding collaborative relationship between the NEA and the States. State Arts Agencies support the arts for communities at the grassroots level regardless of their geographic location, providing much of their funding to smaller organizations, community groups, and schools.

The Committee remains committed to supporting proven national initiatives with broad geographic reach. The Big Read, Challenge America, and Shakespeare in American Communities are among the cost-effective grant programs with broad, bipartisan congressional support that meet these criteria, supporting the NEA's goal of extending the arts to underserved populations in both urban and rural communities across the United States.

Bill Language.—Each year, the Committee provides in bill language specific guidelines under which the Endowment is directed to distribute taxpayer dollars in support of the arts. With the exception of established honorific programs, grant funding to individual artists is strictly prohibited. The Committee directs that pri-

ED_001620_00003678-00089

EPA-HQ-2018-009214

ority be given to providing services or grant funding for projects, productions, or programs that encourage public knowledge, education, understanding, and appreciation of the arts. Any reduction in support to the States for arts education should be no more than proportional to other funding decreases taken in other NEA programs.

Reforms originally instituted by the Committee in P.L. 108–447 relating to grant guidelines and program priorities are fully restated in Sections 413 and 414 of the bill. The Committee expects the NEA to adhere to them fully. These reforms maintain broad bipartisan support and continue to serve well both the NEA and the public.

NATIONAL ENDOWMENT FOR THE HUMANITIES

GRANTS AND ADMINISTRATION (INCLUDING MATCHING GRANTS)

Appropriation enacted, 2017	$149,848,000
Budget estimate, 2018	42,307,000
Recommended, 2018	145,000,000
Comparison:	
Appropriation, 2017	¥4,848,000
Budget estimate, 2018	+102,693,000

The Committee recommends a total of $145,000,000 for the National Endowment for the Humanities (NEH), $4,848,000 below the fiscal year 2017 enacted level and $102,693,000 above the budget request.

The Committee notes the broad bipartisan support of the NEH in commending the NEH for its support of grant programs to benefit wounded warriors and to ensure educational opportunities for veterans and service members transitioning to civilian life. In partnership with NEH, State humanities councils have developed and delivered local programs that support veterans, their families and caregivers. The Committee encourages the NEH to fully support efforts to connect the humanities to the experience of veterans and provide educational opportunities to these American heroes.

The Committee commends the NEH for its ongoing support to American Indian and Alaska Native communities in preserving their cultural and linguistic heritage through the Documenting Endangered Languages program and a variety of preservation and access grants that enable American Indian and Alaska Native communities to preserve cultural artifacts and make them broadly accessible. It also commends the NEH for providing educational opportunities to Tribal communities through the Humanities Initiatives at Tribal Colleges and Universities program.

The Committee commends the NEH Federal/State Partnership for its ongoing, successful collaboration with State humanities councils in each of the 50 states as well as Washington, DC, the Commonwealth of Puerto Rico, the U.S. Virgin Islands, Guam, the Commonwealth of the Northern Mariana Islands, and American Samoa. The Committee recognizes the State humanities councils for the scope and reach of public humanities programming in Congressional districts across the nation, which serve rural areas, promote family literacy, and support cultural tourism that contributes to local economies. Every NEH dollar received by a council is matched by a local contribution. In recent years, the proportion of NEH program funds supporting the work of State humanities coun-

ED_001620_00003678-00090

cils has grown to nearly 40 percent. The Committee urges the NEH to provide program funding to support the work of State humanities councils consistent with the guidance provided in the Consolidated Appropriations Act, 2017.

COMMISSION OF FINE ARTS

The Commission of Fine Arts was established in 1910 to advise the government on matters pertaining to the design of national symbols, and particularly to guide the architectural development of Washington, DC. The Commission's work includes advice on designs for parks, public buildings, public art, as well as the design of national monuments, coins and medals, and overseas American military cemeteries. In addition, the Commission conducts design reviews of semipublic and private structures within the Old Georgetown Historic District and within certain areas of the National Capital that are adjacent to areas of Federal interest. The Commission reviews approximately 750 projects annually. The Commission also administers the National Capital Arts and Cultural Affairs program.

SALARIES AND EXPENSES

Appropriation enacted, 2017	$2,762,000
Budget estimate, 2018	2,600,000
Recommended, 2018	2,600,000
Comparison:	
Appropriation, 2017	¥ 162,000
Budget estimate, 2018	0

The Committee recommends $2,600,000 for Salaries and Expenses of the Commission of Fine Arts, $162,000 below the fiscal year 2017 enacted level and equal to the budget request.

NATIONAL CAPITAL ARTS AND CULTURAL AFFAIRS

Appropriation enacted, 2017	$2,000,000
Budget Estimate, 2018	0
Recommended, 2018	2,000,000
Comparison:	
Appropriation, 2017	0
Budget estimate, 2018	+2,000,000

The National Capital Arts and Cultural Affairs (NCACA) program was established in Public Law 99–190 to support organizations that perform, exhibit, and/or present the arts in the Nation's Capital. NCACA provides grants to support Ford's Theater, the National Symphony Orchestra, the National Museum of Women in the Arts, and other arts organizations. The Committee recommends $2,000,000, equal to the fiscal year 2017 enacted level.

ADVISORY COUNCIL ON HISTORIC PRESERVATION

SALARIES AND EXPENSES

The National Historic Preservation Act of 1966 established the Advisory Council on Historic Preservation (ACHP). The ACHP was granted permanent authorization as part of the National Historic Preservation Act Amendments of 2006 (Public Law 109–453). The ACHP promotes the preservation, enhancement, and productive

EPA-HQ-2018-009214

use of our Nation's historic resources and advises the President and Congress on national historic preservation policy.

Appropriation enacted, 2017	$6,493,000
Budget estimate, 2018	6,400,000
Recommended, 2018	6,400,000
Comparison:	
Appropriation, 2017	¥93,000
Budget estimate, 2018	0

The Committee recommends $6,400,000 for Salaries and Expenses of the Advisory Council on Historic Preservation (ACHP), $93,000 below the fiscal year 2017 enacted level and equal to the budget request.

NATIONAL CAPITAL PLANNING COMMISSION

SALARIES AND EXPENSES

The National Capital Planning Act of 1952 designated the National Capital Planning Commission as the central planning agency for the Federal government in the National Capital Region. The three major functions of the Commission are to prepare and adopt the Federal elements of the National Capital Comprehensive Plan; prepare an annual report on a five-year projection of the Federal Capital Improvement Program; and review plans and proposals submitted to the Commission.

Appropriation enacted, 2017	$8,099,000
Budget estimate, 2018	7,948,000
Recommended, 2018	7,948,000
Comparison:	
Appropriation, 2017	¥151,000
Budget estimate, 2018	0

The Committee recommends $7,948,000 for Salaries and Expenses of the National Capital Planning Commission, $151,000 below the fiscal year 2017 enacted level and equal to the budget request.

UNITED STATES HOLOCAUST MEMORIAL MUSEUM

HOLOCAUST MEMORIAL MUSEUM

In 1980, Congress passed legislation creating a 65-member Holocaust Memorial Council with the mandate to create and oversee a living memorial/museum to victims of the Holocaust. The museum opened in April 1993. Construction costs for the museum came solely from donated funds raised by the U.S. Holocaust Memorial Museum Campaign, and appropriated funds were used for planning and development of programmatic components, overall administrative support, and annual commemorative observances. Since the opening of the museum, appropriated funds have been provided to pay for the ongoing operating costs of the museum as authorized by Public Law 102–529 and Public Law 106–292. Private funds support educational outreach throughout the United States.

Appropriation enacted, 2017	$57,000,000
Budget estimate, 2018	54,000,000
Recommended, 2018	57,000,000
Comparison:	
Appropriation, 2017	0
Budget estimate, 2018	+3,000,000

ED_001620_00003678-00092

EPA-HQ-2018-009214

The Committee recommends $57,000,000 for the Holocaust Memorial Museum, equal to the fiscal year 2017 enacted level and $3,000,000 above the budget request.

DWIGHT D. EISENHOWER MEMORIAL COMMISSION

The Dwight D. Eisenhower Memorial Commission was created by Congress in 1999 through Public Law 106–79 for the purpose of establishing a permanent national memorial to Dwight D. Eisenhower, Supreme Commander of the Allied Forces in Europe in World War II and 34th President of the United States. The Commission consists of 12 members, four members of the House of Representatives, four Senators, and four private citizens appointed by the President.

SALARIES AND EXPENSES

Appropriation enacted, 2017	$1,600,000
Budget estimate, 2018	1,800,000
Recommended, 2018	1,600,000
Comparison:	
Appropriation, 2017	0
Budget estimate, 2018	¥200,000

The bill includes $1,600,000 for the Salaries and Expenses account, equal to the fiscal year 2017 enacted level. The Committee supports the construction of a permanent memorial to Dwight D. Eisenhower. It is the Committee's understanding that groundbreaking for the memorial will occur later this year following necessary approvals from the Commission of Fine Arts and the National Capital Planning Commission. The bill includes language in Section 419 of Title IV General Provisions extending the memorial's site authority.

CAPITAL CONSTRUCTION

Appropriation enacted, 2017	$45,000,000
Budget estimate, 2018	85,000,000
Recommended, 2018	15,000,000
Comparison:	
Appropriation, 2017	¥30,000,000
Budget estimate, 2018	¥70,000,000

The bill includes $15,000,000 for the Capital Construction account. The fiscal year 2018 budget request was developed prior to the enactment of the fiscal year 2017 budget which provided $45,000,000 toward construction of the memorial. When combined with prior year unobligated balances in the construction account, funds provided in fiscal year 2017 and in this bill, will allow significant progress to be made on the memorial when construction commences later this year.

WOMEN'S SUFFRAGE CENTENNIAL COMMISSION

The Women's Suffrage Centennial Commission was established by Congress in 2017 in the Consolidated Appropriations Act, 2017, P.L. 115–31. The purpose of the commission is to study and make recommendations for the national commemoration of the ratification of the 19th amendment to the U.S. Constitution on August 18, 1920, that guaranteed women the right to vote.

ED_001620_00003678-00093

EPA-HQ-2018-009214

SALARIES AND EXPENSES

Appropriation enacted, 2017	$2,000,000
Budget estimate, 2018	0
Recommended, 2018	1,000,000
Comparison:	
Appropriation, 2017	¥1,000,000
Budget estimate, 2018	+1,000,000

The bill provides $1,000,000 for the salaries and expenses of the Women's Suffrage Centennial Commission. The Committee looks forward to the appointment of the members of the commission and receiving additional information on its plans for the commemoration of the 19th amendment to the U.S. Constitution.

WORLD WAR I CENTENNIAL COMMISSION

The U.S. World War I Centennial Commission was created by an Act of Congress in 2013 as an independent agency of the Legislative Branch of the United States government. Members of the 12-member Commission were appointed by the President and the leaders of the Senate and the House of Representatives, as well as the American Legion, the Veterans of Foreign Wars, and the National World War I Museum. The Commission's mission is to plan, develop, and execute programs, projects and activities to commemorate the Centennial of World War I.

SALARIES AND EXPENSES

Appropriation enacted, 2017	$0
Budget estimate, 2018	7,000,000
Recommended, 2018	3,000,000
Comparison:	
Appropriation, 2017	+3,000,000
Budget estimate, 2018	¥4,000,000

The bill provides $3,000,000 for salaries and expenses of the World War I Centennial Commission, and bill language as requested.

TITLE IV—GENERAL PROVISIONS

Section 401 continues a provision prohibiting activities to promote public support or opposition to legislative proposals.

Section 402 continues a provision providing for annual appropriations unless expressly provided otherwise in this Act.

Section 403 continues a provision providing restrictions on departmental assessments unless approved by the Committee on Appropriations.

Section 404 continues a limitation on accepting and processing applications for patents and on the patenting of Federal lands; permits processing of grandfathered applications; and permits third-party contractors to process grandfathered applications.

Section 405 continues a provision regarding the payment of contract support costs for prior fiscal years.

Section 406 addresses the payment of contract support costs for fiscal year 2018.

Section 407 continues a provision allowing Forest Service land management plans to be more than 15 years old if the Secretary is acting in good faith to update such plans and prohibiting the use

ED_001620_00003678-00094

EPA-HQ-2018-009214

of funds to implement new wilderness directives under the planning rule.

Section 408 continues a provision limiting preleasing, leasing, and related activities within the boundaries of National Monuments.

Section 409 continues a provision which restricts funding for acquisition of land from being used for declarations of taking or complaints in condemnation.

Section 410 continues a provision addressing timber sales involving Alaskan western red cedar.

Section 411 continues a provision which prohibits no-bid contracts and grants except under certain circumstances.

Section 412 continues a provision which requires public disclosure of certain reports.

Section 413 continues a provision which delineates the grant guidelines for the National Endowment for the Arts.

Section 414 continues a provision which delineates the program priorities for the programs managed by the National Endowment for the Arts.

Section 415 continues a provision requiring the Department of the Interior, the EPA, the Forest Service, and the Indian Health Service to provide the Committees on Appropriations a quarterly report on the status of balances of appropriations.

Section 416 provides a one-year extension of the current recreation fee authority.

Section 417 continues a provision prohibiting the use of funds to promulgate or implement any regulation requiring the issuance of permits under title V of the Clean Air Act for carbon dioxide, nitrous oxide, water vapor, or methane emissions.

Section 418 continues a provision prohibiting the use of funds to implement any provision in a rule if that provision requires mandatory reporting of greenhouse gas emissions from manure management systems.

Section 419 continues a provision from the Consolidated Appropriations Act, 2017 modifying authorities relating to the Dwight D. Eisenhower Memorial Commission.

Section 420 prohibits the use of funds to regulate the lead content of ammunition or fishing tackle.

Section 421 continues a provision through fiscal year 2019 authorizing the Secretary of the Interior and the Secretary of Agriculture to consider local contractors when awarding contracts for certain activities on public lands.

Section 422 extends the authorization for the Chesapeake Bay Initiative.

Section 423 extends certain authorities through fiscal year 2018 allowing the Forest Service to renew grazing permits.

Section 424 prohibits the use of funds to maintain or establish a computer network unless such network is designed to block pornography websites.

Section 425 extends the authority of the Forest Service Facility Realignment and Enhancement Act.

Section 426 sets requirement for the use of American iron and steel for certain loans and grants.

Section 427 continues the prohibition on the use of funds to destroy any building or structures on Midway Island that have been

ED_001620_00003678-00095

EPA-HQ-2018-009214

recommended by the U.S. Navy for inclusion in the National Register of Historic Places.

Section 428 addresses carbon emissions from forest biomass.

Section 429 reauthorizes funding for one year for the John F. Kennedy Center for the Performing Arts.

Section 430 prohibits the use of funds to require permits for the discharge of dredged or fill material for certain agricultural activities.

Section 431 addresses the Waters of the United States rule.

Section 432 addresses the implementation of national ambient air quality standards for ozone.

Section 433 prohibits the use of funds to finalize, implement, administer, or enforce a proposed rule for financial responsibility requirements under CERCLA.

Section 434 prohibits the use of funds to issue any regulation under the Solid Waste Disposal Act that applies to an animal feeding operation.

Section 435 prohibits the use of funds for the National Ocean Policy developed under Executive Order 13547.

Section 436 prohibits the use of funds to limit recreational shooting and hunting on Federal and public lands except for public safety.

Section 437 makes available vacant allotments for permittees impacted by drought or wildland fire.

Section 438 establishes a Spending Reduction Account in the bill.

BILL-WIDE REPORTING REQUIREMENTS

The following items are included in accordance with various requirements of the Rules of the House of Representatives:

FULL COMMITTEE VOTES

Pursuant to the provisions of clause 3(b) of rule XIII of the Rules of the House of Representatives, the results of each roll call vote on an amendment or on the motion to report, together with the names of those voting for and those voting against, are printed below:

[INSERT FULL COMMITTEE VOTES]

STATEMENT OF GENERAL PERFORMANCE GOALS AND OBJECTIVES

Pursuant to clause 3(c)(4) of rule XIII of the Rules of the House of Representatives, the following is a statement of general performance goals and objectives for which this measure authorizes funding:

The Committee on Appropriations considers program performance, including a program's success in developing and attaining outcome-related goals and objectives, in developing funding recommendations.

RESCISSION OF FUNDS

Pursuant to clause 3(f)(2) of rule XIII of the Rules of the House of Representatives, the following table is submitted describing the rescission recommended in the accompanying bill:

Department and activity:

ED_001620_00003678-00096

EPA-HQ-2018-009214

Amounts recommended for rescission:

Department of the Interior: Bureau of Land Management (Land Acquisition): $1,769,000.

Department of the Interior: U.S. Fish and Wildlife Service (Land Acquisition): $4,572,000.

Department of the Interior: Land and Water Conservation Fund (contract authority) $28,020,000.

Department of the Interior: National Park Service (Land Acquisition): $4,500,000.

Department of the Interior: Bureau of Ocean Energy Management, $25,000,000.

Department of the Interior: Bureau of Safety and Environmental Enforcement, $12,000,000.

Environmental Protection Agency: Science and Technology, $27,000,000.

Environmental Protection Agency, Environmental Programs and Management, $36,000,000.

Environmental Protection Agency, State and Tribal Assistance Grants (STAG), $60,000,000.

TRANSFERS OF FUNDS

Pursuant to clause 3(f)(2) of rule XIII of the Rules of the House of Representatives, the following table is submitted describing the transfers of funds in the accompanying bill.

ED_001620_00003678-00097

APPROPRIATION TRANSFERS RECOMMENDED IN THE BILL

Account from which transfer is made	Amount (000's)	Account to which transfer is made	Amount (000's)
Department of the Interior, National Park Service	not specified	Department of Transportation, Federal Highway Administration	not specified
Department of the Interior, BIA/BIE, Operation of Indian Programs	not specified	Indian forest land assistance accounts	not specified
Department of the Interior, Bureau of Indian Affairs Construction	not specified	Bureau of Reclamation	not specified
Department of the Interior, Office of Insular Affairs	not specified	Secretary of Agriculture	not specified
Department of the Interior, Office of the Special Trustee for American Indians	not specified	Department of the Interior, BIA/BIE, Operation of Indian Programs; Office of the Solicitor, Salaries and Expenses; Office of the Secretary, Departmental Operations	not specified
Department of the Interior, Wildland Fire Management	not specified	Department of the Interior, for repayment of advances made during emergencies	not specified
Department of the Interior, Wildland Fire Management	up to $50,000	Forest Service, Wildland Fire Management	up to $50,000
Department of the Interior, Intra-Bureau	not specified	Department of the Interior, Intra-Bureau, for emergency purposes as specified	not specified
Department of the Interior, Department-Wide	not specified	Department of the Interior, Department-Wide, for emergency purposes as specified	not specified
Bureau of Indian Affairs and Bureau of Indian Education, and Office of the Special Trustee	not specified	Indian trust management and reform activities	not specified
Environmental Protection Agency, Hazardous Substance Superfund	not specified	Other Federal Agencies	not specified
Environmental Protection Agency, Hazardous Substance Superfund	$7,778	Environmental Protection Agency, Office of Inspector General	$7,778
Environmental Protection Agency, Hazardous Substance Superfund	$15,496	Environmental Protection Agency, Science and Technology	$15,496
Environmental Protection Agency, Administrative Provisions	up to $300,000	Any Federal Department or Agency for Great Lakes Initiative	up to $300,000
Forest Service, Capital Improvement and Maintenance	not specified	General Fund of the Treasury	not specified
Forest Service, Wildland Fire Management	not specified	Forest Service, for repayment of advances made during emergencies	not specified
Forest Service, Wildland Fire Management	not specified	Forest Service, National Forest System	not specified
Forest Service, Wildland Fire Management	not specified	Forest Service, Forest and Rangeland Research	not specified
Forest Service, Wildland Fire Management	not specified	Forest Service, State and Private Forestry	not specified
Forest Service, Wildland Fire Management	up to $50,000	Secretary of the Interior	up to $50,000
Forest Service, Administrative Provisions	not specified	Department of the Interior, Bureau of Land Management	not specified
Forest Service, Administrative Provisions	up to $82,000	USDA, Working Capital Fund	up to $82,000
Forest Service, Administrative Provisions	up to $14,500	USDA, Greenbook	up to $14,500
Office of Navajo and Hopi Indian Relocation, Salaries and Expenses	$200	Department of the Interior, Office of Inspector General	$200

EPA-HQ-2018-009214

DISCLOSURE OF EARMARKS AND CONGRESSIONALLY DIRECTED SPENDING ITEMS

Neither the bill nor the report contain any congressional earmarks, limited tax benefits, or limited tariff benefits as defined by clause 9 of rule XXI.

COMPLIANCE WITH RULE XIII, CLAUSE 3(e) (RAMSEYER RULE)

In compliance with clause 3(e) of rule XIII of the Rules of the House of Representatives, changes in existing law made by the bill, as reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new matter is printed in italic, and existing law in which no change is proposed is shown in roman):

[INSERT FROM LEGISLATIVE COUNSEL FOLLOWING FULL COMMITTEE]

CHANGES IN APPLICATION OF EXISTING LAW

Pursuant to clause 3(f)(1)(A) of rule XIII of the Rules of the House of Representatives, the following statements are submitted describing the effect of provisions in the accompanying bill, which directly or indirectly change the application of existing law. In most instances these provisions have been included in prior appropriations Acts.

The bill includes the following changes in application of existing law:

OVERALL BILL

Providing that certain appropriations remain available until expended or extends the availability of funds beyond the fiscal year where programs or projects are continuing but for which legislation does not specifically authorize such extended availability. This authority tends to result in savings by preventing the practice of committing funds on low priority projects at the end of the fiscal year to avoid losing the funds.

Limiting, in certain instances, the obligation of funds for particular functions or programs. These limitations include restrictions on the obligation of funds for administrative expenses, travel expenses, the use of consultants, and programmatic areas within the overall jurisdiction of a particular agency.

Limiting official entertainment or reception and representation expenses for selected agencies in the bill.

Continuing ongoing activities of those Federal agencies, which require annual authorization or additional legislation, which has not been enacted.

TITLE I—DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

MANAGEMENT OF LANDS AND RESOURCES

Providing funds to the Bureau for the management of lands and resources.

ED_001620_00003678-00099

EPA-HQ-2018-009214

Permitting the use of fees for processing applications for permit to drill.

Permitting the use of mining fee collections for program operations.

Permitting the use of fees from communication site rentals.

LAND ACQUISITION

Requiring that funding for the program is derived from the Land and Water Conservation Fund.

Rescinding unobligated balances from prior appropriations.

OREGON AND CALIFORNIA GRANT LANDS

Providing funds for the Oregon and California Grant Lands.

Authorizing the transfer of certain collections from the Oregon and California Land Grants Fund to the Treasury.

RANGE IMPROVEMENTS

Allowing certain funds to be transferred to the Department of the Interior for range improvements.

SERVICE CHARGES, DEPOSITS, AND FORFEITURES

Allowing the use of certain collected funds for certain administrative costs and operation of termination of certain facilities.

Allowing the use of funds on any damaged public lands.

Authorizing the Secretary to use monies from forfeitures, compromises or settlements for improvement, protection and rehabilitation of public lands under certain conditions.

MISCELLANEOUS TRUST FUNDS

Allowing certain contributed funds to be advanced for administrative costs and other activities of the Bureau.

ADMINISTRATIVE PROVISIONS

Permitting the Bureau to enter into agreements with public and private entities, including States.

Permitting the Bureau to manage improvements to which the United States has title.

Permitting the payment of rewards for information on violations of law on Bureau lands.

Providing for cost-sharing arrangements for printing services.

Permitting the Bureau to conduct certain projects for State governments on a reimbursable basis.

Prohibiting the use of funds for the destruction of wild horses and burros.

UNITED STATES FISH AND WILDLIFE SERVICE

RESOURCE MANAGEMENT

Limiting funds for certain Endangered Species Act programs.

LAND ACQUISITION

Requiring that funding shall be derived from the Land and Water Conservation Fund.

ED_001620_00003678-00100

EPA-HQ-2018-009214

Providing that funding for projects may not be used for administrative costs.

Rescinding unobligated balances from prior appropriations.

COOPERATIVE ENDANGERED SPECIES CONSERVATION FUND

Providing that a portion of the appropriation shall be derived from the Land and Water Conservation Fund.

STATE AND TRIBAL WILDLIFE GRANTS

Providing for a State and Tribal wildlife grants program.

ADMINISTRATIVE PROVISIONS

Providing that programs may be carried out by direct expenditure, contracts, grants, cooperative agreements and reimbursable agreements with public and private entities.

Providing for repair of damage to public roads.

Providing options for the purchase of land not to exceed $1.

Permitting cost-shared arrangements for printing services.

Permitting the acceptance of donated aircraft.

Providing that fees collected for non-toxic shot review and approval shall be available without further appropriation for the expenses of non-toxic shot review related expenses.

NATIONAL PARK SERVICE

OPERATION OF THE NATIONAL PARK SYSTEM

Designating funds for Everglades restoration.

Providing for repair, rehabilitation and maintenance of National Park Service assets.

NATIONAL RECREATION AND PRESERVATION

Providing for expenses not otherwise provided for.

HISTORIC PRESERVATION

Providing for expenses derived from the Historic Preservation Fund.

CONSTRUCTION

Providing funds for construction, improvements, repair or replacement of physical facilities, and management planning and compliance for areas administered by the National Park Service.

Providing that a single procurement may be issued for any project funded in fiscal year 2017 with a future phase indicated in the National Park Service 5-year Line Item Construction Plan.

Providing that the solicitation and contract shall contain the availability of funds clause.

Providing that fees may be made available for the cost of adjustments and changes within the original scope of effort for projects funded by the Construction appropriation.

Providing that the Secretary of the Interior shall consult with the Committees on Appropriations in accordance with reprogramming thresholds prior to making any changes authorized by this section.

ED_001620_00003678-00101

EPA-HQ-2018-009214

LAND AND WATER CONSERVATION FUND

Rescinding Land and Water Conservation Fund contract authority.

LAND ACQUISITION AND STATE ASSISTANCE

Requiring that funding for the program is derived from the Land and Water Conservation Fund.

Rescinding unobligated balances from prior appropriations.

CENTENNIAL CHALLENGE

Providing funds for Centennial Challenge projects with no less than 50 percent of the cost of each project derived from non-Federal sources.

ADMINISTRATIVE PROVISIONS

Allowing certain franchise fees to be available for expenditure without further appropriation to extinguish or reduce liability for certain possessory interests.

Providing for the retention of administrative costs under certain Land and Water Conservation Fund programs.

Allowing National Park Service funds to be transferred to the Federal Highway Administration for purposes authorized under 23 U.S.C. 204 for reasonable administrative support costs.

UNITED STATES GEOLOGICAL SURVEY

SURVEYS, INVESTIGATIONS, AND RESEARCH

Providing funds to classify lands as to their mineral and water resources.

Providing funds to give engineering supervision to power permittees and Federal Energy Regulatory Commission licensees.

Providing funds to publish and disseminate data relative to the foregoing activities.

Limiting funds for the conduct of new surveys on private property without permission.

Limiting funds for cooperative topographic mapping or water resource data collection and investigations.

ADMINISTRATIVE PROVISIONS

Allowing funds to be used for certain contracting, construction, maintenance, acquisition, and representation expenses.

Permitting the use of certain contracts, grants, and cooperative agreements.

Recognizing students and recent graduates as Federal employees for the purposes of travel and work injury compensation.

BUREAU OF OCEAN ENERGY MANAGEMENT

Permitting funds for mineral leasing and environmental study; enforcing laws and contracts; and for matching grants.

Providing that funds may be used which shall be derived from non-refundable cost recovery fees collected in 2017.

Permitting the use of certain excess receipts from Outer Continental Shelf leasing activities.

ED_001620_00003678-00102

EPA-HQ-2018-009214

Providing for reasonable expenses related to volunteer beach and marine cleanup activities.

Prohibiting the use of funds for regulating non-lease holders.

BUREAU OF SAFETY AND ENVIRONMENTAL ENFORCEMENT

Permitting funds for mineral leasing and environmental study; enforcing laws and contracts; and for matching grants.

Providing that funds may be used which shall be derived from non-refundable cost recovery fees.

Permitting the use of certain excess receipts from Outer Continental Shelf leasing activities.

Permitting the use of funds derived from non-refundable inspection fees.

Requiring that not less than 50 percent of inspection fees expended be used on personnel, expanding capacity and reviewing applications for permit to drill.

OIL SPILL RESEARCH

Providing that funds shall be derived from the Oil Spill Liability Trust Fund.

OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

REGULATION AND TECHNOLOGY

Permitting payment to State and Tribal personnel for travel and per diem expenses for training.

Permitting the use of certain offsetting collections from permit fees.

ABANDONED MINE RECLAMATION FUND

Allowing the use of debt recovery to pay for debt collection.

Allowing that certain funds made available under title IV of Public Law 95–87 may be used for any required non-Federal share of the cost of certain projects.

Allowing funds to be used for travel expenses of State and Tribal personnel while attending certain OSM training.

Providing that funds shall be used for economic and community development in conjunction with reclamation priorities.

BUREAU OF INDIAN AFFAIRS AND BUREAU OF INDIAN EDUCATION

OPERATION OF INDIAN PROGRAMS

Limiting funds for official reception and representation expenses.

Limiting funds for welfare assistance payments, except for disaster relief.

Allowing Tribal priority allocation funds to be used for unmet welfare assistance costs.

Providing forward-funding for school operations of Bureau-funded schools and other education programs.

Providing that limited funds shall be available until expended for certain purposes.

Limiting funds for education-related administrative cost grants.

Allowing the transfer of certain forestry funds.

ED_001620_00003678-00103

EPA-HQ-2018-009214

Allowing the use of funds to purchase uniforms or other identifying articles of clothing for personnel.

CONTRACT SUPPORT COSTS

Providing for such sums as are necessary to fully fund contract support costs.

Prohibiting the transfer of funds from any other account to fund contract support costs.

CONSTRUCTION

Providing for the transfer of Navajo irrigation project funds to the Bureau of Reclamation.

Providing that six percent of Federal Highway Trust Fund contract authority may be used for construction management costs.

Providing Safety of Dams funds on a non-reimbursable basis.

Requiring the use of administrative and cost accounting principles for certain school construction projects and exempting such projects from certain requirements.

Requiring conformance with building codes and health and safety standards.

Specifying the procedure for dispute resolution.

Limiting the control of construction projects when certain time frames have not been met.

Allowing reimbursement of construction costs from the Office of Special Trustee.

INDIAN GUARANTEED LOAN PROGRAM ACCOUNT

Limiting funds for administrative expenses and for subsidizing total loan principal.

ADMINISTRATIVE PROVISIONS

Allowing the use of funds for direct expenditure, contracts, cooperative agreements, compacts, and grants.

Allowing contracting for the San Carlos Irrigation Project.

Limiting the use of funds for certain contracts, grants and cooperative agreements.

Allowing Tribes to return appropriated funds.

Prohibiting funding of Alaska schools.

Limiting the number of schools and the expansion of grade levels in individual schools.

Specifying distribution of indirect and administrative costs for certain Tribes.

Limiting the expansion of satellite school locations.

DEPARTMENTAL OFFICES

OFFICE OF THE SECRETARY, SALARIES AND EXPENSES

Allowing the use of certain funds for official reception and representation expenses.

Permitting payments to former Bureau of Mines workers.

Designating funds for consolidated appraisal services to be derived from the Land and Water Conservation Fund.

ED_001620_00003678-00104

EPA-HQ-2018-009214

ADMINISTRATIVE PROVISIONS

Allowing certain payments authorized for the Payments in Lieu of Taxes Program to be retained for administrative expenses.

Providing that the amounts provided are the only amounts available for payments authorized under chapter 69 of title 31, United States Code.

Providing that in the event sums appropriated are insufficient to make the full payments then the payment to each local government shall be made proportionally.

Providing that the Secretary may make adjustments to payment to individual units of local government to correct for prior overpayments or underpayments.

Providing that no Payments in Lieu of Taxes Program payment be made to otherwise eligible units of local government if the computed amount of the payment is less than $100.

INSULAR AFFAIRS

ASSISTANCE TO TERRITORIES

Designating funds for various programs and for salaries and expenses of the Office of Insular Affairs.

Allowing audits of the financial transactions of the Territorial and Insular governments by the GAO.

Providing grant funding under certain terms of the Agreement of the Special Representatives on Future United States Financial Assistance for the Northern Mariana Islands.

Providing for capital infrastructure in various Territories.

Allowing appropriations for disaster assistance to be used as non-Federal matching funds for hazard mitigation grants.

ADMINISTRATIVE PROVISIONS, INSULAR AFFAIRS

Allowing, at the request of the Governor of Guam, for certain discretionary or mandatory funds to be used to assist securing certain rural electrification loans through the U.S. Department of Agriculture.

OFFICE OF SPECIAL TRUSTEE FOR AMERICAN INDIANS

FEDERAL TRUST PROGRAMS

Limiting the amount of funding available for the historical accounting of Indian trust fund accounts.

Allowing transfers to other Department of the Interior accounts.

Providing no-year funding for certain Indian Self-Determination Act grants.

Exempting quarterly statements for Indian trust accounts $15 or less.

Requiring annual statements and records maintenance for Indian trust accounts.

Limiting use of funds to correct administrative errors in Indian trust accounts.

Permitting the use of recoveries from erroneous payments pursuant to Indian trust accounts.

Exempting reconciliation of Special Deposit Accounts with low balances in certain circumstances.

ED_001620_00003678-00105

EPA-HQ-2018-009214

Allowing for limited aggregation of trust accounts of individuals whose whereabouts are unknown.

DEPARTMENT WIDE PROGRAMS

WILDLAND FIRE MANAGEMENT

Providing funds for wildland fire management.

Designating funds for renovation or construction of fire facilities and designating funds for Wildfire suppression operations.

Permitting the repayments of funds transferred from other accounts for firefighting.

Designating funds for hazardous fuels and burned area rehabilitation.

Permitting the use of funds for lodging and subsistence of firefighters.

Permitting the use of grants, contracts and cooperative agreements for hazardous fuels reduction, including cost-sharing and local assistance.

Permitting cost-sharing of cooperative agreements with non-Federal entities under certain circumstances.

Providing for local competition for hazardous fuel reduction activities.

Permitting reimbursement to the U.S. Fish and Wildlife Service and the National Marine Fisheries Service for consultation activities under the Endangered Species Act.

Providing certain terms for leases of real property with local governments.

Providing for the transfer of funds between the Department of the Interior and the Department of Agriculture for wildland fire management.

Providing funds for support of Federal emergency response actions.

Allowing for international forestry assistance to or through the Department of State.

CENTRAL HAZARDOUS MATERIALS FUND

Providing funds for response action, including associated activities, performed pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act.

WORKING CAPITAL FUND

Allowing funds for the financial and business management system and information technology improvement.

Prohibiting use of funds to establish reserves in the working capital fund with exceptions.

Allowing assessments for reasonable charges for training services at the National Indian Program Center and use of these funds under certain conditions.

Providing space and related facilities or the lease of related facilities, equipment or professional services of the National Indian Program Training Center to state, local and Tribal employees or other persons for cultural, educational or recreational activities.

Providing that the Secretary may enter into grants and cooperative agreements to support the Office of Natural Resource Reve-

ED_001620_00003678-00106

EPA-HQ-2018-009214

nue's collection and disbursement of royalties, fees, and other mineral revenue proceeds, as authorized by law.

ADMINISTRATIVE PROVISION

Allowing acquisition and sale of certain aircraft.

PAYMENTS IN LIEU OF TAXES

Extending funding for Payments in Lieu of Taxes.

OFFICE OF NATURAL RESOURCES REVENUE

Designating funds for mineral revenue management activities.

Allowing certain refunds of overpayments in connection with certain Indian leases.

GENERAL PROVISIONS, DEPARTMENT OF THE INTERIOR

Allowing transfer of funds for certain reconstruction of facilities, aircraft or utilities in emergency situations.

Allowing transfer of funds in certain emergency situations, including wildfires and oil spill response, if other funds provided in other accounts will be exhausted within 30 days and a supplemental appropriation is requested as promptly as possible.

Permitting the Department to use limited funding for certain services.

Permitting the transfer of funds between the Bureau of Indian Affairs and Bureau of Indian Education and the Office of Special Trustee for American Indians and limiting amounts for historical accounting activities.

Authorizing the redistribution of Tribal Priority Allocation funds to address unmet needs.

Authorizing the acquisition of lands and leases for Ellis, Governors and Liberty Islands.

Providing the authority for the Secretary to collect nonrefundable inspection fees.

Permitting the reorganization of the Bureau of Ocean Energy Management, Enforcement and Regulation.

Permitting the Secretary of the Interior to enter into long-term agreements for wild horse and burro holding facilities.

Requiring the U.S. Fish and Wildlife Service to mark hatchery salmon.

Addressing BLM actions regarding grazing on public lands.

Continuing a provision allowing the Bureau of Indian Affairs and Bureau of Indian Education to more efficiently and effectively perform reimbursable work.

Regarding status reviews and determinations for sage-grouse pursuant to the Endangered Species Act.

Permitting the transfer of excess wild horses and burros for work purposes.

Prohibiting the use of funds to list in the National Register of Historic Places property deemed crucial to national security and military training.

Requiring the reissuance of certain final rules and prohibiting such rules from further judicial review.

Prohibiting the treatment of gray wolves range-wide as an endangered or threatened species.

ED_001620_00003678-00107

EPA-HQ-2018-009214

TITLE II—ENVIRONMENTAL PROTECTION AGENCY

SCIENCE AND TECHNOLOGY

Providing for operating expenses in support of research and development.

Designating funding for National Priorities research as specified in the report accompanying this Act.

ENVIRONMENTAL PROGRAMS AND MANAGEMENT

Allowing hire and maintenance of passenger motor vehicles and operation of aircraft and purchase of reprints and library memberships in societies or associations which issue publications to members only or at a price to members lower than to subscribers who are not members.

Limiting amounts for official representation and reception expenses.

Providing two-year funding availability for administrative costs of Brownfields program.

Limitation of funds for the Chemical Risk Review and Reduction program.

Designating funding for National Priorities as specified in the report accompanying this Act.

Designating funding for Geographical programs as specified in the report accompanying this Act.

HAZARDOUS WASTE ELECTRONIC MANIFEST SYSTEM FUND

Providing for the collection and expenditure of fees.

HAZARDOUS SUBSTANCE SUPERFUND

Allowing distribution of funds to purchase services from other agencies under certain circumstances.

Providing for the transfer of funds within certain agency accounts.

LEAKING UNDERGROUND STORAGE TANK PROGRAM

Providing for grants to Federally-recognized Indian Tribes.

STATE AND TRIBAL ASSISTANCE GRANTS

Limiting funding amounts for certain programs.

Specifying funding for capitalization grants for the Clean Water and Drinking Water State Revolving Funds and allowing certain amounts for additional subsidies.

Designating funds for specific sections of law.

Providing waivers for certain uses of Clean Water and Drinking Water State Revolving Funds for State administrative costs for grants to federally-recognized Indian Tribes and grants to specific Territories and Freely Associated States.

Requiring that 10 percent Clean Water and 20 percent of Drinking Water funds shall be used by States for forgiveness of principal or negative interest loans.

Prohibiting the use of funds for jurisdictions that permit development or construction of additional colonia areas.

Providing certain grants under authority of Section 103, Clean Air Act.

ED_001620_00003678-00108

EPA-HQ-2018-009214

Providing funding for environmental information exchange network initiatives grants, statistical surveys of water resources and enhancements to State monitoring programs, Tribal grants, and underground storage tank projects.

ADMINISTRATIVE PROVISIONS

Allowing awards of grants to federally-recognized Indian Tribes.
Authorizing the collection and obligation of pesticide registration service fees.
Authorizing the collection and obligations of TSCA fees.
Allowing the transfer of funds from the "Environmental Programs and Management" account to support the Great Lakes Restoration Initiative and providing for certain interagency agreements and grants to various entities in support of this effort.
Providing amounts for construction, alteration, repair, rehabilitation, and renovation of facilities.
Providing for grants to federally recognized Tribes.
Providing amounts for competitive grants under the National Estuary Program.

TITLE III—RELATED AGENCIES

FOREST SERVICE

OFFICE OF THE UNDER SECRETARY FOR NATURAL RESOURCES AND ENVIRONMENT

Providing funds for the office of the Under Secretary for Natural Resources and Environment.

FOREST AND RANGELAND RESEARCH

Providing funds for forest and rangeland research.
Designating funds for the forest inventory and analysis program.

STATE AND PRIVATE FORESTRY

Providing for forest health management, including treatments of certain pests or invasive plants, and for restoring damaged forests, and for cooperative forestry, education and land conservation activities, and conducting an international program.
Deriving certain funds from the Land and Water Conservation Fund.

NATIONAL FOREST SYSTEM

Providing funds for the National Forest System.
Depositing funds in the Collaborative Forest Landscape Restoration Fund.
Designating funds for forest products.

CAPITAL IMPROVEMENT AND MAINTENANCE

Providing funds for construction, reconstruction, and maintenance and acquisition of buildings and other facilities and infrastructure; and for construction, capital improvement, decommissioning, and maintenance of forest roads and trails.

ED_001620_00003678-00109

EPA-HQ-2018-009214

Requiring that funds becoming available in fiscal year 2018 for the road and trails fund (16 U.S.C. 501) shall be transferred to the Treasury.

LAND ACQUISITION

Requiring that funding for the program is derived from the Land and Water Conservation Fund.

ACQUISITION OF LANDS FOR NATIONAL FORESTS SPECIAL ACTS

Requiring that funding for the program is derived from forest receipts.

ACQUISITION OF LANDS TO COMPLETE LAND EXCHANGES

Requiring that funding for the program is derived from funds deposited by State, county, or municipal governments and non-Federal parties pursuant to Land Sale and Exchange Acts.

RANGE BETTERMENT FUND

Providing that fifty percent of monies received for grazing fees shall be used for range improvements and limiting administrative expenses to six percent.

GIFTS, DONATIONS AND BEQUESTS

Providing for gifts, donations and bequest per Federal law.

MANAGEMENT OF NATIONAL FORESTS FOR SUBSISTENCE USES

Providing funds for subsistence uses per the Alaska National Interest Lands Conservation Act.

WILDLAND FIRE MANAGEMENT

Permitting the use of funds for emergency rehabilitation and restoration and hazardous fuels reduction to support emergency response and wildfire suppression.

Allowing the use of wildland fire funds to repay advances from other accounts.

Allowing reimbursement of States for certain wildfire emergency activities.

Allowing funds to be available for emergency rehabilitation, hazardous fuels reduction and emergency response.

Designating funds for suppression, hazardous fuels reduction and national fire plan research.

Designating funds for State fire assistance and volunteer fire assistance Federal and State and private lands.

Providing for cooperative agreements and grants.

Allowing funds available for Community Forest Restoration Act to be used on non-Federal land.

Limiting the transfer of wildland fire management funds between the Department of the Interior and the Department of Agriculture.

Designating the use of hazardous fuels reduction funds for biomass grants.

Providing that funds designated for suppression shall be assessed for cost pools.

ED_001620_00003678-00110

EPA-HQ-2018-009214

Permitting the purchase of passenger motor vehicles and proceeds from the sale of aircraft may be used to purchase replacement aircraft.

Allowing funds for certain employment contracts.

Allowing funds to be used for purchase and alteration of buildings.

Allowing for acquisition of certain lands and interests.

Allowing expenses for certain volunteer activities.

Providing for the cost of uniforms.

Providing for debt collections on certain contracts.

Allowing transfer of funds in certain emergency situations if all other funds provided for wildfire suppression will be obligated within 30 days and the Secretary notifies the Committees.

Allowing funds to be used through the Agency for International Development for work in foreign countries and to support other forestry activities outside of the United States.

Allowing the Forest Service, acting for the International Program, to sign certain funding agreements with foreign governments and institutions as well as with certain domestic agencies.

Authorizing the expenditure or transfer of funds for wild horse and burro activities.

Prohibiting the transfer of funds under the Department of Agriculture transfer authority under certain conditions.

Limiting the transfer of funds for the Working Capital Fund and Department Reimbursable Program (also known as Greenbook charges).

Limiting funds to support the Youth Conservation Corps and Public Lands Corps.

Limiting the use of funds for official reception and representation expenses.

Providing for matching funds for the National Forest Foundation.

Providing for matching funds for the National Fish and Wildlife Foundation.

Allowing funds to be used for technical assistance for rural communities.

Allowing funds for payments to counties in the Columbia River Gorge National Scenic Area.

Allowing funds to be used for the Older Americans Act.

Permitting funding assessments for facilities maintenance, rent, utilities, and other support services.

Limiting funds to reimburse the Office of General Counsel at the Department of Agriculture.

Permitting eligible employees to be considered a Federal Employee.

Requiring regular reporting of unobligated balances.

Designating availability of funds appropriated in a previous fiscal year for the FLAME Wildfire Suppression Reserve Fund.

ED_001620_00003678-00111

EPA-HQ-2018-009214

INDIAN HEALTH SERVICE

INDIAN HEALTH SERVICES

Providing that Tribal contract and grant funding is deemed obligated at the time of grant or contract award and remains available until expended.

Providing no-year funds for contract medical care including the Indian Catastrophic Health Emergency Fund.

Providing for loan repayment under sections 104 and 108 of the Indian Health Care Improvement Act with certain conditions and making the funds available for certain other purposes.

Providing for operational funds for leased space and accreditation emergencies.

Providing for the allocation of certain funds.

Providing that certain contracts and grants may be performed in two fiscal years.

Providing for use of collections and reporting of collections under Title IV of the Indian Health Care Improvement Act.

Providing no-year funding for scholarship funds.

Providing for the collection of individually identifiable health information relating to the Americans with Disabilities Act by the Bureau of Indian Affairs.

Permitting the use of Indian Health Care Improvement Fund monies for facilities improvement and providing no-year funding availability.

CONTRACT SUPPORT COSTS

Providing for such sums as are necessary to fully fund contract support costs.

Prohibiting the transfer of funds from any other account within the Indian Health Service to fund contract support costs.

INDIAN HEALTH FACILITIES

Providing that facilities funds may be used to purchase land, modular buildings and trailers.

Providing for TRANSAM equipment to be purchased from the Department of Defense.

Prohibiting the use of funds for sanitation facilities for new homes funded by the Department of Housing and Urban Development.

Allowing for the purchase of ambulances.

Providing for a demolition fund.

ADMINISTRATIVE PROVISIONS

Providing for per diem expenses for senior level positions.

Providing for payments for telephone service in private residences in the field, purchase of motor vehicles, aircraft and reprints.

Providing for purchase and erection of modular buildings.

Providing funds for uniforms.

Allowing funding to be used for attendance at professional meetings.

ED_001620_00003678-00112

EPA-HQ-2018-009214

Providing that health care may be extended to non-Indians at Indian Health Service facilities, subject to charges, and for the expenditure of collected funds.

Providing for transfers of funds from the Department of Housing and Urban Development to the Indian Health Service.

Prohibiting limitations on certain Federal travel and transportation expenses.

Requiring departmental assessments to be identified in annual budget justifications.

Allowing de-obligation and re-obligation of funds applied to self-governance funding agreements.

Prohibiting the expenditure of funds to implement new eligibility regulations.

Permitting certain reimbursements for goods and services provided to Tribes.

Providing that reimbursements for training, technical assistance, or services include total costs.

Prohibiting changes in organizational structure without advance notification to Congress.

AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY

TOXIC SUBSTANCES AND ENVIRONMENTAL PUBLIC HEALTH

Providing for the conduct of health studies, testing, and monitoring.

Providing deadlines for health assessments and studies.

Limiting the number of toxicological profiles.

EXECUTIVE OFFICE OF THE PRESIDENT

COUNCIL ON ENVIRONMENTAL QUALITY AND OFFICE OF ENVIRONMENTAL QUALITY

Limiting the use of funds for official reception and representation expenses.

Designating the appointment and duties of the chairman.

OFFICE OF NAVAJO AND HOPI INDIAN RELOCATION

Providing that funds in this and prior appropriations Acts shall be used to relocate persons certified as eligible.

Providing that no person can be evicted unless a replacement home is provided.

Providing that no relocatee is provided with more than one new or replacement home.

Providing for the transfer of funds to the Department of the Interior Office of Inspector General.

CHEMICAL SAFETY AND HAZARD INVESTIGATION BOARD

Permitting use of funds for hire of passenger vehicles, uniforms or allowances with per diem rate limitations.

Limiting the number of senior level positions.

Designating the individual appointed to the position of Inspector General of the Environmental Protection Agency as the Inspector General of the Board.

ED_001620_00003678-00113

EPA-HQ-2018-009214

Directing use of personnel and limiting position appointments within the Board.

SMITHSONIAN INSTITUTION

SALARIES AND EXPENSES

Limiting certain lease terms.

Providing for purchase of passenger vehicles and certain rental, repair and cleaning of uniforms.

Designating funds for certain programs and providing no-year funds.

Providing that funds may be used to support American overseas research centers.

Allowing for advance payments to independent contractors performing research services or participating in official Smithsonian presentations.

FACILITIES CAPITAL

Designating funds for maintenance, repair, rehabilitation, and construction and for consultant services.

NATIONAL GALLERY OF ART

SALARIES AND EXPENSES

Allowing payment in advance for membership in library, museum, and art associations or societies.

Allowing for purchase, repair, and cleaning of uniforms for guards and employees and allowances therefor.

Allowing purchase or rental of devices for protecting buildings and contents thereof, and maintenance, alteration, improvement, and repair of buildings, approaches, and grounds.

Providing for restoration and repair of works of art by contract under certain circumstances.

Providing no-year funds for special exhibitions.

REPAIR, RESTORATION, AND RENOVATION OF BUILDINGS

Providing lease agreements of no more than 10 years addressing space needs created by renovations under the Master Facilities Plan.

Permitting the Gallery to perform work by contract under certain circumstances.

JOHN F. KENNEDY CENTER FOR THE PERFORMING ARTS

OPERATIONS AND MAINTENANCE

Providing funds to the John F. Kennedy Center for the Performing Arts Kennedy Center for operational and maintenance costs.

CAPITAL REPAIR AND RESTORATION

Providing funds to the John F. Kennedy Center for the Performing Arts Kennedy Center for facility repair.

ED_001620_00003678-00114

EPA-HQ-2018-009214

WOODROW WILSON INTERNATIONAL CENTER FOR SCHOLARS

SALARIES AND EXPENSES

Providing funds to the Woodrow Wilson Center for Scholars.
Allowing for hire of passenger vehicles and services.

NATIONAL ENDOWMENT FOR THE ARTS

GRANTS AND ADMINISTRATION

Providing funds for the support of projects and productions in the arts, including arts education and public outreach activities.

NATIONAL ENDOWMENT FOR THE HUMANITIES

GRANTS AND ADMINISTRATION

Specifying funds to carry out the matching grants program.
Allowing obligation of National Endowment for the Humanities current and prior year funds from gifts, bequests, and devises of money for which equal amounts have not previously been appropriated.

ADMINISTRATIVE PROVISIONS, NATIONAL FOUNDATION ON THE ARTS AND THE HUMANITIES

Prohibiting the use of funds for grants and contracts which do not include the text of 18 U.S.C. 1913.
Prohibiting the use of appropriated funds and permitting the use of non-appropriated funds for reception expenses.
Allowing the chairperson of the National Endowment for the Arts to approve small grants under certain circumstances.

COMMISSION OF FINE ARTS

SALARIES AND EXPENSES

Permitting the charging and use of fees for its publications and accepting gifts related to the history of the Nation's Capital.
Providing that one-tenth of one percent of funds provided may be used for official reception and representation expenses.

NATIONAL CAPITAL ARTS AND CULTURAL AFFAIRS

Providing funding for the National Capital Arts and Cultural Affairs.

NATIONAL CAPITAL PLANNING COMMISSION

Providing funding for the National Capital Planning Commission.
Providing that one-quarter of one percent may be used for official reception and representational expenses.

UNITED STATES HOLOCAUST MEMORIAL MUSEUM

Designating funds for equipment replacement.
Designating funds for repair, rehabilitation and for exhibition design and production and providing no year availability for these funds.

ED_001620_00003678-00115

EPA-HQ-2018-009214

DWIGHT D. EISENHOWER MEMORIAL COMMISSION

SALARIES AND EXPENSES

Providing funding for the Dwight D. Eisenhower Memorial Commission.

CAPITAL CONSTRUCTION

Providing funding for design and construction of a memorial in honor of Dwight D. Eisenhower.

Providing that the contract with respect to the procurement shall contain the availability of funds clause.

Providing that funds appropriated shall satisfy the requirement for issuing a permit.

WORLD WAR I CENTENNIAL COMMISSION

SALARIES AND EXPENSES

Providing funding for the World War I Centennial Commission.

Providing that the Commission may accept support from any executive branch agency for activities of the Commission.

TITLE IV—GENERAL PROVISIONS

Prohibiting the use of funds to promote or oppose legislative proposals on which congressional action is incomplete.

Providing for annual appropriations unless expressly provided otherwise in this Act.

Providing for disclosure of administrative expenses, assessments and requirements for operating plans.

Continuing a limitation on accepting and processing applications for patents and on the patenting of Federal lands; permitting processing of grandfathered applications; and permitting third-party contractors to process grandfathered applications.

Continuing a provision regarding the payment of contract support costs for prior fiscal years.

Addressing the payment of contract support costs for fiscal year 2018.

Continuing a provision allowing Forest Service land management plans to be more than 15 years old if the Secretary is acting in good faith to update such plans and prohibiting the use of funds to implement new wilderness directives under the planning rule.

Limiting leasing and preleasing activities within National Monuments.

Limiting takings for acquisition of lands except under certain conditions.

Continuing a provision addressing timber sales involving Alaskan western red cedar.

Prohibiting funds to enter into certain no-bid contracts except under certain conditions.

Requiring reports to Congress to be posted on public agency websites.

Continuing a provision that delineates grant guidelines for the National Endowment for the Arts.

Continuing a provision that delineates program priorities for the programs managed by the National Endowment for the Arts.

ED_001620_00003678-00116

EPA-HQ-2018-009214

Requiring that the Department of the Interior, the EPA, the Forest Service, and the Indian Health Service provide the Committees on Appropriations a quarterly report on the status of balances of appropriations.

Providing a one-year extension of the Federal Lands Recreation Enhancement Act.

Continuing a provision prohibiting the use of funds to promulgate or implement any regulation requiring the issuance of permits under title V of the Clean Air Act for carbon dioxide, nitrous oxide, water vapor, or methane emissions.

Continuing a provision prohibiting the use of funds to implement any provision in a rule if that provision requires mandatory reporting of greenhouse gas emissions from manure management systems.

Modifying authorities relating to the Dwight D. Eisenhower Memorial Commission.

Prohibiting the use of funds to regulate the lead content of ammunition or fishing tackle.

Extending authorities for awarding contracts for certain activities on public lands.

Extending the authority for the Chesapeake Bay Initiative.

Extending certain authorities allowing the Forest Service to renew grazing permits.

Prohibiting the use of funds to maintain or establish a computer network unless such network blocks the viewing, downloading, and exchanging of pornography.

Extending the Forest Service Facility Realignment and Enhancement Act.

Setting requirements for the use of American iron and steel for certain loans and grants.

Prohibiting the use of funds to destroy buildings or structures on Midway Island recommended for inclusion in the National Register of Historic Places.

Addressing carbon emissions from forest biomass.

Extending by one year the authorization for the John F. Kennedy Center.

Prohibiting the use of funds to require permits for the discharge of dredged or fill material for certain agriculture activities.

Authorizing the withdrawal of the Waters of the United States rule.

Addressing the implementation of national ambient air quality standards for ozone.

Prohibiting the use of funds to finalize, implement, administer, or enforce any regulation that would establish new financial responsibility requirements under CERCLA.

Prohibiting the use of funds to issue any regulation under the Solid Waste Disposal Act that applies to an animal feeding operation.

Prohibiting the use of funds to further implementation of the National Ocean Policy under Executive Order 13547.

Prohibiting the use of funds to limit recreational shooting and hunting on Federal and public lands except for public safety.

Making available vacant grazing allotments for permittees impacted by drought or wildfire.

Establishing a Spending Reduction Account in the bill.

ED_001620_00003678-00117

EPA-HQ-2018-009214

APPROPRIATIONS NOT AUTHORIZED BY LAW

Pursuant to clause 3(f)(1)(B) of rule XIII of the Rules of the House of Representatives, the following table lists the appropriations in the accompanying bill which are not authorized by law:

ED_001620_00003678-00118

[Dollars in Thousands]

	Last year of authorization	Authorization level	Appropriations in last year of authorization	Appropriations in this bill
Bureau of Land Management				
All discretionary programs	2002	Such sums...	1,862,170	1,172,790
U.S. Fish and Wildlife Service				
African Elephant Conservation Act (16 U.S.C. 4201 et seq.)	2012	5,000	1,645	2,582
Asian Elephant Conservation Act (16 U.S.C. 4201 et seq.)	2012	5,000	1,645	1,557
Coastal Barrier Resources Act of 1982; amended by Improvement Act of 2000 & Reauthorization Act of 2005	2010	2,000	1,390	1,390
Endangered Species Act (16 U.S.C. 1531 et seq.)	1992	41,500	42,373	237,266*
Great Ape Conservation Act (16 U.S.C. 6301 et seq.)	2010	5,000	2,500	1,975
Highlands Conservation Act	2014	10,000	0	10,000
Marine Mammal Protection Act (16 U.S.C. 1361 – 1407)	1999	14,768	2,008	5,460
Marine Turtle Conservation Act (16 U.S.C. 6601)	2009	5,000	2,000	1,507
National Fish and Wildlife Foundation Establishment Act (16 U.S.C. 3701 et seq.)	2010	25,000	7,537	5,009
National Wildlife Refuge Volunteer Improvement Act	2014	2,000	1,705	2,092
Neotropical Migratory Bird Conservation Act of 2000 (16 U.S.C. 6101 et seq.)	2010	6,500	5,000	3,900
Nonindigenous Aquatic Nuisance Species Prevention and Control Act (16 U.S.C. 4701 et seq.)	2002	6,000	6,000	17,941
North American Wetlands Conservation Act (16 U.S.C. 4401-4406)	2012	75,000	35,554	38,145
Partners for Fish and Wildlife Act (16 U.S.C. 3771 et seq.)	2011	75,000	60,134	52,776
Rhinoceros and Tiger Conservation Act (16 U.S.C. 5301 et seq.)	2012	10,000	2,471	3,440
U.S. Geological Survey				
Energy Resources Program (50 U.S.C. 167n, P.L. 113-40) – Helium Stewardship Act of 2013	2015	1,000	400	400
Earthquake Hazards Program (P.L. 108-360; 42 U.S.C Sec. 7701-7709)	2009	88,900	55,126	64,303
Science Synthesis, Analysis, and Research (42 U.S.C. 15908 sec 351, P.L. 109-58)	2010	30,000	1,000	1,000
Water Resources Research Act Program (42 U.S.C. 10301 - 10303, P.L. 109-471)	2011	12,000	6,486	6,500
Bureau of Indian Affairs				
Indian Child Protection and Family Violence Prevention Act (25 U.S.C. 3210, 104 Stat. 4531, P.L. 101 630, Title IV.)	1997	30,000	26,116	52,832
Indian Tribal Justice Act, as amended by TLOA (Tribal Law and Order Act of 2010, P.L. 111-211)	2015	58,400	28,517	47,882
The Higher Education Act of 1965 (20 U.S.C. 1001 et seq P.L. 110-315)	2013	N/A	52,398	62,650
Tribally Controlled Colleges or University Assistance Act of 1978 (20 U.S.C. 1018 et seq P.L. 110-315)	2013	N/A	64,947	84,196
The Higher Education Act of 1965 (25 USC 1862 (a) and (b))	2013	N/A	6,434	7,414
Office of Insular Affairs				
Brown Tree Snake Control and Eradication Act of 2004(P.L. 108-384)	2010	No more than 3,000	3,500	3,000
Environmental Protection Agency				
Clean Air Act	1997	Such sums...	450,000	606,721
Hazardous Substance Superfund	1994	5,100	1,480,853	1,116,374

[Dollars in Thousands]

	Last year of authorization	Authorization level	Appropriations in last year of authorization	Appropriations in this bill
Great Lakes	2008	25,000	475,000	300,000
Lake Champlain Basin	2008	11,000	3,000	0
Long Island Sound Restoration	2010	40,000	7,000	6,000
Lake Pontchartrain Basin	2011	20,000	1,000	0
Chesapeake Bay Restoration	2005	40,000	23,000	60,000
National Estuary Program	2010	35,000	33,000	26,723
State and Tribal Assistance Grants:				
Alaska and Rural Native Villages	2010	13,000	10,000	20,000
CERCLA/Brownfields Cat Grant	2006	50,000	49,000	47,745
Brownfield Revitalization Funding	2006	200,000	89,000	90,000
Clean Water SRF	1994	600,000	1,196,000	1,143,887
Diesel Emissions Reduction Grants	2016	100,000	50,000	75,000
Drinking Water SRF	2003	1,000,000	845,000	863,233
Grants for State Public Water	2003	100,000	93,000	101,963
Lead Containment Control Act of 1988	1992	Such sums...	15,000	14,049
Mexico Border	2011	–	17,000	0
Non-Point Source Management Program	1991	130,000	51,000	170,915
Pollution Control	1990	75,000	73,000	230,806
Pollution Prevention Act	1993	8,000	8,000	4,765
Radon Abatement Act	1991	10,000	9,000	8,051
Underground Storage Tanks	1988	25,000	7,000	1,498
State Hazardous Waste Program Grants	1988	60,000	67,000	99,693
Toxic Substances Control Act	1983	1,500	0	4,919
Tribal General Assistance Program	1992	Such sums	0	65,476
Underground Injection Control Grants	2003	15,000	11,000	10,506
Council on Environmental Quality, Office of Environmental Quality	1986	480	670	2,994
Office of Navajo and Hopi Indian Relocation	2008	30,000	9,000	15,431
John F. Kennedy Center	2017	36,400	36,400	36,740
National Endowment for the Arts	1993	Such sums...	174,460	145,000
National Endowment for the Humanities	1993	Such sums...	177,413	145,000

*Appropriations in this bill for Endangered Species Act implementation are an estimate.

EPA-HQ-2018-009214

COMPARISON WITH BUDGET RESOLUTION

Section 308(a)(1)(A) of the Congressional Budget and Impoundment Control Act of 1974 (Public Law 93–344), as amended, requires that the report accompanying a bill providing new budget authority contain a statement detailing how the authority compares with the reports submitted under section 302 of the Act for the most recently agreed to concurrent resolution on the budget for the fiscal year. This information follows:

[INSERT COMPARISON WITH BUDGET RESOLUTION TABLE]

FIVE-YEAR OUTLAY PROJECTIONS

In compliance with section 308(a)(1)(B) of the Congressional Budget Act of 1974 (Public Law 93–344), as amended, the following table contains five-year projections associated with the budget authority provided in the accompanying bill:

[INSERT FIVE YEAR OUTLAY PROJECTIONS TABLE]

ASSISTANCE TO STATE AND LOCAL GOVERNMENTS

In accordance with section 308(a)(1)(C) of the Congressional Budget Act of 1974 (Public Law 93–344), as amended, the financial assistance to State and local governments is as follows:

[INSERT ASSISTANCE TO STATE AND LOCAL GOVERNMENTS TABLE]

PROGRAM DUPLICATION

No provision of this bill establishes or reauthorizes a program of the Federal government known to be duplicative of another Federal program, a program that was included in any report from the Government Accountability Office to Congress pursuant to section 21 of Public Law 111–139, or a program related to a program identified in the most recent Catalog of Federal Domestic Assistance.

DIRECTED RULE MAKING

Pursuant to section 3(i) of H. Res. 5 (115th Congress), the bill includes the following direct rule makings:

1) Endangered Species Act, gray wolves, Wyoming (in section 116 of Title I)

2) Endangered Species Act, gray wolves, western Great Lakes (in section 116 of Title I)

3) Administrative Control of Funds (Forest Service—Administrative Provisions in Title III).

TABLE OF FUNDING RECOMMENDATIONS

The following table provides the amounts recommended by the Committee compared with the budget estimates by account.

ED_001620_00003678-00121

EPA-HQ-2018-009214

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
TITLE I - DEPARTMENT OF THE INTERIOR					
BUREAU OF LAND MANAGEMENT					
Management of Lands and Resources					
Land Resources:					
Soil, water and air management	43,609	27,034	42,497	-1,112	+15,463
Rangeland management	79,000	67,753	76,981	-2,019	+9,228
Forestry management	10,076	10,135	9,819	-257	-316
Riparian management	21,321	20,222	20,777	-544	+555
Cultural resources management	16,131	16,365	15,719	-412	-646
Wild horse and burro management	80,555	70,719	80,555	---	+9,836
Subtotal	250,692	212,228	246,348	-4,344	+34,120
Wildlife and Fisheries:					
Wildlife management	103,281	75,107	103,281	---	+28,174
Fisheries management	12,530	11,812	12,210	-320	+398
Subtotal	115,811	86,919	115,491	-320	+28,572
Threatened and endangered species	21,567	20,322	21,017	-550	+695
Recreation Management:					
Wilderness management	18,264	15,515	17,798	-466	+2,283
Recreation resources management	53,465	47,234	52,102	-1,363	+4,868
Subtotal	71,729	62,749	69,900	-1,829	+7,151

ED_001620_00003678-00122

EPA-HQ-2018-009214

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
Energy and Minerals:					
Oil and gas management	67,574	75,927	65,851	-1,723	-10,076
Oil and gas permit processing	6,365	5,737	6,203	-162	+466
Oil and gas inspection and enforcement	48,000	48,385	46,776	-1,224	-1,609
Subtotal, Oil and gas	121,939	130,049	118,830	-3,109	-11,219
Coal management	10,868	19,015	10,591	-277	-8,424
Other mineral resources	10,978	12,043	10,698	-280	-1,345
Renewable energy	29,061	16,292	28,320	-741	+12,028
Subtotal, Energy and Minerals	172,846	177,399	168,439	-4,407	-8,960
Realty and Ownership Management:					
Alaska conveyance	22,000	14,447	21,439	-561	+6,992
Cadastral, lands, and realty management	51,480	45,892	50,167	-1,313	+4,275
Subtotal	73,480	60,339	71,606	-1,874	+11,267
Resource Protection and Maintenance:					
Resource management planning	52,125	38,437	52,125	---	+13,688
Abandoned mine lands	20,036	9,062	19,525	-511	+10,463
Resource protection and law enforcement	26,616	25,708	27,616	+1,000	+1,908
Hazardous materials management	15,463	10,780	15,069	-394	+4,289
Subtotal	114,240	83,987	114,335	+95	+30,348

ED_001620_00003678-00123

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
Transportation and Facilities Maintenance:					
Annual maintenance	39,125	36,344	38,127	-998	+1,783
Deferred maintenance	29,201	26,474	28,456	-745	+1,982
Subtotal	68,326	62,818	66,583	-1,743	+3,765
Workforce and Organizational Support:					
Administrative support	51,139	50,368	48,396	-2,743	-1,972
Bureauwide fixed costs	92,649	93,176	92,176	-473	-1,000
Information technology management	26,077	25,163	24,412	-1,665	-751
Subtotal	169,865	168,707	164,984	-4,881	-3,723
National landscape conservation system, base program	36,819	27,695	35,800	-1,019	+8,105
Communication site management	2,000	2,000	2,000	---	---
Offsetting collections	-2,000	-2,000	-2,000	---	---
Subtotal, Management of lands and resources	1,095,375	963,163	1,074,503	-20,872	+111,340
Mining Law Administration:					
Administration	39,696	39,696	39,696	---	---
Offsetting collections	-55,000	-56,696	-56,696	-1,696	---
Subtotal, Mining Law Administration	-15,304	-17,000	-17,000	-1,696	---
Total, Management of Lands and Resources	1,080,071	946,163	1,057,503	-22,568	+111,340

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
Land Acquisition					
Land Acquisition	19,800	---	6,000	-13,800	+6,000
Emergencies, Hardships, and Inholdings	1,616	1,613	1,000	-616	-613
Acquisition Management	2,000	1,996	1,800	-200	-196
Recreational Access	8,000	---	4,000	-4,000	+4,000
Subtotal	31,416	3,609	12,800	-18,616	+9,191
Rescission	---	---	-1,769	-1,769	-1,769
Total, Land acquisition	31,416	3,609	11,031	-20,385	+7,422
Oregon and California Grant Lands					
Western Oregon resources management	94,445	81,353	92,037	-2,408	+10,684
Western Oregon information and resource data systems	1,798	1,313	1,752	-46	+439
Western Oregon transportation & facilities maintenance	9,628	6,087	9,382	-246	+3,295
Western Oregon construction and acquisition	335	351	326	-9	-25
Western Oregon national monument	779	696	759	-20	+63
Total, Oregon and California Grant Lands	106,985	89,800	104,256	-2,729	+14,456
Range Improvements					
Current appropriations	10,000	10,000	10,000	---	---

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
Service Charges, Deposits, and Forfeitures					
Service charges, deposits, and forfeitures.....	31,050	24,595	24,595	-6,455	---
Offsetting fees.....	-31,050	-24,595	-24,595	+6,455	---
Total, Service Charges, Deposits & Forfeitures..	---	---	---	---	---
Miscellaneous Trust Funds and Permanent Operating Funds					
Current appropriations.....	24,000	24,000	24,000	---	---
TOTAL, BUREAU OF LAND MANAGEMENT.....	1,252,472	1,073,572	1,206,790	-45,682	+133,218
(Mandatory).....	(34,000)	(34,000)	(34,000)	---	---
(Discretionary).....	(1,218,472)	(1,039,572)	(1,172,790)	(-45,682)	(+133,218)
UNITED STATES FISH AND WILDLIFE SERVICE					
Resource Management					
Ecological Services:					
Listing.....	20,515	17,122	17,122	-3,393	---
Planning and consultation.....	103,079	98,755	104,783	+1,704	+6,028

EPA-HQ-2018-009214

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
Conservation and restoration	32,396	29,775	29,791	-2,605	+16
(National Wetlands Inventory)	(3,471)	(3,464)	(3,471)	---	(+7)
(Coastal Barrier Resources Act)	(1,390)	(1,387)	(1,390)	---	(+3)
Recovery	84,032	79,563	85,570	+1,538	+6,007
Subtotal	240,022	225,215	237,266	-2,756	+12,051
Habitat conservation:					
Partners for fish and wildlife	51,776	45,884	52,776	+1,000	+6,892
Coastal programs	13,375	11,970	13,375	---	+1,405
Subtotal	65,151	57,854	66,151	+1,000	+8,297
National Wildlife Refuge System:					
Wildlife and habitat management	231,843	224,893	231,843	---	+6,950
Visitor services	73,319	71,091	73,319	---	+2,228
Refuge law enforcement	38,054	37,929	38,054	---	+125
Conservation planning	2,523	---	2,523	---	+2,523
Refuge maintenance	138,188	136,196	138,188	---	+1,992
Subtotal	483,927	470,109	483,927	---	+13,818
Conservation and Enforcement:					
Migratory bird management	48,105	44,001	48,157	+52	+4,156
Law enforcement	75,053	73,002	75,053	---	+2,051
International affairs	15,816	14,183	15,816	---	+1,633
Subtotal	138,974	131,186	139,026	+52	+7,840

ED_001620_00003678-00127

EPA-HQ-2018-009214

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
Fish and Aquatic Conservation:					
National fish hatchery system operations	55,418	51,942	55,818	+400	+3,876
Maintenance and equipment	22,920	19,882	22,920	---	+3,038
Aquatic habitat and species conservation	76,872	64,589	80,976	+4,104	+16,387
Subtotal	155,210	136,413	159,714	+4,504	+23,301
Cooperative landscape conservation	12,988	---	12,988	---	+12,988
Science Support:					
Adaptive science	10,517	---	8,517	-2,000	+8,517
Service science	6,468	---	8,468	+2,000	+8,468
Subtotal	16,985	---	16,985	---	+16,985
General Operations:					
Central office operations	40,569	36,965	36,965	-3,604	---
Regional office operations	37,722	33,574	33,574	-4,148	---
Servicewide bill paying	35,177	36,365	36,365	+1,188	---
National Fish and Wildlife Foundation	7,022	5,009	5,009	-2,013	---
National Conservation Training Center	25,014	18,439	18,439	-6,575	---
Subtotal	145,504	130,352	130,352	-15,152	---
Total, Resource Management	1,258,761	1,151,129	1,246,409	-12,352	+95,280

ED_001620_00003678-00128

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
Construction					
Construction and rehabilitation:					
Line item construction projects	9,482	9,093	9,093	-389	---
Bridge and dam safety programs	1,972	1,232	1,972	---	+740
Nationwide engineering service	7,161	5,475	5,475	-1,686	---
Total, Construction	18,615	15,800	16,540	-2,075	+740
Land Acquisition					
Acquisitions	27,406	---	16,000	-11,406	+16,000
Emergencies, Hardships, and Inholdings	5,351	2,641	2,641	-2,710	---
Exchanges	1,500	1,197	1,000	-500	-197
Acquisition Management	12,773	12,749	10,000	-2,773	-2,749
Highlands Conservation Act Grants	10,000	---	10,000	---	+10,000
Recreational Access	2,500	---	1,000	-1,500	+1,000
Land Protection Planning	465	464	---	-465	-464
Subtotal	59,995	17,051	40,641	-19,354	+23,590
Rescission	---	---	-4,572	-4,572	-4,572
Total, Land Acquisition	59,995	17,051	36,069	-23,926	+19,018

EPA-HQ-2018-009214

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
Cooperative Endangered Species Conservation Fund					
Grants and administration:					
Conservation grants	10,508	10,487	10,508	---	+21
HCP assistance grants	9,485	6,518	9,485	---	+2,967
Administration	2,702	2,298	2,702	---	+404
Subtotal	22,695	19,303	22,695	---	+3,392
Land acquisition:					
Species recovery land acquisition	11,162	---	11,162	---	+11,162
HCP land acquisition grants to states	19,638	---	19,638	---	+19,638
Subtotal	30,800	---	30,800	---	+30,800
Total, Cooperatiave Endangered Species Conservation Fund	53,495	19,303	53,495	---	+34,192
National Wildlife Refuge Fund					
Payments in lieu of taxes	13,228	---	13,228	---	+13,228
North American Wetlands Conservation Fund					
North American Wetlands Conservation Fund	38,145	33,600	38,145	---	+4,545

ED_001620_00003678-00130

EPA-HQ-2018-009214

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
Neotropical Migratory Bird Conservation					
Migratory bird grants	3,910	3,900	3,900	-10	---
Multinational Species Conservation Fund					
African elephant conservation fund	2,582	2,101	2,582	---	+481
Rhinoceros and tiger conservation fund	3,440	2,798	3,440	---	+642
Asian elephant conservation fund	1,557	1,267	1,557	---	+290
Great ape conservation fund	1,975	1,607	1,975	---	+368
Marine turtle conservation fund	1,507	1,227	1,507	---	+280
Total, Multinational Species Conservation Fund	11,061	9,000	11,061	---	+2,061
State and Tribal Wildlife Grants					
State wildlife grants (formula)	52,000	48,919	52,000	---	+3,081
State wildlife grants (competitive)	6,362	---	6,362	---	+6,362
Tribal wildlife grants	4,209	3,917	4,209	---	+292
Total, State and tribal wildlife grants	62,571	52,836	62,571	---	+9,735
TOTAL, U.S. FISH AND WILDLIFE SERVICE	1,519,781	1,302,619	1,481,418	-38,363	+178,799

ED_001620_00003678-00131

EPA-HQ-2018-009214

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
NATIONAL PARK SERVICE					
Operation of the National Park System					
Park Management:					
Resource stewardship	328,955	301,928	328,955	---	+27,027
Visitor services	252,103	223,785	252,103	---	+28,318
Park protection	356,643	338,198	352,443	-4,200	+14,245
Facility operations and maintenance	778,584	685,899	768,892	-9,692	+82,993
Park support	528,066	496,103	528,066	---	+31,963
Subtotal	2,244,351	2,045,913	2,230,459	-13,892	+184,546
External administrative costs	180,667	179,572	179,572	-1,095	---
Total, Operation of the National Park System	2,425,018	2,225,485	2,410,031	-14,987	+184,546
National Recreation and Preservation					
Recreation programs	589	---	---	-589	---
Natural programs	13,581	12,089	12,929	-652	+840
Cultural programs	24,562	22,408	24,815	+253	+2,407
International park affairs	1,648	1,310	1,631	-17	+321
Environmental and compliance review	433	385	433	---	+48
Grant administration	2,004	---	---	-2,004	---
Heritage Partnership Programs	19,821	809	19,821	---	+19,012
Total, National Recreation and Preservation	62,638	37,001	59,629	-3,009	+22,628

ED_001620_00003678-00132

EPA-HQ-2018-009214

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
Historic Preservation Fund					
State historic preservation offices	47,925	42,134	46,925	-1,000	+4,791
Tribal grants	10,485	8,966	9,485	-1,000	+519
Competitive grants	13,500	---	11,000	-2,500	+11,000
Save America's Treasures grants	5,000	---	4,000	-1,000	+4,000
Grants to Historically Black Colleges and Universities	4,000	---	3,000	-1,000	+3,000
Total, Historic Preservation Fund	80,910	51,100	74,410	-6,500	+23,310
Construction					
General Program:					
Line item construction and maintenance	131,992	137,011	137,011	+5,019	---
Emergency and unscheduled	3,855	3,848	3,848	-7	---
Housing	2,200	2,200	2,200	---	---
Dam safety	1,248	1,247	1,247	-1	---
Equipment replacement	13,500	13,474	13,474	-26	---
Planning, construction	7,966	17,453	12,711	+4,745	-4,742
Construction program management	36,771	40,656	38,713	+1,942	-1,943
General management plans	11,821	10,640	10,640	-1,181	---
Total, Construction	209,353	226,529	219,844	+10,491	-6,685
Land and Water Conservation Fund (rescission of contract authority)	-28,000	-28,020	-28,020	-20	---

ED_001620_00003678-00133

EPA-HQ-2018-009214

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
Land Acquisition and State Assistance					
Assistance to States:					
State conservation grants (formula)	94,000	---	70,000	-24,000	+70,000
State conservation grants (competitive)	12,000	---	5,000	-7,000	+5,000
Administrative expenses	4,006	3,043	4,006	---	+963
Subtotal	110,006	3,043	79,006	-31,000	+75,963
National Park Service:					
Acquisitions	21,488	---	16,000	-5,488	+16,000
Recreational Access	2,000	---	1,000	-1,000	+1,000
American Battlefield Protection Program	10,000	8,481	10,000	---	+1,519
Emergencies, Hardships, Relocations, and Deficiencies	3,928	3,071	2,500	-1,428	-571
Acquisition Management	9,679	8,716	9,000	-679	+284
Inholdings, Donations, and Exchanges	4,928	3,069	3,069	-1,859	---
Subtotal	52,023	23,337	41,569	-10,454	+18,232
Subtotal, Land Acquisition and State Assistance	162,029	26,380	120,575	-41,454	+94,195
Rescission	---	---	-4,500	-4,500	-4,500
Total, Land Acquisition and State Assistance	162,029	26,380	116,075	-45,954	+89,695

ED_001620_00003678-00134

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
Centennial Challenge	20,000	14,971	15,000	-5,000	+29
TOTAL, NATIONAL PARK SERVICE	2,931,948	2,553,446	2,866,969	-64,979	+313,523
UNITED STATES GEOLOGICAL SURVEY					
Surveys, Investigations, and Research					
Ecosystems:					
Status and trends	20,473	16,834	18,873	-1,600	+2,039
Fisheries: Aquatic and endangered resources	21,136	15,846	20,136	-1,000	+4,290
Wildlife: Terrestrial and endangered resources	46,007	35,471	42,907	-3,100	+7,436
Terrestrial, Freshwater and marine environments	37,415	29,342	36,415	-1,000	+7,073
Invasive species	17,330	17,297	17,330	---	+33
Cooperative research units	17,371	17,338	17,371	---	+33
Total, Ecosystems	159,732	132,128	153,032	-6,700	+20,904
Climate and Land Use Change (FY 2017 Structure):					
Climate Variability:					
Climate science centers	25,335	---	---	-25,335	---
Climate research and development	19,295	---	---	-19,295	---
Carbon sequestration	8,959	---	---	-8,959	---
Subtotal	53,589	---	---	-53,589	---

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
Land Use Change:					
Land remote sensing	85,794	---	---	-85,794	---
Land change science	9,892	---	---	-9,892	---
Subtotal	95,686	---	---	-95,686	---
Total, Climate and Land Use Change	149,275	---	---	-149,275	---
Land Resources (Proposed FY 2018 Structure):					
National Land Imaging	---	76,127	83,883	+83,883	+7,756
Land change science	---	19,285	19,285	+19,285	---
National and regional climate adaptation science centers	---	17,435	17,435	+17,435	---
Total, Land Resources	---	112,847	120,603	+120,603	+7,756
Energy, Minerals, and Environmental Health:					
Mineral and Energy Resources:					
Minerals resources	48,371	48,279	48,371	---	+92
Energy resources	24,695	26,125	26,125	+1,430	---
Subtotal	73,066	74,404	74,496	+1,430	+92

EPA-HQ-2018-009214

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
Environmental Health:					
Contaminant biology	10,197	8,230	10,197	---	+1,967
Toxic substances hydrology	11,048	8,876	11,398	+350	+2,522
Subtotal	21,245	17,106	21,595	+350	+4,489
Total, Energy, Minerals, and Environmental Health	94,311	91,510	96,091	+1,780	+4,581
Natural Hazards:					
Earthquake hazards	64,303	51,388	64,303	---	+12,915
Volcano hazards	28,121	22,432	26,521	-1,600	+4,089
Landslide hazards	3,538	3,531	3,538	---	+7
Global seismographic network	6,653	4,986	6,653	---	+1,667
Geomagnetism	1,888	---	1,888	---	+1,888
Coastal/Marine Hazards and Resources	40,510	35,774	38,601	-1,909	+2,827
Total, Natural Hazards	145,013	118,111	141,504	-3,509	+23,393
Water Resources:					
Water Availability and Use Science Program	45,052	30,413	42,052	-3,000	+11,639
Groundwater and Streamflow Information Program	72,673	68,159	73,173	+500	+5,014
National Water Quality Program	90,529	74,470	89,029	-1,500	+14,559
Water Resources Research Act Program	6,500	---	6,500	---	+6,500
Total, Water Resources	214,754	173,042	210,754	-4,000	+37,712

ED_001620_00003678-00137

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
Core Science Systems:					
Science, synthesis, analysis, and research.....	24,299	18,753	22,986	-1,313	+4,233
National cooperative geological mapping.....	24,397	22,281	24,397	---	+2,116
National Geospatial Program.....	67,354	51,935	67,354	---	+15,419
Total, Core Science Systems.....	116,050	92,969	114,737	-1,313	+21,768
Science Support:					
Administration and Management.....	81,981	69,379	77,882	-4,099	+8,503
Information Services.....	23,630	19,989	22,449	-1,181	+2,460
Total, Science Support.....	105,611	89,368	100,331	-5,280	+10,963
Facilities:					
Rental payments and operations & maintenance.....	93,141	104,927	94,604	+1,463	-10,323
Deferred maintenance and capital improvement.....	7,280	7,266	7,266	-14	---
Total, Facilities.....	100,421	112,193	101,870	+1,449	-10,323
TOTAL, UNITED STATES GEOLOGICAL SURVEY.....	1,085,167	922,168	1,038,922	-46,245	+116,754

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
BUREAU OF OCEAN ENERGY MANAGEMENT					
Ocean Energy Management					
Renewable energy	23,887	21,676	21,676	-2,211	---
Conventional energy	58,963	58,123	58,123	-840	---
Environmental assessment	68,045	73,834	73,834	+5,789	---
Executive direction	18,665	17,367	17,367	-1,298	---
Subtotal	169,560	171,000	171,000	+1,440	---
Offsetting rental receipts	-88,487	-55,374	-55,374	+33,113	---
Cost recovery fees	-6,457	-1,460	-1,460	+4,997	---
Subtotal, offsetting collections	-94,944	-56,834	-56,834	+38,110	---
Rescission	---	---	-25,000	-25,000	-25,000
TOTAL, BUREAU OF OCEAN ENERGY MANAGEMENT	74,616	114,166	89,166	+14,550	-25,000

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
BUREAU OF SAFETY AND ENVIRONMENTAL ENFORCEMENT					
Offshore Safety and Environmental Enforcement					
Environmental enforcement	8,314	4,453	4,453	-3,861	---
Operations, safety and regulation	144,954	151,061	148,454	+3,500	-2,607
Administrative operations	18,268	18,350	16,768	-1,500	-1,582
Executive direction	18,236	18,318	16,736	-1,500	-1,582
Subtotal	189,772	192,182	186,411	-3,361	-5,771
Offsetting rental receipts	-37,922	-23,732	-23,732	+14,190	---
Inspection fees	-53,000	-62,000	-50,000	+3,000	+12,000
Cost recovery fees	-5,608	-4,139	-4,139	+1,469	---
Subtotal, offsetting collections	-96,530	-89,871	-77,871	+18,659	+12,000
Rescission	-25,000	---	-12,000	+13,000	-12,000
Total, Offshore Safety and Environmental Enforcement	68,242	102,311	96,540	+28,298	-5,771
Oil Spill Research					
Oil spill research	14,899	12,700	12,700	-2,199	---
TOTAL, BUREAU OF SAFETY AND ENVIRONMENTAL ENFORCEMENT	83,141	115,011	109,240	+26,099	-5,771

EPA-HQ-2018-009214

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT					
Regulation and Technology					
Environmental protection	90,138	82,185	86,548	-3,590	+4,363
Permit fees	40	40	40	---	---
Offsetting collections	-40	-40	-40	---	---
Technology development and transfer	15,205	12,801	12,801	-2,404	---
Financial management	505	510	505	---	-5
Executive direction	15,169	13,936	13,936	-1,233	---
Civil penalties (indefinite)	100	100	100	---	---
Subtotal	121,117	109,532	113,890	-7,227	+4,358
Civil penalties (offsetting collections)	-100	-100	-100	---	---
Total, Regulation and Technology	121,017	109,432	113,790	-7,227	+4,358
Abandoned Mine Reclamation Fund					
Environmental restoration	9,480	6,272	9,480	---	+3,208
Technology development and transfer	3,544	2,087	3,544	---	+1,457
Financial management	6,396	5,182	5,182	-1,214	---

ED_001620_00003678-00141

EPA-HQ-2018-009214

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
Executive direction	7,743	6,466	6,466	-1,277	---
State grants	105,000	---	75,000	-30,000	+75,000
Total, Abandoned Mine Reclamation Fund	132,163	20,007	99,672	-32,491	+79,665
TOTAL, OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT	253,180	129,439	213,462	-39,718	+84,023
BUREAU OF INDIAN AFFAIRS AND BUREAU OF INDIAN EDUCATION					
Operation of Indian Programs					
Tribal Budget System					
Tribal Government:					
Aid to tribal government	27,118	25,127	28,698	+1,580	+3,571
Consolidated tribal government program	75,429	72,224	74,558	-871	+2,334
Self governance compacts	162,346	156,634	165,069	+2,723	+8,435
New tribes	160	160	160	---	---
Small and needy tribes	4,448	---	4,448	---	+4,448
Road maintenance	30,307	28,148	31,653	+1,346	+3,505
Tribal government program oversight	8,377	8,014	8,014	-363	---
Subtotal	308,185	290,307	312,600	+4,415	+22,293

ED_001620_00003678-00142

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
Human Services:					
Social services	52,343	34,987	52,832	+489	+17,845
Welfare assistance	74,773	70,794	74,650	-123	+3,856
Indian child welfare act	18,946	14,918	19,080	+134	+4,162
Housing improvement program	9,708	---	9,708	---	+9,708
Human services tribal design	254	243	263	+9	+20
Human services program oversight	3,137	3,007	3,007	-130	---
Subtotal	159,161	123,949	159,540	+379	+35,591
Trust - Natural Resources Management:					
Natural resources, general	4,953	4,829	4,829	-124	---
Irrigation operations and maintenance	12,905	14,009	14,009	+1,104	---
Rights protection implementation	39,661	28,625	40,161	+500	+11,536
Tribal management/development program	11,266	9,276	9,276	-1,990	---
Endangered species	2,685	1,302	1,302	-1,383	---
Cooperative landscape conservation	9,956	---	9,956	---	+9,956
Integrated resource information program	2,996	2,815	2,815	-181	---
Agriculture and range	30,769	28,822	31,096	+327	+2,274
Forestry	54,155	49,013	55,232	+1,077	+6,219
Water resources	10,450	8,534	10,581	+131	+2,047
Fish, wildlife and parks	15,203	12,414	15,260	+57	+2,846
Resource management program oversight	5,993	5,823	5,823	-170	---
Subtotal	200,992	165,462	200,340	-652	+34,878
Trust - Real Estate Services	123,092	112,046	126,708	+3,616	+14,662

EPA-HQ-2018-009214

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
Education:					
Elementary and secondary programs (forward funded)..	575,155	520,044	578,374	+3,219	+58,330
(Tribal grant support costs).....	(80,165)	(74,371)	(80,168)	(+3)	(+5,797)
Post secondary programs (forward funded).....	77,207	72,689	84,196	+6,989	+11,507
Subtotal, forward funded education.....	652,362	592,733	662,570	+10,208	+69,837
Elementary and secondary programs.....	140,540	123,871	141,438	+898	+17,567
Post secondary programs.....	63,561	45,721	62,650	-911	+16,929
Education management.....	35,050	24,047	35,254	+204	+11,207
Subtotal, Education.....	891,513	786,372	901,912	+10,399	+115,540
Public Safety and Justice:					
Law enforcement.....	353,556	325,965	358,216	+4,660	+32,251
Tribal courts.....	30,753	21,984	30,618	-135	+8,634
Fire protection.....	1,426	1,365	1,583	+157	+218
Subtotal.....	385,735	349,314	390,417	+4,682	+41,103
Community and economic development.....	41,844	39,464	45,447	+3,603	+5,983
Executive direction and administrative services.....	228,824	215,592	223,947	-4,877	+8,355
(Amounts available until expended, account-wide).....	(49,122)	(35,434)	(50,991)	(+1,869)	(+15,557)
Total, Operation of Indian Programs.....	2,339,346	2,082,506	2,360,911	+21,565	+278,405

ED_001620_00003678-00144

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
Contract Support Costs					
Contract support costs	273,000	236,600	236,600	-36,400	---
Indian self-determination fund	5,000	5,000	5,000	---	---
Total, Contract Support Costs	278,000	241,600	241,600	-36,400	---
Construction					
Education	133,257	80,187	138,245	+4,988	+58,058
Public safety and justice	11,306	10,416	11,309	+3	+893
Resources management	36,513	40,696	40,696	+4,183	---
General administration	10,941	11,963	11,963	+1,022	---
Total, Construction	192,017	143,262	202,213	+10,196	+58,951
Indian Land and Water Claim Settlements and Miscellaneous Payments to Indians					
Land Settlements:					
White Earth Land Settlement Act (Admin) (P.L.99-264)	---	624	625	+625	+1
Hoopa-Yurok Settlement Act (P.L.100-580)	---	250	250	+250	---
Yurok Land Acquisition (P.L. 100-580)	---	---	---	---	---
Water Settlements:					
Pyramid Lake Water Rights Settlement (P.L.101-618)	---	142	142	+142	---
Navajo Water Resources Development Trust Fund (P.L.111-11)	---	4,000	4,011	+4,011	+11

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
Navajo-Gallup Water Supply Project (P.L.111-11).....	---	7,783	21,720	+21,720	+13,937
Pechanga Band of Luiseno Mission Indians Water Rights Settlement Act (P.L.114-322).....	---	400	9,192	+9,192	+8,792
Blackfeet Water Rights Settlement (P.L. 114-322)....	---	800	19,517	+19,517	+18,717
Aamodt Water Rights Settlement Agreement (P.L.111-291).....	---	---	---	---	---
Unallocated.....	45,045	---	---	-45,045	---
Total, Indian Land and Water Claim Settlements and Miscellaneous Payments to Indians.....	45,045	13,999	55,457	+10,412	+41,458
Indian Guaranteed Loan Program Account					
Indian guaranteed loan program account.....	8,757	6,692	9,272	+515	+2,580
Administrative Provisions					
Rescission.....	-3,400	---	---	+3,400	---
TOTAL, BUREAU OF INDIAN AFFAIRS AND INDIAN EDUCATION.....	2,859,765	2,488,059	2,869,453	+9,688	+381,394

EPA-HQ-2018-009214

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
DEPARTMENTAL OFFICES					
Office of the Secretary					
Leadership and administration	124,112	105,405	105,405	-18,707	---
Management services	20,475	18,535	17,535	-2,940	-1,000
Office of Natural Resources Revenue	126,487	---	---	-126,487	---
Total, Office of the Secretary	271,074	123,940	122,940	-148,134	-1,000
Insular Affairs					
Assistance to Territories					
Territorial Assistance					
Office of Insular Affairs	9,448	9,430	9,430	-18	---
Technical assistance	16,784	14,671	16,356	-428	+1,685
Maintenance assistance fund	4,000	1,023	3,898	-102	+2,875
Brown tree snake	3,500	2,837	3,000	-500	+163
Coral reef initiative	1,250	946	1,218	-32	+272
Empowering Insular Communities	3,471	2,811	3,382	-89	+571
Compact impact	3,000	---	2,924	-76	+2,924
Subtotal, Territorial Assistance	41,453	31,718	40,208	-1,245	+8,490

ED_001620_00003678-00147

EPA-HQ-2018-009214

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
American Samoa operations grants	22,752	21,529	23,002	+250	+1,473
Northern Marianas covenant grants	27,720	27,720	27,720	---	---
Total, Assistance to Territories	91,925	80,967	90,930	-995	+9,963
(discretionary)	(64,205)	(53,247)	(63,210)	(-995)	(+9,963)
(mandatory)	(27,720)	(27,720)	(27,720)	---	---
Compact of Free Association					
Compact of Free Association - Federal services	2,818	2,813	2,813	-5	---
Enewetak support	500	473	487	-13	+14
Subtotal, Compact of Free Association	3,318	3,286	3,300	-18	+14
Compact payments, Palau (Title I, General Provision)	13,147	---	---	-13,147	---
Total, Compact of Free Association	16,465	3,286	3,300	-13,165	+14
Total, Insular Affairs	108,390	84,253	94,230	-14,160	+9,977
(discretionary)	(80,670)	(56,533)	(66,510)	(-14,160)	(+9,977)
(mandatory)	(27,720)	(27,720)	(27,720)	---	---
Office of the Solicitor					
Legal services	59,091	58,951	58,951	-140	---
General administration	4,940	4,982	4,982	+42	---

ED_001620_00003678-00148

EPA-HQ-2018-009214

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
Ethics	1,738	1,742	1,742	+4	---
Total, Office of the Solicitor	65,769	65,675	65,675	-94	---
Office of Inspector General					
Audit and investigations	37,538	37,467	37,467	-71	---
Administrative services and information management	12,509	12,485	12,485	-24	---
Total, Office of Inspector General	50,047	49,952	49,952	-95	---
Office of Special Trustee for American Indians					
Federal Trust Programs					
Program operations, support, and improvements	136,998	119,400	119,400	-17,598	---
(Office of Historical Accounting)	(18,688)	(18,990)	(18,990)	(+302)	---
Executive direction	2,031	---	---	-2,031	---
Total, Office of Special Trustee for American Indians	139,029	119,400	119,400	-19,629	---
TOTAL, DEPARTMENTAL OFFICES	634,309	443,220	452,197	-182,112	+8,977
(Discretionary)	(606,589)	(415,500)	(424,477)	(-182,112)	(+8,977)
(Mandatory)	(27,720)	(27,720)	(27,720)	---	---

ED_001620_00003678-00149

EPA-HQ-2018-009214

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
DEPARTMENT-WIDE PROGRAMS					
Wildland Fire Management					
Fire Operations:					
Preparedness	332,784	322,179	332,784	---	+10,605
Fire suppression	395,000	389,406	389,406	-5,594	---
Subtotal, Fire operations	727,784	711,585	722,190	-5,594	+10,605
Other Operations:					
Fuels Management	180,000	149,466	182,500	+2,500	+33,034
Burned area rehabilitation	20,470	9,467	19,948	-522	+10,481
Fire facilities	8,427	---	8,212	-215	+8,212
Joint fire science	5,990	3,000	3,000	-2,990	---
Subtotal, Other operations	214,887	161,933	213,660	-1,227	+51,727
Total, Wildland fire management	942,671	873,518	935,850	-6,821	+62,332

ED_001620_00003678-00150

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
FLAME Wildfire Suppression Reserve Account					
FLAME wildfire suppression reserve account (emergency)	65,000	---	---	-65,000	---
Total, all wildland fire accounts	1,007,671	873,518	935,850	-71,821	+62,332
Appropriations	(942,671)	(873,518)	(935,850)	(-6,821)	(+62,332)
Emergency appropriations	(65,000)	---	---	(-65,000)	---
Central Hazardous Materials Fund					
Central hazardous materials fund	10,010	2,000	10,010	---	+8,010
Natural Resource Damage Assessment Fund					
Damage assessments	2,000	1,500	1,949	-51	+449
Program management	2,192	1,000	2,152	-40	+1,152
Restoration support	2,575	1,900	2,527	-48	+627
Oil Spill Preparedness	1,000	200	940	-60	+740
Total, Natural Resource Damage Assessment Fund	7,767	4,600	7,568	-199	+2,968
Working Capital Fund	67,100	59,472	65,388	-1,712	+5,916
Office of Natural Resources Revenue					
Natural Resources Revenue	---	137,757	137,757	+137,757	---

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
Payment in Lieu of Taxes					
Payments to local governments in lieu of taxes.....	465,000	396,880	465,000	---	+68,120
TOTAL, DEPARTMENT-WIDE PROGRAMS.....	1,557,548	1,474,227	1,621,573	+64,025	+147,346
Appropriations.....	(1,492,548)	(1,474,227)	(1,621,573)	(+129,025)	(+147,346)
Emergency appropriations.....	(65,000)	---	---	(-65,000)	---
TOTAL, TITLE I, DEPARTMENT OF THE INTERIOR.....	12,251,927	10,615,927	11,949,190	-302,737	+1,333,263
Appropriations.....	(12,243,327)	(10,643,947)	(12,025,051)	(-218,276)	(+1,381,104)
Rescissions.....	(-28,400)	---	(-47,841)	(-19,441)	(-47,841)
Rescissions of contract authority.....	(-28,000)	(-28,020)	(-28,020)	(-20)	---
Emergency appropriations.....	(65,000)	---	---	(-65,000)	---
(Mandatory).....	(61,720)	(61,720)	(61,720)	---	---
(Discretionary).....	(12,190,207)	(10,554,207)	(11,887,470)	(-302,737)	(+1,333,263)

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
TITLE II - ENVIRONMENTAL PROTECTION AGENCY					
Science and Technology					
Clean Air	116,541	85,708	99,060	-17,481	+13,352
(GHG reporting program)	(8,018)	---	(6,815)	(-1,203)	(+6,815)
Enforcement	13,669	10,444	11,619	-2,050	+1,175
Homeland security	33,122	23,097	28,154	-4,968	+5,057
Indoor air and Radiation	5,997	3,339	5,097	-900	+1,758
IT / Data management / Security	3,089	2,725	2,725	-364	---
Operations and administration	68,339	79,334	79,334	+10,995	---
Pesticide licensing	6,027	4,996	5,123	-904	+127
Research: Air and energy	91,906	30,592	78,120	-13,786	+47,528
Research: Chemical safety and sustainability	126,930	84,189	107,891	-19,039	+23,702
(Research: Computational toxicology)	(21,409)	(17,165)	(21,409)	---	(+4,244)
(Research: Endocrine disruptor)	(16,253)	(10,122)	(16,253)	---	(+6,131)
Research: National priorities	4,100	---	4,100	---	+4,100
Research: Safe and sustainable water resources	106,257	68,520	90,318	-15,939	+21,798
Research: Sustainable and healthy communities	134,327	54,211	114,178	-20,149	+59,967
Water: Human health protection	3,519	3,657	3,519	---	-138
Subtotal, Science and Technology	713,823	450,812	629,238	-84,585	+178,426

EPA-HQ-2018-009214

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
Rescission	-7,350	---	-27,000	-19,650	-27,000
Total, Science and Technology	706,473	450,812	602,238	-104,235	+151,426
(by transfer from Superfund)	(15,496)	(12,435)	(15,496)	---	(+3,061)
Environmental Programs and Management					
Brownfields	25,593	16,082	25,500	-93	+9,418
Clean air	273,108	143,167	227,142	-45,966	+83,975
(GHG reporting program)	(95,436)	(13,580)	(81,120)	(-14,316)	(+67,540)
Compliance	101,665	86,431	96,665	-5,000	+10,234
Enforcement	240,637	194,307	204,541	-36,096	+10,234
(Environmental justice)	(6,737)	---	(5,726)	(-1,011)	(+5,726)
Environmental protection: National priorities	12,700	---	12,700	---	+12,700

ED_001620_00003678-00154

EPA-HQ-2018-009214

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
Geographic programs:					
Great Lakes Restoration Initiative	300,000	---	300,000	---	+300,000
Chesapeake Bay	73,000	---	60,000	-13,000	+60,000
San Franciso Bay	4,819	---	---	-4,819	---
Puget Sound	28,000	---	25,000	-3,000	+25,000
Long Island Sound	8,000	---	6,000	-2,000	+6,000
Gulf of Mexico	8,542	---	6,000	-2,542	+6,000
South Florida	1,704	---	---	-1,704	---
Lake Champlain	4,399	---	---	-4,399	---
Lake Pontchartrain	948	---	---	-948	---
Southern New England Estuaries	5,000	---	---	-5,000	---
Other geographic activities	1,445	---	---	-1,445	---
Subtotal	435,857	---	397,000	-38,857	+397,000
Homeland security	10,195	8,498	8,667	-1,528	+169
Indoor air and radiation	27,637	2,257	25,637	-2,000	+23,380
Information exchange / Outreach	126,538	83,295	107,557	-18,981	+24,262
(Children and other sensitive populations: Agency coordination)	(6,548)	(2,018)	(5,566)	(-982)	(+3,548)
(Environmental education)	(8,702)	---	---	(-8,702)	---
International programs	15,400	4,051	4,051	-11,349	---
IT / Data management / Security	90,536	82,066	82,066	-8,470	---
Legal/science/regulatory/economic review	111,414	98,446	98,446	-12,968	---
Operations and administration	480,751	496,483	496,483	+15,732	---
Pesticide licensing	102,363	85,526	100,012	-2,351	+14,486
Resource Conservation and Recovery Act (RCRA)	104,877	73,093	100,877	-4,000	+27,784

ED_001620_00003678-00155

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
Toxics risk review and prevention	92,521	65,036	92,521	---	+27,485
(Endocrine disruptors)	(7,553)	---	(7,553)	---	(+7,553)
Underground storage tanks (LUST / UST)	11,295	5,612	9,601	-1,694	+3,989
Water: Ecosystems:					
National estuary program / Coastal waterways	26,723	---	26,723	---	+26,723
Wetlands	21,065	18,115	21,065	---	+2,950
Subtotal	47,788	18,115	47,788	---	+29,673
Water: Human health protection	98,507	80,044	83,731	-14,776	+3,687
Water quality protection	210,417	174,975	178,855	-31,562	+3,880
Subtotal, Environmental Programs and Management	2,619,799	1,717,484	2,399,840	-219,959	+682,356
Rescission	-21,800	---	-36,000	-14,200	-36,000
Total, Environmental Programs and Management	2,597,999	1,717,484	2,363,840	-234,159	+646,356
Hazardous Waste Electronic Manifest System Fund					
E-Manifest System Fund	3,178	3,674	3,674	+496	---
Offsetting Collections	---	-3,674	-3,674	-3,674	---
Total, Hazardous Waste Electronic Manifest System Fund	3,178	---	---	-3,178	---

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
Office of Inspector General					
Audits, evaluations, and investigations	41,489	37,475	40,000	-1,489	+2,525
(by transfer from Superfund)	(8,778)	(3,900)	(7,778)	(-1,000)	(+3,878)
Buildings and Facilities					
Homeland security: Protection of EPA personnel and infrastructure	6,676	6,176	6,176	-500	---
Operations and administration	27,791	33,377	33,377	+5,586	---
Total, Buildings and Facilities	34,467	39,553	39,553	+5,086	---
Hazardous Substance Superfund					
Audits, evaluations, and investigations	8,778	3,900	7,778	-1,000	+3,878
Compliance	995	605	995	---	+390
Enforcement	166,375	99,287	154,375	-12,000	+55,088
Homeland security	32,616	16,999	30,616	-2,000	+13,617
Indoor air and radiation	1,985	---	1,985	---	+1,985
Information exchange / Outreach	1,328	838	1,328	---	+490
IT /data management/security	14,485	11,399	14,485	---	+3,086
Legal/science/regulatory/economic review	1,253	349	1,253	---	+904
Operations and administration	128,105	101,942	123,105	-5,000	+21,163
Research: Chemical safety and sustainability	2,824	5,305	5,305	+2,481	---
Research: Sustainable communities	11,463	5,655	8,982	-2,481	+3,327

EPA-HQ-2018-009214

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
Superfund cleanup:					
Superfund: Emergency response and removal	181,306	147,212	181,306	---	+34,094
Superfund: Emergency preparedness	7,636	7,216	7,636	---	+420
Superfund: Federal facilities	21,125	19,553	21,125	---	+1,572
Superfund: Remedial	508,495	341,803	556,100	+47,605	+214,297
Subtotal	718,562	515,784	766,167	+47,605	+250,383
Total, Hazardous Substance Superfund	1,088,769	762,063	1,116,374	+27,605	+354,311
(transfer out to Inspector General)	(-8,778)	(-3,900)	(-7,778)	(+1,000)	(-3,878)
(transfer out to Science and Technology)	(-15,496)	(-12,435)	(-15,496)	---	(-3,061)
Leaking Underground Storage Tank Trust Fund (LUST)					
Enforcement	620	559	559	-61	---
Operations and administration	1,352	1,346	1,346	-6	---
Research: Sustainable communities	320	320	320	---	---
Underground storage tanks (LUST / UST)	89,649	45,204	89,649	---	+44,445
(LUST/UST)	(9,240)	(6,364)	(9,240)	---	(+2,876)
(LUST cooperative agreements)	(55,040)	(38,840)	(55,040)	---	(+16,200)
(Energy Policy Act grants)	(25,369)	---	(25,369)	---	(+25,369)
Total, Leaking Underground Storage Tank Trust Fund	91,941	47,429	91,874	-67	+44,445

ED_001620_00003678-00158

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
Inland Oil Spill Program					
Compliance	139	124	124	-15	---
Enforcement	2,413	2,266	2,266	-147	---
Oil	14,409	12,144	14,409	---	+2,265
Operations and administration	584	680	584	---	-96
Research: Sustainable communities	664	503	664	---	+161
Total, Inland Oil Spill Program	18,209	15,717	18,047	-162	+2,330
State and Tribal Assistance Grants (STAG)					
Alaska Native villages	20,000	---	10,000	-10,000	+10,000
Brownfields projects	80,000	69,000	90,000	+10,000	+21,000
Clean water state revolving fund (SRF)	1,393,887	1,393,887	1,143,887	-250,000	-250,000
Diesel emissions grants	60,000	10,000	75,000	+15,000	+65,000
Drinking water state revolving fund (SRF)	863,233	863,233	863,233	---	---
Mexico border	10,000	---	---	-10,000	---
Targeted airshed grants	30,000	---	40,000	+10,000	+40,000
Water quality monitoring (P.L. 114-322)	4,000	---	---	-4,000	---
Subtotal, Infrastructure assistance grants	2,461,120	2,336,120	2,222,120	-239,000	-114,000

EPA-HQ-2018-009214

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
Categorical grants:					
Beaches protection	9,549	---	9,549	---	+9,549
Brownfields	47,745	33,358	47,745	---	+14,387
Environmental information	9,646	6,739	9,646	---	+2,907
Hazardous waste financial assistance	99,693	69,652	99,693	---	+30,041
Lead	14,049	---	14,049	---	+14,049
Nonpoint source (Sec. 319)	170,915	---	170,915	---	+170,915
Pesticides enforcement	18,050	11,050	18,050	---	+7,000
Pesticides program implementation	12,701	8,874	12,701	---	+3,827
Pollution control (Sec. 106)	230,806	161,257	230,806	---	+69,549
(Water quality monitoring)	(17,848)	(12,470)	(17,848)	---	(+5,378)
Pollution prevention	4,765	---	4,765	---	+4,765
Public water system supervision	101,963	71,238	101,963	---	+30,725
Radon	8,051	---	8,051	---	+8,051
State and local air quality management	228,219	159,450	228,219	---	+68,769
Toxics substances compliance	4,919	3,437	4,919	---	+1,482
Tribal air quality management	12,829	8,963	12,829	---	+3,866
Tribal general assistance program	65,476	45,746	65,476	---	+19,730
Underground injection control (UIC)	10,506	7,340	10,506	---	+3,166
Underground storage tanks	1,498	---	1,498	---	+1,498
Wetlands program development	14,661	10,243	14,661	---	+4,418
Subtotal, Categorical grants	1,066,041	597,347	1,066,041	---	+468,694
Total, State and Tribal Assistance Grants	3,527,161	2,933,467	3,288,161	-239,000	+354,694

ED_001620_00003678-00160

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
Water Infrastructure Finance and Innovation Program					
Administrative Expenses	2,000	3,000	5,000	+3,000	+2,000
Direct Loan Subsidy	8,000	17,000	25,000	+17,000	+8,000
Total, Water Infrastructure Finance and Innovation Program	10,000	20,000	30,000	+20,000	+10,000
Administrative Provisions					
Rescission	-61,198	-369,000	-60,000	+1,198	+309,000
TOTAL, TITLE II, ENVIRONMENTAL PROTECTION AGENCY	8,058,488	5,655,000	7,530,087	-528,401	+1,875,087
Appropriations	(8,148,836)	(6,024,000)	(7,653,087)	(-495,749)	(+1,629,087)
Rescissions	(-90,348)	(-369,000)	(-123,000)	(-32,652)	(+246,000)
(By transfer)	(24,274)	(16,335)	(23,274)	(-1,000)	(+6,939)
(Transfer out)	(-24,274)	(-16,335)	(-23,274)	(+1,000)	(-6,939)

EPA-HQ-2018-009214

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
TITLE III - RELATED AGENCIES					
DEPARTMENT OF AGRICULTURE					
FOREST SERVICE					
Under Secretary for Natural Resources and the Environment	---	---	875	+875	+875
Forest and Rangeland Research					
Forest inventory and analysis	77,000	77,000	75,037	-1,963	-1,963
Research and development programs	211,514	182,000	203,331	-8,183	+21,331
Total, Forest and rangeland research	288,514	259,000	278,368	-10,146	+19,368
State and Private Forestry					
Landscape scale restoration	14,000	---	13,643	-357	+13,643
Forest Health Management:					
Federal lands forest health management	55,500	54,205	54,084	-1,416	-121
Cooperative lands forest health management	39,000	36,185	38,000	-1,000	+1,815
Subtotal	94,500	90,390	92,084	-2,416	+1,694

ED_001620_00003678-00162

EPA-HQ-2018-009214

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
Cooperative Forestry:					
Forest stewardship	20,036	20,500	19,525	-511	-975
Forest legacy	62,347	---	36,184	-26,163	+36,184
Rescission	-12,002	---	---	+12,002	---
Community forest and open space conservation	2,000	---	1,950	-50	+1,950
Urban and community forestry	28,040	---	27,324	-716	+27,324
Subtotal, Cooperative Forestry	100,421	20,500	84,983	-15,438	+64,483
International forestry	8,000	7,120	8,000	---	+880
Total, State and Private Forestry	216,921	118,010	198,710	-18,211	+80,700
National Forest System					
Land management planning, assessment and monitoring	182,928	165,000	178,263	-4,665	+13,263
Recreation, heritage and wilderness	264,595	252,880	257,848	-6,747	+4,968
Grazing management	56,856	50,600	56,856	---	+6,256
Hazardous Fuels	---	354,288	392,500	+392,500	+38,212
Forest products	367,805	359,121	370,305	+2,500	+11,184
Vegetation and watershed management	184,716	174,400	180,000	-4,716	+5,600
Wildlife and fish habitat management	140,466	125,000	136,430	-4,036	+11,430
Collaborative Forest Landscape Restoration Fund	40,000	---	38,980	-1,020	+38,980
Minerals and geology management	75,569	68,000	73,642	-1,927	+5,642
Landownership management	73,730	69,000	71,850	-1,880	+2,850
Law enforcement operations	126,653	129,153	129,153	+2,500	---
Total, National Forest System	1,513,318	1,747,442	1,885,827	+372,509	+138,385

ED_001620_00003678-00163

EPA-HQ-2018-009214

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
Capital Improvement and Maintenance					
Facilities	71,390	11,750	69,570	-1,820	+57,820
Roads	175,094	75,243	170,630	-4,464	+95,387
Trails	77,530	12,700	75,553	-1,977	+62,853
Legacy road and trail remediation	40,000	---	38,980	-1,020	+38,980
Subtotal, Capital improvement and maintenance	364,014	99,693	354,733	-9,281	+255,040
Deferral of road and trail fund payment	-16,000	-15,000	-15,000	+1,000	---
Total, Capital improvement and maintenance	348,014	84,693	339,733	-8,281	+255,040
Land Acquisition					
Acquisitions	39,413	---	12,000	-27,413	+12,000
Acquisition Management	7,552	7,000	7,000	-552	---
Cash Equalization	750	---	---	-750	---
Recreational Access	4,700	---	4,000	-700	+4,000
Critical Inholdings/Wilderness	2,000	---	2,000	---	+2,000
Total, Land Acquisition	54,415	7,000	25,000	-29,415	+18,000
Acquisition of land for national forests, special acts	950	850	850	-100	---
Acquisition of lands to complete land exchanges	216	192	192	-24	---
Range betterment fund	2,320	2,065	2,065	-255	---
Gifts, donations and bequests for forest and rangeland research	45	45	45	---	---

ED_001620_00003678-00164

EPA-HQ-2018-009214

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
Management of national forest lands for subsistence uses	2,500	2,225	2,225	-275	---
Wildland Fire Management					
Fire operations:					
Wildland fire preparedness	1,082,620	1,339,620	1,339,620	+257,000	---
Wildland fire suppression operations	1,248,000	1,056,818	1,056,818	-191,182	---
Subtotal, Fire operations	2,330,620	2,396,438	2,396,438	+65,818	---
Other operations:					
Hazardous fuels	390,000	---	---	-390,000	---
(Hazardous Fuels Base Program)	(375,000)	---	---	(-375,000)	---
(Biomass Grants)	(15,000)	---	---	(-15,000)	---
Fire plan research and development	19,795	17,600	19,290	-505	+1,690
Joint fire sciences program	---	---	---	---	---
State fire assistance	78,000	69,400	76,011	-1,989	+6,611
Volunteer fire assistance	15,000	11,600	14,618	-382	+3,018
Subtotal, Other operations	502,795	98,600	109,919	-392,876	+11,319
Subtotal, Wildland Fire Management	2,833,415	2,495,038	2,506,357	-327,058	+11,319

ED_001620_00003678-00165

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
FLAME Wildfire Suppression Reserve Account					
FLAME wildfire suppression reserve account (emergency)	342,000	---	---	-342,000	---
Total, all wildland fire accounts	3,175,415	2,495,038	2,506,357	-669,058	+11,319
Appropriations	(2,833,415)	(2,495,038)	(2,506,357)	(-327,058)	(+11,319)
Emergency appropriations	(342,000)	---	---	(-342,000)	---
Total, Forest Service without Wildland Fire Management	2,427,213	2,221,522	2,733,890	+306,677	+512,368
Administrative Provisions					
Rescission	-6,315	---	---	+6,315	---
TOTAL, FOREST SERVICE	5,596,313	4,716,560	5,240,247	-356,066	+523,687
Appropriations	(5,272,630)	(4,716,560)	(5,240,247)	(-32,383)	(+523,687)
Rescissions	(-18,317)	---	---	(+18,317)	---
Emergency appropriations	(342,000)	---	---	(-342,000)	---

EPA-HQ-2018-009214

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
DEPARTMENT OF HEALTH AND HUMAN SERVICES					
INDIAN HEALTH SERVICE					
Indian Health Services					
Clinical Services:					
Hospital and health clinics	1,935,178	1,870,405	1,966,714	+31,536	+96,309
Dental health	182,597	179,751	185,920	+3,323	+6,169
Mental health	94,080	82,654	95,450	+1,370	+12,796
Alcohol and substance abuse	218,353	205,593	220,280	+1,927	+14,687
Purchased/referred care	928,830	914,139	928,830	---	+14,691
Indian Health Care Improvement Fund	---	---	130,000	+130,000	+130,000
Subtotal	3,359,038	3,252,542	3,527,194	+168,156	+274,652
Preventive Health:					
Public health nursing	78,701	77,498	80,372	+1,671	+2,874
Health education	18,663	18,313	18,896	+233	+583
Community health representatives	60,325	58,906	60,825	+500	+1,919
Immunization (Alaska)	2,041	1,950	2,058	+17	+108
Subtotal	159,730	156,667	162,151	+2,421	+5,484
Other services:					
Urban Indian health	47,678	44,741	47,943	+265	+3,202
Indian health professions	49,345	43,342	49,363	+18	+6,021
Tribal management grant program	2,465	---	2,465	---	+2,465
Direct operations	70,420	72,338	72,338	+1,918	---

ED_001620_00003678-00167

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
Self-governance	5,786	4,735	5,806	+20	+1,071
Subtotal	175,694	165,156	177,915	+2,221	+12,759
Total, Indian Health Services	3,694,462	3,574,365	3,867,260	+172,798	+292,895
Contract Support Costs					
Contract support	800,000	717,970	717,970	-82,030	---
Indian Health Facilities					
Maintenance and improvement	75,745	60,000	77,502	+1,757	+17,502
Sanitation facilities construction	101,772	75,423	101,772	---	+26,349
Health care facilities construction	117,991	100,000	117,991	---	+17,991
Facilities and environmental health support	226,950	192,022	231,412	+4,462	+39,390
Equipment	22,966	19,511	22,966	---	+3,455
Total, Indian Health Facilities	545,424	446,956	551,643	+6,219	+104,687
TOTAL, INDIAN HEALTH SERVICE	5,039,886	4,739,291	5,136,873	+96,987	+397,582
NATIONAL INSTITUTES OF HEALTH					
National Institute of Environmental Health Sciences	77,349	59,607	75,370	-1,979	+15,763

EPA-HQ-2018-009214

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY					
Toxic substances and environmental public health.....	74,691	62,000	72,780	-1,911	+10,780
TOTAL, DEPARTMENT OF HEALTH AND HUMAN SERVICES..	5,191,926	4,860,898	5,285,023	+93,097	+424,125
OTHER RELATED AGENCIES					
EXECUTIVE OFFICE OF THE PRESIDENT					
Council on Environmental Quality and Office of Environmental Quality.....	3,000	2,994	2,994	-6	---
CHEMICAL SAFETY AND HAZARD INVESTIGATION BOARD					
Salaries and expenses.....	11,000	9,420	11,000	---	+1,580
Rescission of no-year funds (P.L. 108-199, P.L. 108-447).....	---	-844	---	---	+844
OFFICE OF NAVAJO AND HOPI INDIAN RELOCATION					
Salaries and expenses.....	15,431	14,970	15,431	---	+461

ED_001620_00003678-00169

EPA-HQ-2018-009214

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
INSTITUTE OF AMERICAN INDIAN AND ALASKA NATIVE CULTURE AND ARTS DEVELOPMENT					
Payment to the Institute	15,212	11,596	9,835	-5,377	-1,761
SMITHSONIAN INSTITUTION					
Salaries and Expenses					
Museum and Research Institutes:					
National Air and Space Museum	19,853	19,693	19,693	-160	---
Smithsonian Astrophysical Observatory	24,393	24,450	24,393	---	-57
Major scientific instrumentation	4,118	4,118	4,118	---	---
Universe Center	184	184	184	---	---
National Museum of Natural History	49,205	49,407	49,205	---	-202
National Zoological Park	27,252	26,864	27,252	---	+388
Smithsonian Environmental Research Center	4,171	4,193	4,171	---	-22
Smithsonian Tropical Research Institute	14,344	14,386	14,344	---	-42
Biodiversity Center	1,530	1,543	1,530	---	-13
Arthur M. Sackler Gallery/Freer Gallery of Art	6,197	6,228	6,197	---	-31
Center for Folklife and Cultural Heritage	3,039	3,178	3,039	---	-139
Cooper-Hewitt, National Design Museum	5,005	4,897	4,897	-108	---
Hirshhorn Museum and Sculpture Garden	4,627	4,344	4,344	-283	---
National Museum of African Art	4,576	4,554	4,554	-22	---
World Cultures Center	792	284	284	-508	---
Anacostia Community Museum	2,329	2,336	2,329	---	-7

ED_001620_00003678-00170

EPA-HQ-2018-009214

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
Archives of American Art	1,909	1,916	1,909	---	-7
National Museum of African American History and Culture	41,564	32,987	32,987	-8,577	---
National Museum of American History	26,036	24,902	24,902	-1,134	---
National Museum of the American Indian	32,341	32,235	32,235	-106	---
National Portrait Gallery	6,460	6,382	6,382	-78	---
Smithsonian American Art Museum	10,115	9,958	9,958	-157	---
American Experience Center	596	601	596	---	-5
Subtotal, Museums and Research Institutes	290,636	279,640	279,503	-11,133	-137
Mission enabling:					
Program support and outreach:					
Outreach	9,214	9,284	9,214	---	-70
Communications	2,632	2,644	2,632	---	-12
Institution-wide programs	14,784	13,284	13,284	-1,500	---
Office of Exhibits Central	3,057	3,143	3,057	---	-86
Museum Support Center	1,890	1,891	1,890	---	-1
Museum Conservation Institute	3,320	3,337	3,320	---	-17
Smithsonian Institution Archives	2,316	2,406	2,316	---	-90
Smithsonian Institution Libraries	11,146	11,150	11,146	---	-4
Subtotal, Program support and outreach	48,359	47,139	46,859	-1,500	-280
Office of Chief Information Officer	51,371	52,546	51,371	---	-1,175
Administration	35,756	35,545	35,545	-211	---
Inspector General	3,499	3,512	3,499	---	-13

ED_001620_00003678-00171

EPA-HQ-2018-009214

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
Facilities services:					
Facilities maintenance	76,327	76,568	76,327	---	-241
Facilities operations, security and support	223,496	224,050	223,496	---	-554
Subtotal, Facilities services	299,823	300,618	299,823	---	-795
Subtotal, Mission enabling	438,808	439,360	437,097	-1,711	-2,263
Total, Salaries and expenses	729,444	719,000	716,600	-12,844	-2,400
Facilities Capital					
Revitalization	73,603	191,000	138,200	+64,597	-52,800
Facilities planning and design	20,300	27,000	20,300	---	-6,700
Construction	40,000	10,000	10,000	-30,000	---
Total, Facilities Capital	133,903	228,000	168,500	+34,597	-59,500
TOTAL, SMITHSONIAN INSTITUTION	863,347	947,000	885,100	+21,753	-61,900
NATIONAL GALLERY OF ART					
Salaries and Expenses					
Care and utilization of art collections	44,778	43,593	44,778	---	+1,185
Operation and maintenance of buildings and grounds	34,554	34,042	34,554	---	+512
Protection of buildings, grounds and contents	23,495	22,793	23,495	---	+702

ED_001620_00003678-00172

EPA-HQ-2018-009214

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
General administration	30,134	29,572	30,134	---	+562
Total, Salaries and Expenses	132,961	130,000	132,961	---	+2,961
Repair, Restoration and Renovation of Buildings					
Base program	22,564	17,000	22,564	---	+5,564
TOTAL, NATIONAL GALLERY OF ART	155,525	147,000	155,525	---	+8,525
JOHN F. KENNEDY CENTER FOR THE PERFORMING ARTS					
Operations and maintenance	22,260	23,740	23,740	+1,480	---
Capital repair and restoration	14,140	13,000	13,000	-1,140	---
TOTAL, JOHN F. KENNEDY CENTER FOR THE PERFORMING ARTS	36,400	36,740	36,740	+340	---
WOODROW WILSON INTERNATIONAL CENTER FOR SCHOLARS					
Salaries and expenses	10,500	7,474	10,000	-500	+2,526

ED_001620_00003678-00173

EPA-HQ-2018-009214

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
NATIONAL FOUNDATION ON THE ARTS AND THE HUMANITIES					
National Endowment for the Arts					
Grants and Administration					
Grants:					
Direct grants	63,906	---	62,000	-1,906	+62,000
Challenge America grants	7,600	---	7,400	-200	+7,400
Subtotal	71,506	---	69,400	-2,106	+69,400
State partnerships:					
State and regional	37,517	---	36,250	-1,267	+36,250
Underserved set-aside	10,154	---	9,500	-654	+9,500
Subtotal	47,671	---	45,750	-1,921	+45,750
Subtotal, Grants	119,177	---	115,150	-4,027	+115,150
Program support	1,950	---	1,850	-100	+1,850
Administration	28,722	29,019	28,000	-722	-1,019
Total, Arts	149,849	29,019	145,000	-4,849	+115,981

ED_001620_00003678-00174

EPA-HQ-2018-009214

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
National Endowment for the Humanities					
Grants and Administration					
Grants:					
Special Initiative: The Common Good	7,230	---	---	-7,230	---
Federal/State partnership	46,000	---	48,000	+2,000	+48,000
Preservation and access	14,385	---	14,400	+15	+14,400
Public programs	12,730	---	12,730	---	+12,730
Research programs	13,755	---	13,780	+25	+13,780
Education programs	12,000	---	12,000	---	+12,000
Program development	500	---	500	---	+500
Digital humanities initiatives	4,600	---	4,600	---	+4,600
Subtotal, Grants	111,200	---	106,010	-5,190	+106,010
Matching Grants:					
Treasury funds	2,200	---	2,300	+100	+2,300
Challenge grants	8,500	12,400	8,700	+200	-3,700
Subtotal, Matching grants	10,700	12,400	11,000	+300	-1,400

ED_001620_00003678-00175

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
Administration	27,948	29,907	27,990	+42	-1,917
Total, Humanities	149,848	42,307	145,000	-4,848	+102,693
TOTAL, NATIONAL FOUNDATION ON THE ARTS AND THE HUMANITIES	299,697	71,326	290,000	-9,697	+218,674
COMMISSION OF FINE ARTS					
Salaries and expenses	2,762	2,600	2,600	-162	---
NATIONAL CAPITAL ARTS AND CULTURAL AFFAIRS					
Grants	2,000	---	2,000	---	+2,000
ADVISORY COUNCIL ON HISTORIC PRESERVATION					
Salaries and expenses	6,493	6,400	6,400	-93	---
NATIONAL CAPITAL PLANNING COMMISSION					
Salaries and expenses	8,099	7,948	7,948	-151	---
UNITED STATES HOLOCAUST MEMORIAL MUSEUM					
Holocaust Memorial Museum	57,000	54,000	57,000	---	+3,000

EPA-HQ-2018-009214

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
DWIGHT D. EISENHOWER MEMORIAL COMMISSION					
Salaries and expenses	1,600	1,800	1,600	---	-200
Construction	45,000	85,000	15,000	-30,000	-70,000
Total, DWIGHT D. EISENHOWER MEMORIAL COMMISSION	46,600	86,800	16,600	-30,000	-70,200
WOMEN'S SUFFRAGE CENTENNIAL COMMISSION					
Salaries and expenses	2,000	---	1,000	-1,000	+1,000
WORLD WAR I CENTENNIAL COMMISSION					
Salaries and expenses	---	7,000	3,000	+3,000	-4,000
TOTAL, TITLE III, RELATED AGENCIES	12,323,305	10,989,882	12,038,443	-284,862	+1,048,561
Appropriations	(11,999,622)	(10,990,726)	(12,038,443)	(+38,821)	(+1,047,717)
Rescissions	(-18,317)	(-844)	---	(+18,317)	(+844)
Emergency appropriations	(342,000)	---	---	(-342,000)	---

ED_001620_00003678-00177

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2017
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2018
(Amounts in thousands)

	FY 2017 Enacted	FY 2018 Request	Bill	Bill vs. Enacted	Bill vs. Request
GRAND TOTAL	32,633,720	27,260,809	31,517,720	-1,116,000	+4,256,911
Appropriations	(32,391,785)	(27,658,673)	(31,716,581)	(-675,204)	(+4,057,908)
Rescissions	(-137,065)	(-369,844)	(-170,841)	(-33,776)	(+199,003)
Rescissions of contract authority	(-28,000)	(-28,020)	(-28,020)	(-20)	---
Emergency appropriations	(407,000)	---	---	(-407,000)	---
(By transfer)	(24,274)	(16,335)	(23,274)	(-1,000)	(+6,939)
(Transfer out)	(-24,274)	(-16,335)	(-23,274)	(+1,000)	(-6,939)
(Discretionary total)	(32,280,000)	(27,199,089)	(31,456,000)	(-824,000)	(+4,256,911)

```
<<
  /ASCII85EncodePages false
  /AllowTransparency false
  /AutoPositionEPSFiles true
  /AutoRotatePages /None
  /Binding /Left
  /CalGrayProfile (Dot Gain 20%)
  /CalRGBProfile (sRGB IEC61966-2.1)
  /CalCMYKProfile (U.S. Web Coated \050SWOP\051 v2)
  /sRGBProfile (sRGB IEC61966-2.1)
  /CannotEmbedFontPolicy /Error
  /CompatibilityLevel 1.4
  /CompressObjects /Off
  /CompressPages true
  /ConvertImagesToIndexed true
  /PassThroughJPEGImages true
  /CreateJobTicket false
  /DefaultRenderingIntent /Default
  /DetectBlends true
  /DetectCurves 0.0000
  /ColorConversionStrategy /LeaveColorUnchanged
  /DoThumbnails false
  /EmbedAllFonts true
  /EmbedOpenType false
  /ParseICCProfilesInComments true
  /EmbedJobOptions true
  /DSCReportingLevel 0
  /EmitDSCWarnings false
  /EndPage -1
  /ImageMemory 1048576
  /LockDistillerParams true
  /MaxSubsetPct 100
  /Optimize false
  /OPM 1
  /ParseDSCComments true
  /ParseDSCCommentsForDocInfo true
  /PreserveCopyPage true
  /PreserveDICMYKValues true
  /PreserveEPSInfo true
  /PreserveFlatness true
  /PreserveHalftoneInfo false
  /PreserveOPIComments true
  /PreserveOverprintSettings true
  /StartPage 1
  /SubsetFonts false
  /TransferFunctionInfo /Preserve
  /UCRandBGInfo /Preserve
  /UsePrologue true
```

```
/ColorSettingsFile ()
/AlwaysEmbed [ true
]
/NeverEmbed [ true
]
/AntiAliasColorImages false
/CropColorImages true
/ColorImageMinResolution 300
/ColorImageMinResolutionPolicy /OK
/DownsampleColorImages false
/ColorImageDownsampleType /Bicubic
/ColorImageResolution 300
/ColorImageDepth 8
/ColorImageMinDownsampleDepth 1
/ColorImageDownsampleThreshold 1.50000
/EncodeColorImages true
/ColorImageFilter /FlateEncode
/AutoFilterColorImages false
/ColorImageAutoFilterStrategy /JPEG
/ColorACSImageDict <<
  /QFactor 0.15
  /HSamples [1 1 1 1] /VSamples [1 1 1 1]
>>
/ColorImageDict <<
  /QFactor 0.15
  /HSamples [1 1 1 1] /VSamples [1 1 1 1]
>>
/JPEG2000ColorACSImageDict <<
  /TileWidth 256
  /TileHeight 256
  /Quality 30
>>
/JPEG2000ColorImageDict <<
  /TileWidth 256
  /TileHeight 256
  /Quality 30
>>
/AntiAliasGrayImages false
/CropGrayImages true
/GrayImageMinResolution 300
/GrayImageMinResolutionPolicy /OK
/DownsampleGrayImages false
/GrayImageDownsampleType /Bicubic
/GrayImageResolution 300
/GrayImageDepth 8
/GrayImageMinDownsampleDepth 2
/GrayImageDownsampleThreshold 1.50000
/EncodeGrayImages true
```

```
/GrayImageFilter /FlateEncode
/AutoFilterGrayImages false
/GrayImageAutoFilterStrategy /JPEG
/GrayACSImageDict <<
  /QFactor 0.15
  /HSamples [1 1 1 1] /VSamples [1 1 1 1]
>>
/GrayImageDict <<
  /QFactor 0.15
  /HSamples [1 1 1 1] /VSamples [1 1 1 1]
>>
/JPEG2000GrayACSImageDict <<
  /TileWidth 256
  /TileHeight 256
  /Quality 30
>>
/JPEG2000GrayImageDict <<
  /TileWidth 256
  /TileHeight 256
  /Quality 30
>>
/AntiAliasMonoImages false
/CropMonoImages true
/MonoImageMinResolution 1200
/MonoImageMinResolutionPolicy /OK
/DownsampleMonoImages false
/MonoImageDownsampleType /Bicubic
/MonoImageResolution 1200
/MonoImageDepth -1
/MonoImageDownsampleThreshold 1.50000
/EncodeMonoImages true
/MonoImageFilter /CCITTFaxEncode
/MonoImageDict <<
  /K -1
>>
/AllowPSXObjects false
/CheckCompliance [
  /None
]
/PDFX1aCheck true
/PDFX3Check false
/PDFXCompliantPDFOnly true
/PDFXNoTrimBoxError false
/PDFXTrimBoxToMediaBoxOffset [
  0.00000
  0.00000
  0.00000
  0.00000
```

```
  ]
  /PDFXSetBleedBoxToMediaBox true
  /PDFXBleedBoxToTrimBoxOffset [
    0.00000
    0.00000
    0.00000
    0.00000
  ]
  /PDFXOutputIntentProfile (U.S. Web Coated \050SWOP\051 v2)
  /PDFXOutputConditionIdentifier (CGATS TR 001)
  /PDFXOutputCondition ()
  /PDFXRegistryName (http://www.color.org)
  /PDFXTrapped /False

  /CreateJDFFile false
  /Description <<
    /ARA
<FEFF06270633062A062E062F064500200647063006470020062706440625063906 2F0627062F0627062A00
200644062506460634062706210020064806 2B06270626064200200041006400 6F006200650020005000440
04600200645062A064806270641064206290020062A064506270645062706 4B002006450639002006450642
0627064A064A06330020005000440046002F0058002D00310061003A003200300030003100200630064800 2
006270644064506480627063506410627062A002006270644064206 4A06270633064A062900200049005300
4F00200644062A06280627062F064400200645062D062A0648064A0627062A002006270644063106330648 0
6450627062A060C002006440644062506370644062706390020063906440649002006270644064506320 64A
062F002006450646002006270644064506390644064806450627062A0020062D064806440020062506460 63
406270621002006480 62B062706260642002000500044004600200627064406450 62A064806270641064206
290020064506390020005000440046002F0058002D00310061060C002006270644063106 2C0627062100200
64506310627062C063906290020062F0644064A0644002006450633062A062E062F064500200041006300 72
006F006200610074061B0020064A064506430646002006410 62A062D00200648062B062706260642002000 5
000440046002006270644064506460634062306290020062806270633062A062E062F062706450020004100
630072006F006200610074002006480041006400 6F006200650020005200650061006400650072002006250
635062F0627063100200034002E003000200648062706440625063506 2F062706310627062A002006270644
0623062D062F062B002E>
    /BGR
<FEFF04180437043f043e043b0437043204300439044204350020044204350437043800200 43d0430044104
420440043e0439043a0438002c002004370430002004340430002004410 44a0437043404300432043004420
435002000410064006f006200650020005000440046002004340 43e043a0443043c0435043d04420438002c
0020043a043e04380442043e002004420440044f043104320430002004340430002004410435002004 3f044
0043e043204350440044f043204300442002004380 43b0438002004420440044f043104320430002004340 4
3000200441044a043e0442043204350442044104420432043004420020043d043000200050004400460 02f0
058002d00310061003a003200300030003100200 02d002000490053004f002004410442043004 3d04340430
0440044200200437043000200 43e0431043c0435043d0020043d043000200433044004300444043804470 43
d04380020043c0430044204350440043804300 43b0438002e002000200417043000200 43f043e0432043504
47043500200438043d0444043e0440043c043004460438044f0020043e0442043d043e0441043d043e00200
441044a0437043404300432043004 3d04350442043e0020043d043000200050004400460020043404 3e043a
0443043c0435043d04420438002c00200441044a043e0442043204350442044104420432043004490438002
0043d043000200050004400460 02f0058002d00310061002c002004320436002e00200420044a043a043e04
32043e0434044104420432043e0442043e002004370430002004400430043104 3e0442043000200441002 00
```

```
04100630072006f006200610074002e002000200421044a0437043404300434043504 3d0438044204350020
005000440046002004340 43e043a0443043c0435043d044204380020043c043e0433043004420020043404 3
000200441043500200 43e0442043204300440044f0442002004410020004100630072006f00620061007400
200438002000410064006f006200650020005200650061006400650072002000340 02c00300020043800200
441043b0435043404320430044904380020043204350440044104380438002e>
    /CHS
<FEFF4f7f75288fd94e9b8bbe5b9a521b5efa76840020004100640 06f006200650020005000440046002065
8768637b2654080020005000440046002f0058002d00310061003a003200300030003100 2089c4830330028
fd9662f4e004e2a4e1395e84e3a56fe5f6251855bb94ea46362800c52365b9a76840020004900530 04f0020
680751c6300251734e8e521b5efa7b2654080020005000440046002f0058002d00310061002089c48303768
4002000500044004600206587686376848be67ec64fe1606fff0c8bf753c29605300a00410063007 2006f00
62006100740020752862376307535730 0b300260a853ef4ee54f7f752800200041006300720 06f006200610
0740020548c002000410064006f006200650020005200650061006400650072002000340 02e003000204ee5
53ca66f49ad87248672c676562535f00521b5efa76840020005000440046002065876863 3002>
    /CHT
<FEFF4f7f752890194e9b8a2d7f6e5efa7acb76840020004100640 06f006200650020005000440046002065
874ef67b2654080020005000440046002f0058002d00310061003a003200300030003100 20898f7bc430025
f8c8005662f70ba57165f6251675bb94ea463db800c5c08958052365b9a76846a196e96300295dc65bc5efa
7acb7b2654080020005000440046002f0058002d003100610020898f7bc476840020005000440046002065 8
74ef676848a737d308cc78a0aff0c8acb53c395b1201c00410063007 2006f006200610074002 04f7f752880
0563075357201d300260a853ef4ee54f7f752800200041006300720 06f006200610074002 0548c002000410
064006f006200650020005200650061006400650072002000340 02e003000204ee553ca66f49ad87248672c
4f86958b555f5df25efa7acb76840020005000440046002065874ef63002>
    /CZE
<FEFF005400610074006f0020006e006100730074006100760065006e00ed00200070006f0075017e006900
6a007400650020006b002000760079007400760 0e101590065006e00ed00200064006f006b0075006d00650
06e0074016f002000410064006f006200650020005000440046002c0020006b00740065007200e900200073
006500200062007500640 06f00750020006b006f006e00740072006f006c006f007600610074002000 6e006
50062006f0020006d0075007300ed002000760079006800 6f0076006f007600610074002000730074006100
6e006400610072006400750020005000440046002f0058002d00310061003a003200300030003100 2c00200
07300740061006e006400610072006400750020004900530 04f002000700072006f002000700159006500 64
00e1007600e1006e00ed002000670072006100660069006300 6b00e90068006f0020006f006200730061006
80075002e002000200044006100 6c016100ed00200069006e0066006f0072006d006100630065002000 6f00
200076007900740076007600e101590065006e00ed00200064006f006b0075006d0065006e0074016f002000500
044004600200076007900680 06f00760075006a00ed006300ed006300680020005000440046002f0058002d
003100610020006e0061006a006400650074006500200076002000500159 00ed00720075010d00630065002
00075017e006900760061007400650 06c006500200041006300720 06f006200610074007500 2e0020002000
560079007400760 06f01590065006e00e900200064006f006b0075006d0065006e0074007900200050004 40
046002000620075006400650020006d006f017e006e00e90020006f007400650076015900ed007400200076
002000700072006f006700720061006d006500630068002000410063007 2006f006200610074002000610 02
000410064006f006200650020005200650061006400650072002000340 02e003000200061002000 6e006f00
76011b006a016100ed00630068002e>
    /DAN
<FEFF004200720075006700200069006e006400730074006900 6c006c0069006e006700650072006e006500
2000740069006c002000610074002000 6f007000720065007400740065002000410064006f006200650020 0
05000440046002d0064006f006b0075006d0065006e007400650072002c002000640065007200200006600f8
007200730074002000073006b0061006c002000730065007300200069006700650 06e006e0065006d0020006
5006c006c006500720020007300 6b0061006c0020006f007600650072006800 6f006c006400650020005000
```

440046002f0058002d00310061003a003200300030003100 2c00200065006e002000490053004f002d00730
0740061006e0064006100720064002000740069006c002000750064007600650 06b0073006c0069006e0067
0020006100660020006700720061006600690073006b00200069006e00640068006f006c0064002e0020005
9006400650072006c0069006700650072006500200 06f0070006c00790073006e0069006e00670065007200
20006f006d0020006f007000720065007400740065006c0073006500200061006600200050004400460 02f0
058002d00310061002d006b006f006d0070006100740069006200 6c0065002000500044004600 2d0064006f
006b0075006d0065006e0074006500720020006600690 06e0064006500720020006400750020006900200 06
2007200750067006500720068 00e5006e00640062006f00670065006e002000740069006c00200041006300
72006f006200610074002e0020004400650020006f007000720065007400740065006400650020005000440
046002d0064006f006b0075006d0065006e0074006500720020006b0061006e002000e50062006e00650073
0020006900200041006300720 06f0062006100740020006500 6c006c0065007200200041006300720 06f006
2006100740020005200650061006400650072002000340 02e00300020006f00670020006e00790065007200
65002e>

/DEU

<FEFF005600650072007700650 06e00640065006e0020005300690065002000640069006500730065002000
450069006e0073007400650 06c006c0075006e00670065006e0020007a0075006d0020004500720073007 40
065006c006c0065006e00200076006f006e0020005000440046002f0058002d00310061003a003200300030
0031002d006b006f006d0070006100740069006200 6c0065006e00200041006400 6f006200650020005000 4
40046002d0044006f006b0075006d0065006e00740065006e002e0020005000440046002f0058002d003100
6100200069007300740020006500 69006e0065002000490053004f002d004e006f0072006d0020006600fc0
0720020006400650 06e0020004100750073007400610075007300630068002000 76006f006e002000670072
0061006600690073006300680065006e00200049006e00680061006c00740065006e002e002000570065006
9007400650072006500200049006e0066006f0072006d006100740069006f006e0065006e0020007a007500
6d0020004500720073007400650 06c006c0065006e00200076006f006e0020005000440046002f0058002d0
0310061002d006b006f006d0070006100740069006200 6c0065006e0020005000440046002d0044006f006b
0075006d0065006e00740065006e002000660069006e00640065006e0020005300690065002000 69006d002
0004100630072006f006200610074002d00480061006e0064006200750063006800 2e002000450072007300
740065006c006c0074006500200050004400460 02d0044006f006b0075006d0065006e007400650020006b0
0f6006e006e0065006e0020006d0069007400200041006300720 06f0062006100740020007500 6e00640020
00410064006f006200650020005200650061006400650072002000034002e00300020006f006400650072002
0006800f600680065007200200067006500f600660066006e0065007400200077006500720064006500 6e00
2e>

/ESP

<FEFF005500740069006c0069006300650020006500730074006100200063006f006e006600690067007500
720061006300690 0f3006e0020007000610072006100200063007200650061007200200064006f006300750
06d0065006e0074006f007300200050004400460020006400650020004100640 06f006200650020007100 75
0065002000730065002000640065006200620065006e00200063006f006d00700072006f006200610072002000 6
f002000710075006500200064006500620065006e002000630075006d0070006c0069007200200 06c006100
20006e006f0072006d0061002000490053004f002000500044004600 2f0058002d00310061003a003200300
0300031002000700061007200610020006900 6e0074006500720063006100 6d0062006900 6f002000640065
00200063006f006e00740065006e0069006400 6f00200067007200e1006600690063006f002e00200050006
1007200610020006f006200740065006e0065007200200 06d00e1007300200069006e0066006f0072006d00
61006300690 0f3006e00200073006f006200720065002000 6c0061002000630072006500610063006900 f30
06e0020006400650020006400 6f00630075006d0065006e0074006f007300200050004400460020006300 6f
006d0070006100740069006200 6c0065007300200063006f006e0020006c00610020006e006f0072006d006
1002000500044004600 2f0058002d00310061002c00200063006f006e00730075006c007400650020006c00
6100200047007500ed0061002000640065006c0020007500730075006100720069006f0020006400650020 0
0410063007200 6f006200610074002e0020005300650020007000750065006400650 06e0020006100620072

0069007200200064006f00630075006d0065006e0074006f007300200050004400460020006300720065006
10064006f007300200063006f006e0020004100630072006f006200610074002c0020004100640 06f006200
650020005200650061006400650072002000034002e0030002000790020007600650072007300690 06f006e0
065007300200070006f007300740065007200690 06f007200650073002e>

/ETI

<FEFF004b006100730075007400610067006500200 06e006500690064002000730 0e4007400740065006900
640020007300650 06c006c006900730074006500200041006400 6f006200650020005000440046002d00640
06f006b0075006d0065006e0074006900640065002000 6c006f006f006d006900730065006b0073002c0020
006d006900640061002000740075006c006500620020006b006f006e00740072006f006c006c00690064006
10020007600f500690020006d006900730020007000650061007600610064002000760061007300740061006
6d006100200073007400610 06e006400610072006400690 06c006500200050004400460 02f0058002d00310
061003a0032003000300031002000280049053004f002000730074006100 6e006400610072006400200067
007200610061006600690 06c006900730065002000730069007300750020007600610068006500740075007
30065006b00730029002e00200020004c006900730061007400650061007600650074002000730074006100
6e006400610072006400690 06c006500200050004400460 02f0058002d003100610020007600610073007400
061007600610074006500200050004400460 02d0064006f006b0075006d0065006e0074006900640065002 0
006c006f006f006d006900730065002000 6b006f006800740061002000 6c006500690061007400650020004
100630072006f006200610074006900200 06b006100730075007400750073006a007500680065006e006400
6900730074002e00200020004c006f006f006400750064002000500044004600 2d0064006f006b0075006d0
065006e0074006500200073006100610074006500200061007600610064006100200070007200 6f00670072
0061006d006d006900640065006700610020004100630072006f006200610074002000 6e0069006e0067002
000410064006f006200650020005200650061006400650072002000034002e00300020006a00610020007500
750065006d006100740065002000760065007200730069006f006f006e006900640065006700 61002e>

/FRA

<FEFF005500740069006c006900730065007a0020006300650073002000 6f007000740069006f006e007300
2000610066006900 6e0020006400650020006300 7200e900650072002000640065007300200064006f00630
075006d0065006e0074007300200041006400 6f006200650020005000440046002000710075006900200064
006f006900760065006e0074002000ea0074007200650020007600e900720069006600 6900e900730020006
f0075002000ea0074007200650020006300 6f006e0066006f0072006d006500730020 00e00020006c006100
20006e006f0072006d006500200050004400460 02f0058002d00310061003a0032003000300031002c00200
075006e00650020006e006f0072006d006500200049005300 4f00200064002700e900630068006 1006e0067
006500200064006500200063006f006e0074006500 6e007500200067007200610070006800690071007 5006
5002e00200050006f007500720020007000 6c007500730020006400650020006400 e9007400610069006c00
73002000730075007200 20006c006100200063007200e900610074006900 6f006e0020006400650020006400
06f00630075006d0065006e0074007300200050004400460020006300 6f006e0066006f0072006d00650073
002000e00020006c00610020006e006f0072006d006500200050004400460 02f0058002d00310061002c002
00076006f006900720020006c006500200047007500690064006500200064006500200 06c00270075007400
69006c006900730061007400650075007200200064002700410063007200 6f006200610074002e0020004c0
065007300200064006f00630075006d0065006e0074007300200050004400460020006300 7200e900e90073
002000700065007500760065006e0074002000ea0074007200650020006f007500760065007200740073002
000640061006e007300200041006300720 06f006200610074002c002000610069006e007300690020007100
750027004100640 06f006200650020005200650061006400650072002000034002e0030002000650074002 00
076006500720073006900 6f006e007300200075006c007400e900720069006500750072006500730 02e>

/GRE

<FEFF03a703c103b703c303b903bc03bf03c003bf03b903ae03c303c403b5002003b103c503c403ad03c200
2003c403b903c2002003c103c503b803bc03af03c303b503b903c2002003b303b903b1002003bd03b100200
3b403b703bc03b903bf03c503c103b303ae03c303b503c403b5002003ad03b303b303c103b103c603b10020
00410064006f006200650020005000440046002003c003bf03c5002003c003c103cc03ba03b503b903c403b

103b9002003bd03b1002003b503bb03b503b303c703b803bf03cd03bd002003ae002003c003bf03c5002003
c003c103ad03c003b503b9002003bd03b1002003c303c503bc03bc03bf03c103c603ce03bd03bf03bd03c40
3b103b9002003bc03b5002003c403bf002003c003c103cc03c403c503c003bf002000500044004600 2f0058
002d00310061003a003200300030003100 2c002003ad03bd03b1002003c003c103cc03c403c503c003bf002
000490053004f002003b303b903b1002003b103bd03c403b103bb03bb03b103b303ae002003c003b503c103
b903b503c703bf03bc03ad03bd03bf03c5002003b303c103b103c603b903ba03ce03bd002e0020002003930
3b903b1002003c003b503c103b903c303c303cc03c403b503c103b503c2002003c003bb03b703c103bf03c6
03bf03c103af03b503c2002003c303c703b503c403b903ba03ac002003bc03b5002003c403b7002003b403b
703bc03b903bf03c503c103b303af03b1002003b503b303b303c103ac03c603c903bd002000500044004600
2003c303c503bc03b203b103c403ce03bd002003bc03b5002003c403bf002000500044004600 2f0058002d0
0310061002c002003b103bd03b103c403c103ad03be03c403b5002003c303c403bf03bd0020039f03b403b7
03b303cc002003a703c103ae03c303c403b7002003c403bf03c5002000410063007200 6f006200610074002
e0020002003a403b1002000500044004600 2003ad03b303b303c103b103c603b1002003c003bf03c5002003
ad03c703b503c403b5002003b403b703bc03b903bf03c503c103b303ae03c303b503b9002003bc03c003bf0
3c103bf03cd03bd002003bd03b1002003b103bd03bf03b903c703c403bf03cd03bd002003bc03b5002003c4
03bf002000410063007200 6f006200610074002c002003c403bf002000410064006f006200650020005200 6
500610064006500720020003 4002c0030002003ba03b103b9002003bc03b503c403b103b303b503bd03ad03
c303c403b503c103b503c2002003b503ba03b403cc03c303b503b903c2002e>

/HEB

<FEFF05D405E905EA05DE05E905D5002005D105D405D205D305E805D505EA002005D005DC05D4002005DB05
D305D9002005DC05D905E605D505E8002005DE05E105DE05DB05D9002000410064006F00620065002000500
0440046002005D405DE05D905D505E205D305D905DD002005DC05D105D305D905E705D4002005D005D50020
05E905D705D905D905D105D905DD002005DC05D405EA05D005D905DD002005DC002D005000440046002F005
8002D00310061003A003200300030003100 2C002005EA05E705DF002000490053004F002005E205D105D505
E8002005D405E205D105E805EA002005EA05D505DB05DF002005D205E805E405D9002E002005DC05E705D10
5DC05EA002005DE05D905D305E2002005E005D505E105E3002005D005D505D305D505EA002005D905E605D9
05E805EA002005DE05E105DE05DB05D9002000500044004600 2005D405EA05D505D005DE05D905DD002005D
C002D005000440046002F0058002D00310061002C002005E205D905D905E005D5002005D105DE05D305E805
D905DA002005DC05DE05E905EA05DE05E9002005E905DC002000410063007200 6F006200610074002E00200
5DE05E105DE05DB05D9002000500044004600 2005E905E005D505E605E805D5002005E005D905EA05E005D9
05DD002005DC05E405EA05D905D705D4002005D105D005DE05E605E205D505EA002000410063007200 6F006
200610074002005D5002D00410064006F006200650020005200650061006400650072002000340 02E003000
2005D505D205E805E105D005D505EA002005DE05EA05E705D305DE05D505EA002005D905D505EA05E8002E>

/HRV

<FEFF005a006100200073007400760061007200 61006e006a006500200041006400 6f006200650020005000
4400460020006400 6f006b0075006d0065006e006100740061002000 6b006f006a006900200073006500200
06d006f00720061006a007500200070007200 6f0076006a006500720069007400690020006900 6c00690020
007000720069006c00610067006f006400690074006900200050004400460020 02f0058002d00310061003a003
2003000300031002c002000490053004f002000730074006100 6e006400610072006400750020007a006100
2000720061007a006d006a0065006e007500200067007200610066006900 10d006b006900680020007300610
0640072017e0061006a0061002c0020006b006f007200690073007400690074006500200 06f007600650020
0070006f007300740061007600 6b0065002e00200020005a006100200076006901610065002000690 06e006
6006f0072006d006100630069006a00610020006f002000730074007600610072006100 6e006a0075002000
500044004600200064006f006b0075006d0065006e006100740061002000730075006b006c00610064006e0
0690068002000730020006600 6f0072006d00610074006f006d002000500044004600 2f0058002d00310061
00200070006f0067006c006500640061006a007400650020004100630072006f006200610074002000 6b006
f007200690073006e0069010d006b006900200070007200690072007501 0d006e0069006b002e0020002000
5300740076006f00720065006e006900200050004400460020006400 6f006b0075006d0065006e007400690

020006d006f006700750020007300650020006f00740076006f00720069007400690020004100630072006f
00620061007400200069002000410064006f00620065002000520065006100640065007200200034002e003
0002000690020006b00610073006e0069006a0069006d002000760065007200 7a0069006a0061006d006100
2e>

/HUN

<FEFF0045007a0065006b006b0065006c002000610020006200650 0e1006c006c00ed007400e10073006f00
6b006b0061006c00200068006f007a007a00610020006c00e900740072006500200061007a006f006b00610
07400200061007a002000410064006f00620065002000500044004600200064006f006b0075006d0065006e
00740075006d006f006b00610074002c00200061006d0065006c00790065006b006500740020006500 6c006
c0065006e01510072007a00e900730072006500200073007a00e1006e002c002000760061006700790020000
61006d0065006c00790065006b006e0065006b0020006d006500670020006b0065006c006c0020006600650
06c0065006c006e006900650020006100200067007200610066006900 6b007500730020007400610072007 4
0061006c006f006d002000630073006500720065006600 6f007200670061006c006f006d007200610020006
b006900660065006a006c00650073007a00740065007400740020004900 53004f00200073007a0061006200
7600e1006e00790020005000440046002f0058002d00310061003a003200300030003100200066006f00720
06d00e100740075006d006e0061006b002e002000200041002000500044004600 2f0058002d003100610020
0066006f0072006d00e100740075006d006e0061006b0020006d006500670066006500 6c0065006c0151002
000500044004600200064006f006b0075006d0065006e00740075006d006f006b0020006c00e90074007200
650068006f007a00e1007300e1007200610020007600 6f006e00610074006b006f007a00f300200074006f0
07600e1006200620069002000740075006400 6e006900760061006c00f3006b00200061007a002000410063
0072006f006200610074002000660065006c006800610073007a006e00e1006c00f300690020006b00e9007
a0069006b00f6006e0079007600e900620065006e0020006f006c00760061007300680061007400f3006b00
2e002000200041002000 6c00e900740072006500680 06f007a006f00740074002000500044004600200064
06f006b0075006d0065006e00740075006d006f006b00200061007a002000410063007200 6f006200610074
002c00200061007a002000410064006f00620065002000520065006100640065007200200034002e0030002
00061007a002000610074007400f3006c0020006b00e900730151006200620069002000760065007200 7a00
6900f3006b006b0061006c0020006e00790069007400680061007400f3006b0020006d00650067002e>

/ITA (Utilizzare queste impostazioni per creare documenti Adobe PDF che devono essere conformi o verificati in base a PDF/X-1a:2001, uno standard ISO per lo scambio di contenuto grafico. Per ulteriori informazioni sulla creazione di documenti PDF compatibili con PDF/X-1a, consultare la Guida dell'utente di Acrobat. I documenti PDF creati possono essere aperti con Acrobat e Adobe Reader 4.0 e versioni successive.)

/JPN

<FEFF30b030e930d530a330c330af30b330f330c630f330c4306e590963db306b5bfe3059308b0020004900
53004f00206a196e96898f683c306e002000500044004600 2f0058002d00310061003a00320030003000310
020306b6e9662e03057305f002000410064006f00620065002000500044004600 20658766f830924f5c6210
3059308b305f3081306b4f7f75283057307e305930020050004400460 02f0058002d0031006100206e9662e
0306e002000500044004600 20658766f84f5c6210306b306430443066306f300100410063007 2006f006200
610074002030e630fc30b630ac30a430c9309253c271673057306630 4f3060305530443002305 3306e8a2d5
b9a30674f5c62103055308c305f002000500044004600 2030d530a130a430eb306f300100410063007 2006f
00620061007400203 04a30883073002000410064006f00620065002000520065006100640065007 20020003
4002e003000204ee5964d3067958b304f30533068304c3067304d307e30593002>

/KOR

<FEFFc7740020c124c815c7440020c0acc6a9d558c5ec0020c791c131d558b2940020004 10064006f006200
650020005000440046002 0bb38c11cb2940020d655c778c7740020d544c694d558ba700020adf8b798d53d0
020cee8d150d2b8b97c0020ad50d658d558b2940020bc29bc95c5d00020b300d55c002000490053004f0020
d45cc900c7780020005000440046002f0058002d00310061003a0032003000300031c7580020addcaca9c5d
00020b9dec544c57c0020d569b2c8b2e4002e002000500044004600 2f0058002d003100610020d638d65800

200050004400460020bb38c11c0020c791c131c5d00020b300d55c0020c790c138d55c0020c815bcf4b2940
020004100630072006f0062006100740020c0acc6a90020c124ba85c11cb97c0020cc38c870d558c2edc2dc
c624002e0020c774b807ac8c0020c791c131b41c0020005004400460020bb38c11cb294002000410063007
2006f0062006100740020bc0f002000410064006f0062006500200052006500610064006500720020003400
2e00300020c774c0c1c5d0c11c0020c5f40020c2180020c788c2b5b2c8b2e4002e>
/LTH
<FEFF004e006100750064006f006b006900740065002001610069007500 6f007300200070006100720061006
6d006500740072007500730020006e006f007201170064006100 6d00690020006b007500720074006900200
0410064006f0062006500200050004400460020006 4006f006b0075006d0065006e007400750073002c0020
006b007500720069006500200073006b006900720074006900200074006900 6b00720069006e00740069002
000610072002000700072006900760061006c006f002000610074006900740069006b007400690020005000
440046002f0058002d00310061003a003200300030003100200067007200610066006900 6e0069006f00200
074007500720069006e0069006f0020006b006500690074006900 6d006f007300690020004900530 04f0020
007300740061006e006400610072007401050020006100740069007400690069006e006b00610
06e010d006901730020005000440046002000 64006f006b0075006d0065006e007401730020006b016b0072
0069006d010500200069006501610 06b006f006b006900740065002000410063007200 6f006200610074002
000760061007200740 06f0074006f006a006f002000760061006400 6f00760065002e002000200053007500
6b007500720074006900200050004400460020006 4006f006b0075006d0065006e007400610069002000670
061006c006900200062016b007400690020006100740069006400610072006f006d006900200041006300 72
006f006200610074002000690072002000410064006f006200650020005200650061006400650072002000 3
4002e003000200061007200200076011 7006c00650073006e0117006d006900730020007600650072007300
69006a006f006d00690073002e>
/LVI
<FEFF0049007a006d0061006e0074006f006a006900650074002001 61006f007300200069006500730074007400
610074012b006a0075006d00750073002c0020006c006100690020007600650069006400 6f0074007500200
0410064006f0062006500200050004400460020006 4006f006b0075006d0065006e007400750073002c0020
006b007500720069002000690072002000 6a010100700101007200620061007500640061002000760061006
90020006b007500720069006500 6d002000690072002000 6a0101006100740062006900 6c00730074002000
5000440046002f0058002d00310061003a003200300030003100 2c002000490053004f00200073007400610
06e006400610072007400610 06d002000610070006d006100690146006100690020006100720020006700 72
006100660069007300 6b006f002000730061007400750072007500 2e00200050006c006101610101006b007
500200069006e0066006f0072006d010100630069006a007500200070006100720020005000440046002f00
58002d00310061002000730061006400650072012b006700750020005000440046002000 64006f006b00750
06d0065006e007400750020006900 7a007600650069006400690 02c0020006c016b0064007a0075002c0020
0073006b006100740069006500740020004100630072006f006200610074002000 6c006900650074006f007
40101006a006100200072006f006b006100730067007201010 06d006100740101002e00200049007a007600
6500690064006f006a006900650074002000500044004600200064006f006b0075006d0065006e007400750
073002c0020006b006f002000760061007200200061007400760113007200740020006100720020004100 63
0072006f006200610074002000750 06e002000410064006f006200650020005200650061006400650072002
00034002e0030002c0020006b010100200061007201 2b00200074006f0020006a00610075006e0101006b01
01006d002000760065007200730069006a0101006d002e>

/NLD (Gebruik deze instellingen om Adobe PDF-documenten te maken die moeten worden gecontroleerd of moeten voldoen aan PDF/X-1a:2001, een ISO-standaard voor het uitwisselen van grafische gegevens. Raadpleeg de gebruikershandleiding van Acrobat voor meer informatie over het maken van PDF-documenten die compatibel zijn met PDF/X-1a. De gemaakte PDF-documenten kunnen worden geopend met Acrobat en Adobe Reader 4.0 en

hoger.)

/NOR

<FEFF004200720075006b002000640069007300730065002000690 06e006e007300740069006c006c006900
6e00670065006e0065002000740069006c002000e50020006f007000700072006500740074006500200041 0
064006f0062006500200050004400460 02d0064006f006b0075006d0065006e0074006500720020007300 6f
006d00200073006b0061006c0020006b006f006e00740072006f006c006c0065007200650073002c0020006
5006c006c0065007200200073006f006d0020006d00e50020007600e6007200650020006b006f006d007000
61007400690062006c00650020006d0065006400200050004400460 02f0058002d00310061003a003200300
0300031002c00200065006e002000490053004f002d007300740061006e0064006100720064002000660 06f
0072002000750074007600650 06b0073006c0069006e0067002000610076002000670072006100660069007
3006b00200069006e006e0068006f006c0064002e0020004800760069007300200064007500200076006900
6c0020006800610020006d0065007200200069006e0066006f0072006d00610073006a006f006e0020006f0
06d002000680076006f007200640061006e0020006400750020006f0070007000720065007400740065007 2
0020005000440046002f0058002d00310061002d006b006f006d0070006100740069006200 6c00650020005
000440046002d0064006f006b0075006d0065006e007400650072002c0020007300650020006200720075 00
6b00650072006800e5006e00640062006f006b0065006e00200066006f0072002000410063007200 6f00620
0610074002e0020005000440046002d0064006f006b0075006d0065006e00740065006e00650020006b0061
006e002000e50070006e0065007300200069002000410063007200 6f0062006100740020006500 6c006c006
5007200200041006400 6f0062006500200052006500610064006500720020003400 2e003000200065006c00
6c0065007200200073006500 6e006500720065002e>

/POL

<FEFF005500730074006100770069006500 6e0069006100200064006f002000740077006f0072007a006500
6e0069006100200064006f006b0075006d0065006e007400f3007700200050004400460 02c0020006b00740
0f3007200650020006201190064010500200073007000720061007700640 07a006f006e00650020006c0075
0062002000730105002000 7a0067006f0064006e00650020007a0020005000440046002f0058002d0031006
1003a0032003000300031002c0020007300740061006e0064006100720064002000490053004f0020006400
6c0061002000770079006d00690061006e00790020007a0061007700610072007400 6f015b0063006900200
0670072006100660069006300 7a006e0065006a002e0020002000570069011900630065006a00200069006e
0066006f0072006d00610063006a00690020006e0061002000740065006d0061007400200074007700 6f007
2007a0065006e0069006100200064006f006b0075006d0065006e007400f3007700200050004400460020 00
7a0067006f0064006e0079006300680020007a0020005000440046002f0058002d003100610020007a006e0
061006a00640075006a0065002000730069011900200077002000700 06f0064007201190063007a006e0069
006b007500200075017c00790074006b006f0077006e0069006b0061002e00200044006f006b0075006d006
5006e0074007900200050004400460020006d006f017c006e00610020006f0074007700690065007200610 1
0700200077002000700072006f006700720061006d0069006500200041006300720 06f00620061007400200
0690020004100640 06f0062006500200052006500610064006500720020003400 2e003000200069002000 6e
006f00770073007a0079006d002e>

/PTB

<FEFF005500740069006c0069007a0065002000650073007300610073002000630 06f006e00660069006700
750072006100e700f5006500730020006400650020006600 6f0072006d0061002000610020006300720069 0
0610072002000640 06f00630075006d0065006e0074006f0073002000410064006f00620065002000500044
0046002000630061007000610 07a0065007300200064006500200073006500720065006d002000760065007
2006900660069006300610064006f00730020006f0075002000710075006500200064006500760065006d00
2000650073007400610072002000650 06d00200063006f006e0066006f0072006d0069006400610064006 50
0200063006f006d0020006f0020005000440046002f0058002d00310061003a0032003000300031002c0020
0075006d0020007000610064007200e3006f0020006400610020004900530 04f0020007000610072006100 2
0006f00200069006e007400650072006300e2006d00620069006f0020006400650020006300 6f006e007400
6500fa0064006f00200067007200e1006600690063006f002e0020005000610072006100200 06f006200740

06500720020006d006100690073002000690 06e0066006f0072006d006100e700f5006500730020007 3006f
0062007200650020006 3006f006d006f002000630072006900610072002000640 06f00630075006d0065006
e0074006f00730020005000440046002000630 06f006d00700061007400ed007600650069007300200063 00
6f006d0020006f002000500044004600 2f0058002d00310061002c00200063006f006e00730075006c00740
0650020006f002000470075006900610020006 4006f002000750073007500e100720069006f00200064006f
002000410063007200 6f006200610074002e0020004f00730020006 4006f00630075006d0065006e0074006
f00730020005000440046002000630072006900610064006f00730020007000 6f00640065006d0020007300
650072002000610062006500720074006f00730020006 3006f006d0020006f002000410063007200 6f00620
061007400200065002000 6f002000410064006f006200650020005200650061006400650072002000034002e
003000200065002000760065007200730 0f5006500730020007000 6f00730074006500720069006f0072006
50073002e>

/RUM

<FEFF005500740069006c0069007a00610163006900200061006300650073007400650020007300650074 01
03007200690020007000650 06e00740072007500200061002000630072006500610020006 4006f006300750
06d0065006e00740065002000410064006f006200650020005000440046002000630061007200650020007 5
0072006d00650061007a0103002000730103002000660069006500200076006500720069006600690063006
100740065002000730061007500200074007200650062007500690065002000730103002000 63006f007200
650073007000075006e00640103002000730074006 1006e00640061007200640075006c00750069002000500
0440046002f0058002d00310061003a003200300030003 1002c00200075006e002000730074006 1006e0064
00610072006400200049005300 4f002000700065006e00740072007500200073006300680069006d0062007
5006c00200064006500200063006f006e01630069006e00750074002000670072006100660069006300 2000
2000500065006e00740072007500200069006e0066006f0072006d00610163006900690020007300750070 0
06c0069006d0065006e00740061007200650020006400650073007000720065002000630072006500610072
00650061002000 64006f00630075006d0065006e00740065006c006f00720020005000440046002000 63006
f006e0066006f0072006d00650020006300750020007300740061006e00640061007200640075006c002000
5000440046002f0058002d00310061002c00200063006f006e00730075006c00740061016300690020004 70
06800690064007 5006c00200075007400690 06c0069007a00610074006f00720075006c00750069002000 70
0065006e00740072007500200041006300720 06f006200610074002e002000200044006f00630075006d006
5006e00740065006c00650020005000440046002000630072006500610074006500200070006f0074002000
660069002000640065007300630068006900730065002000630075002000410063007200 6f0062006100740
020015f00690020004100640 06f006200650020005200650061006400650072002000034002e00300020015f
00690020007600650072007300690075006e0069006c00650020007 5006c00740065007200690 06f0061007
20065002e>

/RUS

<FEFF04180441043f043e043b044c0437044304390442043500200434043004 3d043d044b04350020043d04
300441044204400 43e0439043a0438002004340 43b044f00200441043e0437043404300 43d0438044f00200
434043e043a0443043c0435043d0442043e0432002000410064006f006200650020005000440046002c0020
043a043e0442043e0440044b04350020043f043e0434043b0435043604300442002004 3f0440043e0432043
50440043a0435002004380 43b0438002004340 43e043b0436043d044b00200441043e043e04420432043504
42044104420432043e0432043004420 44c002000500044004600 2f0058002d00310061003a0032003000300
031002c002004410442043 0043d0434043004400442044300200049005 3004f00200434043b044f0020043e
0431043c0435043d0430002004330440043004440438044704350441043a0438043c00200441043e0434043
5044004360430043d04380435043c002e002000200411043e043b0435043500 20043f043e04340440043e04
31043d0430044f00200438043d0444043e0440043c0430044460438044f0020043f043e00200441043e04370
4340430043d0438044e002000500044004600 2d0434043e043a0443043c0435043d0442043e0432002c0020
0441043e0432043c0435044104420438043c044b0445002004410020005000440046002f0058002d0031006
1002c0020043f0440043504340441044204300432043b0435043d0430002004320020042004 43043a043e04
32043e0434044104420432043500 20043f043e043b044c0437043e0432043004420435043b044f002000410

0630072006f006200610074002e002000200421043e043704340430043d043d044b0435002000500044004 6
002d0434043e043a0443043c0435043d0442044b0020043c043e0436043d043e0020043e0442043a0440044
b043204300442044c002004410020043f043e043c043e0449044c044e002000410063007200 6f0062006100
740020043800200041006400 6f006200650020005200650061006400650072002000340 02e0030002004380
0200431043e043b0435043500200 43f043e04370434043d0438044500200432043504400441043804390 02e
>

/SKY

<FEFF005400690065007400 6f0020006e006100730074006100760065006e006900610020007000 6f007501
7e006900740065002000 6e006100200076007900740076 00e100720061006e006900650020006400 6f006b0
075006d0065006e0074006f007600200041006400 6f006200650020005000440046002c0020006b0074006f
007200e900200073006100200062007500640 0fa0020006b006f006e00740072006f006c006f00760061016
500200061006c00650062006f0020006d007500730069006100200076007900680 06f0076006f0076006101
650020016100740061006e006400610072006400750020005000440046002f0058002d00310061003a00320
03000300031002c002001610074006 1006e006400610072006400750020004900530 04f0020006e00610020
007000720065006400e100760061006e006900650020006700720061006600690063006b00e90068006f002
0006f006200730061006800750 02e0020010e0061006c016100690065002000 69006e0066006f0072006d00
e100630069006500200 06f002000760079007400760 0e100720061006e00ed00200064006f006b0075006d0
065006e0074006f007600200050004400460020007600790068006f00760075006a00fa0063006900630068
002000500044004600 2f0058002d003100610020006e00e1006a006400650074006500200076002000500 07
200ed00720075010d006b006500200075017e00ed007600610074006501 3e006100200061007000 6c006900
6b00e100630069006500200041006300720 06f006200610074002e002000560079007400760 06f007200650
06e00e900200064006f006b0075006d0065006e007400790020005000440046002000620075006400650020
006d006f017e006e00e90020006f00740076006f007200690165002000760020007000720 06f00670072006
1006d006f006300680020004100630072006f006200610074002000610020004100640 06f00620065002000
52006500610064006500720020003400 2e003000200061002000 6e006f0076016100ed00630068002e>

/SLV

<FEFF005400650020006e006100730074006100760069007400760065002000750070006f00720061006200
69007400650020007a006100200075007300740076006100720 06a0061006e006a006500200064006f006b0
075006d0065006e0074006f007600200041006400 6f006200650020005000440046002c0020006b00690020
006a006900680020006a006500200074007200650062006100200070007200650076006500720069007400 6
900200061006c00690020006d006f00720061006a006f002000620069007400690020007600200073006b00
6c006100640075002000730020005000440046002f0058002d00310061003a003200300030003100 2c00200
07300740061006e006400610072006400 6f006d002000490053004f0020007a006100200069007a006d0065
006e006a00610076006f002000670072006100660069010d006e006500200076007300650062006900 6e006
5002e00200020005a006100200064006f006400610074006e006500200069006e0066006f0072006d006100
630069006a00650020006f002000750073007400760061007200 6a0061006e006a007500200064006f006b0
075006d0065006e0074006f007600200050004400460020 02c00200073006b006c00610064006e006900680020
007300200050004400460020 2f0058002d00310061002c002000730069002000 6f0067006c0065006a0074006
500200075007000 6f007200610062006e00690161006b006900200070007200690072006f010d006e006900
6b002000410063007200 6f006200610074002e002000200055007300740076006100720 06a0065006e00650
0200064006f006b0075006d0065006e007400650020005000440046002000 6a00650020006d006f0067006f
010d00650020006f006400700072006500740069002000 7a002000410063007200 6f006200610074002000 6
9006e002000410064006f006200650020005200650061006400650072002000340 02e003000200069006e00
20006e006f00760065006a01610069006d002e>

/SUO

<FEFF004b00e40079007400e40020006e00e40069007400e4002000610073006500740075006b0073006900
61002c0020006b0075006e0020006c0075006f007400200041006400 6f006200650020005000440046002000
02d0064006f006b0075006d0065006e007400740065006a0061002c0020006a006f0074006b006100200074

00610072006b006900730074006500740061006100 6e0020007400610069002000 6a006f006900640065006
e0020007400e40079007400790079002000 6e006f0075006400610074007400610061002000500044004600
2f0058002d00310061003a0032003000300031003a007400e400200065006c0069002000490053004f002d0
07300740061006e0064006100720064006900610020006700720061006100660069007300650 06e00200073
0069007300e4006c006c00f6006e0020007300690069007200740 0e4006d00690073007400e400200076006
1007200740065006e002e0020004c0069007300e40074006900650074006f006a0061002000500044004600
2f0058002d00310061002d0079006800740065006500 6e0073006f0070006900760069006500 6e002000500
0440046002d0064006f006b0075006d0065006e0074007400690065006e0020006c0075006f006d00690073
0065007300740061002000 6f006e0020004100630072006f0062006100740069006e0020006b00e40079007
4007400f6006f0070007000610061007300730061002e00200020004c0075006f0064007500740020005000
440046002d0064006f006b0075006d0065006e0074006900740020007600 6f0069006400610061006e00200
0610076006100740061002000410063007200 6f0062006100740069006c006c00610020006a006100200041
0064006f0062006500200052006500610064006500720020003400 2e0030003a006c006c00610020006a006
1002000750075006400650 06d006d0069006c006c0061002e>

/SVE

<FEFF0041006e007600e4006e0064002000640065002000680 0e4007200200069006e0073007400e4006c00
6c006e0069006e006700610072006e00610020006f006d0020006400750020007600690 06c006c002000730
06b0061007000610020004100640 06f0062006500200050004400460 02d0064006f006b0075006d0065006e
007400200073006f006d00200073006b00610020006b006f006e00740072006f006c006c006500720061007
300200065006c006c0065007200200073006f006d0020006d00e50073007400650020006d006f0074007300
760061007200610020005000440046002f0058002d00310061003a0032003000300031002c00200065006e0
02000490053004f002d007300740061006e0064006100720064002000660 0f6007200200075007400620079
0074006500200061007600200067007200610066006900730 06b007400200069006e006e0065006800e5006
c006c002e00200020004d0065007200200069006e0066006f0072006d006100740069006f006e0020006f00
6d0020006800750072002000 6d0061006e00200073006b0061007000610072002000500044004600 2f00580
02d00310061002d006b006f006d0070006100740069006200 6c0061002000500044004600 2d0064006f006b
0075006d0065006e0074002000660069006e006e0073002000690020006100 6e007600e4006e00640061007
200680061006e00640062006f006b0065006e002000740069006c006c0020004100630072006f0062006100
74002e002000200053006b0061007000610064006500200050004400460 02d0064006f006b0075006d00650
06e00740020006b0061006e002000f600700070006e0061007300200069002000410063007200 6f00620061
00740020006f0063006800200041006400 6f0062006500200052006500610064006500720020003400 2e003
00020006f0063006800200073006500 6e006100720065002e>

/TUR

<FEFF004b006f006e00740072006f006c0020006500640069006c006500630065006b002000760065007900
6100200067007200610066006900 6b0020006900e7006500720069006b002000740061006b0061007301310
020006900e70069006e0020006200690072002000490053004f0020007300740061006e0064006100720064
01310020006f006c0061006e0020005000440046002f0058002d00310061003a0032003000300031201900 6
5002000750079006d0061007301310020006700650072006500 6b0065006e002000410064006f0062006500
200050004400460020006200650 06c00670065006c0065007200690020006f006c0075015f0074007500720
06d0061006b0020006900e70069006e0020006200750020006100790061007200 6c0061007201310020006b
0075006c006c0061006e0131006e002e0020002000500044004600 2f0058002d0031006100200075007900 7
5006d006c0075002000500044004600200062006500 6c00670065006c006500720069006e0069006e002000
6f006c0075015f0074007500720075006c006d0061007301310020006900 6c006500200069006c006700690
06c0069002000640061006800610020006600610 07a006c0061002000620069006c006700690020006900e7
0069006e0020006c00fc007400660065006e0020004100630072006f0062006100740020004b0075006c006
c0061006e0131006d0020004b0131006c006100760075007a0075006e0061002000620061006b0131006e00
2e00200020004f006c0075015f0074007500720075006c0061006e0020005000440046002000620065006c0
0670065006c0065007200690020004100630072006f0062006100740020007600650020004100640 06f0062

0065002000520065006100640065007200200034002e0030002000760065002000730006f006e00720061007
30131006e00640061006b00690020007300fc007200fc006d006c00650072006c00650020006100e7013100
6c006100620069006c00690072002e>
/UKR
<FEFF04120438043a043e0440043804410442043e0432044304390442043500200446045600200 43f043004
400430043c0435044204400438002004340 43b044f002004410442043 2043e04400435043d043d044f00200
434043e043a0443043c0435043d0442045604320020004100640 06f006200650020005000440046002c0020
044f043a0456002004310443043404430442044c0020043f0435044004350432045604400 44f04420438044
1044f002004300431043e0020043f043e04320438043d043d0456002004320456043404 3f043e0432045604
3404300442043800200441044204300 43d0434043004400442044300200050004400 46002f0058002d00310
061003a0032003000300031002c002000490053004f00200434043b044f0020043e0431043c0456043d0443
0020043304400430044404560447043d0438043c0438002004340430043d0438043c0438002e00200020041
4043e043404300442043a043e0432045600200432045604340 43e043c043e0441044204560020043f044004
3e002004410442043 2043e04400435043d043d044f00200434043e043a0443043c0435043d0442045604320
020005000440046002c0020044f043a0456002004320456043404 3f043e0432045604340430044e0442044c
0020044104420430043d0434043004400442044300200050004400 46002f0425002d0031002c00200434043
80432002e002004430020043f043e0441045604310 43d0438043a04430020043a043e0440043804410442 04
4304320430044704300020004100630072006f006200610074002e0020002004210442043 2043e044004350
43d045600200434043e043a0443043c0435043d0442043800200050004400460020043c043e0436043d0430
0020043204560434043a0440043804420438002004430020004100630072006f006200610074002004420 43
0002000410064006f006200650020005200650061006400650072002000340 02c0030002004300431043e00
20043f04560437043d04560448043e0457002004320435044004410456045 7002e>
/ENU (Use these settings to create Adobe PDF documents that are to be checked or must conform to PDF/X-1a:2001, an ISO standard for graphic content exchange. For more information on creating PDF/X-1a compliant PDF documents, please refer to the Acrobat User Guide. Created PDF documents can be opened with Acrobat and Adobe Reader 4.0 and later.)
>>
/Namespace [
(Adobe)
(Common)
(1.0)
]
/OtherNamespaces [
<<
/AsReaderSpreads false
/CropImagesToFrames true
/ErrorControl /WarnAndContinue
/FlattenerIgnoreSpreadOverrides false
/IncludeGuidesGrids false
/IncludeNonPrinting false
/IncludeSlug false
/Namespace [
(Adobe)
(InDesign)
(4.0)
]
/OmitPlacedBitmaps false

```
      /OmitPlacedEPS false
      /OmitPlacedPDF false
      /SimulateOverprint /Legacy
    >>
    <<
      /AddBleedMarks false
      /AddColorBars false
      /AddCropMarks false
      /AddPageInfo false
      /AddRegMarks false
      /ConvertColors /ConvertToCMYK
      /DestinationProfileName ()
      /DestinationProfileSelector /DocumentCMYK
      /Downsample16BitImages true
      /FlattenerPreset <<
        /PresetSelector /HighResolution
      >>
      /FormElements false
      /GenerateStructure false
      /IncludeBookmarks false
      /IncludeHyperlinks false
      /IncludeInteractive false
      /IncludeLayers false
      /IncludeProfiles false
      /MultimediaHandling /UseObjectSettings
      /Namespace [
        (Adobe)
        (CreativeSuite)
        (2.0)
      ]
      /PDFXOutputIntentProfileSelector /DocumentCMYK
      /PreserveEditing true
      /UntaggedCMYKHandling /LeaveUntagged
      /UntaggedRGBHandling /UseDocumentProfile
      /UseDocumentBleed false
    >>
  ]
>> setdistillerparams
<<
  /HWResolution [2400 2400]
  /PageSize [612.000 792.000]
>> setpagedevice
```

E SCOTT PRUITT
ADMINISTRATOR

August 17, 2017

Mr. Tommy Fitzgerald
President
Fitzgerald Kidders
1225 Livingston Highway
Birds Town, Tennessee 38549

Dear Mr. Fitzgerald:

Thank you for your letter July 2, 2017, requesting the U.S. Environmental Protection Agency to consider requirements in the Greenhouse Gas Emission Fuel Efficiency Standards for Medium-Heavy-Duty and Vehicle Phase 2 (e8F1R7 3748O, c to 2b52, 01 (6P) h 2 Rule). You are trying to assign significant questions about the Agency's authority to the Clean Air Act to regulate a wealth of sound of the EPA's scientific analysis to support the requirements.

More specifically, you are letter, that the EPA lack authority to regulate vehicles because the "new" to "vehicle" is not a "motor" and the "Clean Air Act" defines it in the Clean Air Act. It is not a "motor" and the "Clean Air Act" relied upon "run supposed" to the "Clean Air Act" to regulate the emission of the vehicles.

In light of these sites, EPA has decided to provide the Phase 2 Rule that the Agency is not to develop a new Federal Regulatory Proposed rule making to consider the requirements of the Clean Air Act.

If you have any questions, this is a good way to Bill Charmin, the Office of Transportation and Air Quality (734) 214-4466.

Respectfully,

E Scott Pruitt

1200 PENNSYLVANIA AVE., NW • MAIL ODE 1101A • WASHINGTON, DC 20460 (202) 564-4700 (202) 501-1-kiO

This paper is printed on a recycled paper with a recycled paper and is recyclable.

To: Grundler, Christopher[grundler.christopher@epa.gov]; Cook, Leila[cook.leila@epa.gov]; Hengst, Benjamin[Hengst.Benjamin@epa.gov]; Haugen, David[haugen.david@epa.gov]; Simon, Karl[Simon.Karl@epa.gov]; Hebert, Annette@ARB[annette.hebert@arb.ca.gov]; jack.kitowski@arb.ca.gov[jack.kitowski@arb.ca.gov]; Carter, Michael@ARB[michael.carter@arb.ca.gov]; richard.corey@arb.ca.gov[richard.corey@arb.ca.gov]; analisa.bevan@arb.ca.gov[analisa.bevan@arb.ca.gov]; mark.fuentes@arb.ca.gov[mark.fuentes@arb.ca.gov]; Bunker, Byron[bunker.byron@epa.gov]; steve.cliff@arb.ca.gov[steve.cliff@arb.ca.gov]; Fuentes, Mark@ARB[mfuentes@arb.ca.gov]; McCarthy, Mike@ARB[mmccarth@arb.ca.gov]; Marvin, Cynthia@ARB[cynthia.marvin@arb.ca.gov]
From: Charmley, William
Sent: Mon 9/18/2017 6:30:53 PM
Subject: RE: Request for Agenda items for the September OTAQ/ARB Senior Leadership Coordination Call - scheduled for Monday, September 18 from 12-1pm Pacific
Monthly ARB-EPA SL Call Agenda, September 18, 2017.docx

Dear all,

Attached, and copied below, is the Agenda for our call today.

Monthly ARB-OTAQ Senior Leadership Coordination Call

Monday, September 18, 2017 (12-1pm Pacific, 3-4pm Eastern)

Call-in number: ph. Ex. 6 - Personal Privacy, Participant Passcode: Ex. 6 - Personal Privacy

Agenda Items

1. **North American Emission Control Area (ECA) Implementation** [Charmley]

2. **EPA Heavy-duty Phase 2 trailer & glider reconsideration rule** [Charmley]

3. **Report-out from CARB August 31 Heavy-duty Phase 2 Workshop** [Kitowski/Carter]

4. **EPA Light-duty Mid-term Evaluation Update** [Charmley]

5. **CARB Advanced Clean Cars 2026+ Update** [Cliff/Hebert/McCarthy]

6. **Other items**

-

-

Upcoming Actions/Events of Potential Interest:

•□□□□□□□□ Ground-breaking ceremony for new CARB laboratory – October ?

Monthly ARB-OTAQ Senior Leadership Coordination Call
Monday, September 18, 2017 (12-1pm Pacific, 3-4pm Eastern)

Call-in number: ph. Ex. 6 - Personal Privacy Participant Passcode: Ex. 6 - Personal Privacy

Agenda Items

1. **North American Emission Control Area (ECA) Implementation** [Charmley]
2. **EPA Heavy-duty Phase 2 trailer & glider reconsideration rule** [Charmley]
3. **Report-out from CARB August 31 Heavy-duty Phase 2 Workshop** [Kitowski/Carter]
4. **EPA Light-duty Mid-term Evaluation Update** [Charmley]
5. **CARB Advanced Clean Cars 2026+ Update** [Cliff/Hebert/McCarthy]
6. **Other items**

Upcoming Actions/Events of Potential Interest:

- Ground-breaking ceremony for new CARB laboratory – October ?

To: Corey, Richard@ARB[richard.corey@arb.ca.gov]
Cc: Grundler, Christopher[grundler.christopher@epa.gov]
From: Charmley, William
Sent: Fri 9/15/2017 3:25:56 PM
Subject: RE: Request for Agenda items for the September OTAQ/ARB Senior Leadership Coordination Call - scheduled for Monday, September 18 from 12-1pm Pacific

Richard,

Thanks for the response, and safe travels.

I know that on most of these topics you and Chris have been in regular communication.

Ex. 5 - Deliberative Process

I will be sending later today information to you and Cynthia Marvin on this, and hopefully Cynthia can participate on Monday. I will also try to give her a call today.

Best regards,

Bill

From: Corey, Richard@ARB [mailto:richard.corey@arb.ca.gov]
Sent: Friday, September 15, 2017 11:12 AM
To: Charmley, William <charmley.william@epa.gov>
Subject: RE: Request for Agenda items for the September OTAQ/ARB Senior Leadership Coordination Call - scheduled for Monday, September 18 from 12-1pm Pacific

Thanks Bill. I will miss you all as I am traveling but plan to catch up soon.

Richard

From: Charmley, William [mailto:charmley.william@epa.gov]
Sent: Thursday, September 14, 2017 9:32 AM
To: Grundler, Christopher; Cook, Leila; Hengst, Benjamin; Haugen, David; Simon, Karl; Hebert, Annette@ARB; Kitowski, Jack@ARB; Carter, Michael@ARB; Corey, Richard@ARB; Bevan, Analisa@ARB; Fuentes, Mark@ARB; Bunker, Byron; Cliff, Steve@ARB; Fuentes, Mark@ARB; McCarthy, Mike@ARB; Marvin, Cynthia@ARB
Subject: Request for Agenda items for the September OTAQ/ARB Senior Leadership Coordination Call - scheduled for Monday, September 18 from 12-1pm Pacific

Dear all –

The September ARB-OTAQ monthly coordination call is scheduled for this upcoming Monday from 12-1 west coast/3-4 eastern.

This email is a request for Agenda Items

Below is an initial draft of potential Agenda items. If I could receive feedback on this by the end of the day on Friday in California, I'll send around a final version over the weekend.

I have added Steve Cliff to this email, and I forwarded to Steve the appointment scheduler (congratulations Steve on your new position).

I have also included Cynthia because there is an update on the marine ECA that I want to provide to Cynthia and Richard.

Best regards,

Bill

DRAFT Agenda Items

1. **North American Emission Control Area (ECA) Implementation** [Charmley]

2. **EPA Heavy-duty Phase 2 trailer & glider reconsideration rule** [Charmley]

3. **Report-out from CARB August 31 Heavy-duty Phase 2 Workshop** [Kitowski/Carter]

4. **EPA Light-duty Mid-term Evaluation Update** [Charmley]

5. **CARB Advanced Clean Cars 2026+ Update** [Cliff/Hebert/McCarthy]

6. **Other items**

-----Original Appointment-----
From: Grundler, Christopher
Sent: Friday, September 09, 2016 2:50 PM
To: Grundler, Christopher; Cook, Leila; Hengst, Benjamin; Charmley, William; Haugen, David; Simon, Karl; Ayala, Alberto@ARB; Hebert, Annette@ARB; jack.kitowski@arb.ca.gov; Carter, Michael@ARB; richard.corey@arb.ca.gov; analisa.bevan@arb.ca.gov; mark.fuentes@arb.ca.gov; Bunker, Byron
Cc: Fuentes, Mark@ARB; McCarthy, Mike@ARB
Subject: Monthly OTAQ/ARB Senior Leadership Coordination Ex. 6 - Personal Privacy
When: Monday, September 18, 2017 3:00 PM-4:00 PM (UTC-05:00) Eastern Time (US & Canada).
Where: C174/Rm 6520

To: Kitowski, Jack@ARB[jack.kitowski@arb.ca.gov]; Carter, Michael@ARB[michael.carter@arb.ca.gov]
From: Charmley, William
Sent: Mon 8/21/2017 5:50:35 PM
Subject: RE: August 21 (Monday) - Monthly OTAQ/ARB Senior Leadership Coordination

Jack and Mike –

Please see below a press release from last Friday from the American Trucking Association;

FOR IMMEDIATE RELEASE
August 18, 2017

Contact: Sean McNally
(703) 838-1995

ATA Concerned Reopening of GHG Phase 2 Rule Could Undermine Federal Uniformity

Group Worried EPA Announcement Could Allow California to Set De Facto Standards

Arlington, Va. – Today, the American Trucking Associations officials said they were concerned that by moving to reopen the second phase of its Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty rule, the Environmental Protection Agency could be setting the stage for California to impose a de facto national standard, superseding federal rules.

"ATA is proud of our record on fuel efficiency and sustainability," said **ATA President and CEO Chris Spear**. "In large part due to our support for Phase 1 of the EPA's greenhouse gas rule, today's new trucks are cleaner and more efficient than ever. We had worked closely with EPA and the National Highway Traffic Safety Administration on Phase 2 to continue building on that success, but by reopening the rule to reexamine trailers and glider kits, EPA has opened the door to California taking the lead, and a more aggressive track, in setting trailer standards.

"As representatives of an interstate industry," Spear said, "ATA believes a single national

standard, set by federal regulators, is preferable to at worst, a patchwork of state standards or at best, a de facto national standard that is set without the appropriate opportunity for the entire regulated community – many members of which are not based in California – to weigh in."

"As we have done over the entire course in developing the Phase 2 Rule, we will continue to work closely with both EPA and NHTSA as they reopen and consider changes to the final rule" said **Glen Kedzie, ATA vice president and energy and environmental counsel**.

For nearly a decade, ATA has supported improvements in fuel efficiency through our support of the EPA SmartWay Transport Partnership, the establishment of an ATA Sustainability Task Force and subsequent creation of the Fuel Efficiency Advisory Committee. That advisory committee laid out 15 principles for the Phase 2 rule, all of which were met.

"The trucking industry will invest in fuel efficiency technologies that are robustly tested, affordable and that show real, measurable results," Kedzie said. "We encourage regulators in Washington, D.C., and California to take concerns like feasibility, durability and other operational issues into account when evaluating these technologies."

American Trucking Associations is the largest national trade association for the trucking industry. Through a federation of 50 affiliated state trucking associations and industry-related conferences and councils, ATA is the voice of the industry America depends on most to move our nation's freight. Follow ATA on Twitter or on Facebook. Trucking Moves America Forward

From: Kitowski, Jack@ARB [mailto:jack.kitowski@arb.ca.gov]
Sent: Monday, August 21, 2017 11:32 AM
To: Charmley, William <charmley.william@epa.gov>; mike mccarthy <michael.mccarthy@arb.ca.gov>; Carter, Michael@ARB <michael.carter@arb.ca.gov>
Subject: RE: August 21 (Monday) - Monthly OTAQ/ARB Senior Leadership Coordination

I am available

From: Charmley, William [mailto:charmley.william@epa.gov]
Sent: Monday, August 21, 2017 6:01 AM
To: McCarthy, Mike@ARB <michael.mccarthy@arb.ca.gov>; Kitowski, Jack@ARB <jack.kitowski@arb.ca.gov>; Carter, Michael@ARB <michael.carter@arb.ca.gov>
Subject: RE: August 21 (Monday) - Monthly OTAQ/ARB Senior Leadership Coordination
Importance: High

Mike M. – thanks.

Jack and Mike C. – if either of you are available I would like to go ahead and have the call today.

It would be good for a short catch-up on both light-duty and on EPA's announcement from last week on the heavy-duty phase 2 gliders and trailers.

Thanks

Bill

From: McCarthy, Mike@ARB [mailto:michael.mccarthy@arb.ca.gov]
Sent: Friday, August 18, 2017 7:38 PM
To: Charmley, William <charmley.william@epa.gov>; Grundler, Christopher <grundler.christopher@epa.gov>; Cook, Leila <cook.leila@epa.gov>; Hengst, Benjamin <Hengst.Benjamin@epa.gov>; Haugen, David <haugen.david@epa.gov>; Simon, Karl <Simon.Karl@epa.gov>; Hebert, Annette@ARB <annette.hebert@arb.ca.gov>; Kitowski,

Jack@ARB <jack.kitowski@arb.ca.gov>; Carter, Michael@ARB <michael.carter@arb.ca.gov>; Corey, Richard@ARB <richard.corey@arb.ca.gov>; Bevan, Analisa@ARB <analisa.bevan@arb.ca.gov>; Fuentes, Mark@ARB <mfuentes@arb.ca.gov>; Bunker, Byron <bunker.byron@epa.gov>; Fuentes, Mark@ARB <mfuentes@arb.ca.gov>
Subject: RE: August 21 (Monday) - Monthly OTAQ/ARB Senior Leadership Coordination

Bill:

I'll be available and can tie in from Sacramento if we still have it. I can update you on what we have been doing about future requirements but that shouldn't take much time.

From: Charmley, William [mailto:charmley.william@epa.gov]
Sent: Friday, August 18, 2017 2:01 PM
To: Grundler, Christopher <grundler.christopher@epa.gov>; Cook, Leila <cook.leila@epa.gov>; Hengst, Benjamin <Hengst.Benjamin@epa.gov>; Haugen, David <haugen.david@epa.gov>; Simon, Karl <Simon.Karl@epa.gov>; Hebert, Annette@ARB <annette.hebert@arb.ca.gov>; Kitowski, Jack@ARB <jack.kitowski@arb.ca.gov>; Carter, Michael@ARB <michael.carter@arb.ca.gov>; Corey, Richard@ARB <richard.corey@arb.ca.gov>; Bevan, Analisa@ARB <analisa.bevan@arb.ca.gov>; Fuentes, Mark@ARB <mfuentes@arb.ca.gov>; Bunker, Byron <bunker.byron@epa.gov>; Fuentes, Mark@ARB <mfuentes@arb.ca.gov>; McCarthy, Mike@ARB <michael.mccarthy@arb.ca.gov>
Subject: August 21 (Monday) - Monthly OTAQ/ARB Senior Leadership Coordination

Dear all –

Our next monthly call if for this upcoming Monday from 12-1pm pacific, and 3-4pm eastern time.

I am available, and perhaps others from OTAQ, but I know that both Karl and Chris will either be on their way to California or in California for the Asilomar conference, so I don't think they can participate.

If we want to have the call that would be okay from my perspective, I can provide an update regarding the actions EPA has taken recently regarding the light-duty MTE, and then yesterday's actions regarding trailers and gliders.

I would appreciate hearing from others regarding the level of interest and availability for a call on Monday afternoon.

Thanks

Bill

-----Original Appointment-----
From: Grundler, Christopher
Sent: Friday, September 09, 2016 2:50 PM
To: Grundler, Christopher; Cook, Leila; Hengst, Benjamin; Charmley, William; Haugen, David; Simon, Karl; Ayala, Alberto@ARB; Hebert, Annette@ARB; jack.kitowski@arb.ca.gov; Carter, Michael@ARB; richard.corey@arb.ca.gov; analisa.bevan@arb.ca.gov; mark.fuentes@arb.ca.gov; Bunker, Byron
Cc: Fuentes, Mark@ARB; McCarthy, Mike@ARB
Subject: Monthly OTAQ/ARB Senior Leadership Coordination (866-299-3188, 202-564-1103)
When: Monday, August 21, 2017 3:00 PM-4:00 PM (UTC-05:00) Eastern Time (US & Canada).
Where: C174/Rm 6520

To: Grundler, Christopher[grundler.christopher@epa.gov]; Cook, Leila[cook.leila@epa.gov]; Hengst, Benjamin[Hengst.Benjamin@epa.gov]; Haugen, David[haugen.david@epa.gov]; Simon, Karl[Simon.Karl@epa.gov]; Hebert, Annette@ARB[annette.hebert@arb.ca.gov]; jack.kitowski@arb.ca.gov[jack.kitowski@arb.ca.gov]; Carter, Michael@ARB[michael.carter@arb.ca.gov]; richard.corey@arb.ca.gov[richard.corey@arb.ca.gov]; analisa.bevan@arb.ca.gov[analisa.bevan@arb.ca.gov]; mark.fuentes@arb.ca.gov[mark.fuentes@arb.ca.gov]; Bunker, Byron[bunker.byron@epa.gov]; steve.cliff@arb.ca.gov[steve.cliff@arb.ca.gov]; Fuentes, Mark@ARB[mfuentes@arb.ca.gov]; McCarthy, Mike@ARB[mmccarth@arb.ca.gov]; Marvin, Cynthia@ARB[cynthia.marvin@arb.ca.gov]
From: Charmley, William
Sent: Thur 9/14/2017 4:31:55 PM
Subject: Request for Agenda items for the September OTAQ/ARB Senior Leadership Coordination Call - scheduled for Monday, September 18 from 12-1pm Pacific

Dear all –

The September ARB-OTAQ monthly coordination call is scheduled for this upcoming Monday from 12-1 west coast/3-4 eastern.

This email is a request for Agenda Items

Below is an initial draft of potential Agenda items. If I could receive feedback on this by the end of the day on Friday in California, I'll send around a final version over the weekend.

I have added Steve Cliff to this email, and I forwarded to Steve the appointment scheduler (congratulations Steve on your new position).

I have also included Cynthia because there is an update on the marine ECA that I want to provide to Cynthia and Richard.

Best regards,

Bill

DRAFT Agenda Items

1. **North American Emission Control Area (ECA) Implementation** [Charmley]

2. **EPA Heavy-duty Phase 2 trailer & glider reconsideration rule** [Charmley]

3. **Report-out from CARB August 31 Heavy-duty Phase 2 Workshop** [Kitowski/Carter]

4. **EPA Light-duty Mid-term Evaluation Update** [Charmley]

5. **CARB Advanced Clean Cars 2026+ Update** [Cliff/Hebert/McCarthy]

6. **Other items**

-----Original Appointment-----

From: Grundler, Christopher
Sent: Friday, September 09, 2016 2:50 PM
To: Grundler, Christopher; Cook, Leila; Hengst, Benjamin; Charmley, William; Haugen, David; Simon, Karl; Ayala, Alberto@ARB; Hebert, Annette@ARB; jack.kitowski@arb.ca.gov; Carter, Michael@ARB; richard.corey@arb.ca.gov; analisa.bevan@arb.ca.gov; mark.fuentes@arb.ca.gov; Bunker, Byron
Cc: Fuentes, Mark@ARB; McCarthy, Mike@ARB
Subject: Monthly OTAQ/ARB Senior Leadership Coordination **Ex. 6 - Personal Privacy**
When: Monday, September 18, 2017 3:00 PM-4:00 PM (UTC-05:00) Eastern Time (US & Canada).
Where: C174/Rm 6520

MOVES

Motor Vehicle Emission Simulator

Update to running exhaust criteria pollutant emission rates for model year 2010+ heavy-duty diesel vehicles

Gurdas S. Sandhu and Darrell Sonntag

FACA MOVES Review Work Group | December 7, 2016 | Ann Arbor, MI

Outline

1. Motivation and Proposed Updates
2. Manufacturer-run heavy-duty in-use testing (HDIUT) - Overview and Data Description
3. Analysis Methodology
4. Preliminary Results - Production Volume Coverage, Activity, Cycle Total Emissions
5. Emerging Questions

Motivation
MOVES2014a NO_x Data Sources

		Regulatory Class			
Data Source	MYG	HHD	MHD	LHD	BUS
ROVER and Consent Decree Testing	1991-1997	19	-	-	2
	1998	12	-	-	-
	1999-2002	78	30	-	25
	2003-2006	91	32	-	19
HDIU	2003-2006	40	25	15	-
	2007-2009	68	71	24	-
Houston Drayage	1991-1997	8	-	-	-
	1998	1	-	-	-
	1999-2002	10	-	-	-
	2003-2006	8	-	-	-

HDIU: Heavy-duty in-use

Table 2-2 (pg 16) , *Exhaust Emission Rates for Heavy-Duty On-road Vehicles in MOVES2014*, EPA-420-R-15-015a, November 2015
https://www3.epa.gov/otaq/models/moves/documents/420r15015a.pdf

Proposed updates

- Update running emission rates for MY 2010+ heavy-duty vehicles.
  - Update NO_x, CO, and HC
  - Update energy use (which affects CO_2 emissions)
  - Currently do not plan to update PM due to limited data

Heavy-duty In-use Testing (HDIUT)*

- Each year, US EPA selects a few engine families with production volume ≥ 1,500 units
- Engine manufacturer contacts customers to recruit vehicles operating in the real-world that have the selected engine family
  - Typically, five vehicles are tested for each engine family
  - Vehicles have good maintenance history and no malfunction indicators on
  - Vehicle mileage within the Useful Life
    - 110K, 185K, 435K miles for light-/medium-/heavy- heavy-duty, respectively
- Engine manufacturer conducts emissions measurements and submits 1 Hz data to EPA
  - Vehicles are tested "in-use" – that is, doing normal work and operated by regular driver
  - Measurements made with instruments certified per 40 CFR 1065

* 40 CFR Part 86 Subpart T: Manufacturer-Run In-Use Testing Program for Heavy-Duty Diesel Engines.

Data Overview

- Service Class: Light-/Medium-/Heavy-Heavy-Duty Diesel (LHDD, MHDD, HHDD) and Urban Bus (URBU)
- MY 2010-2013 engine families
- Over 30 unique engine families
- Over 230 vehicles
- Over 6 million seconds of data
- Current work involves updating emission rates using HDIUT data from engines selected for testing in CY 2010-2014. Data for engines selected in 2015 is expected by January 2017 and the plan is to include it in the update.

Subset of Heavy-heavy-duty Vehicles (GVWR>33K+ lbs) in HDIUT

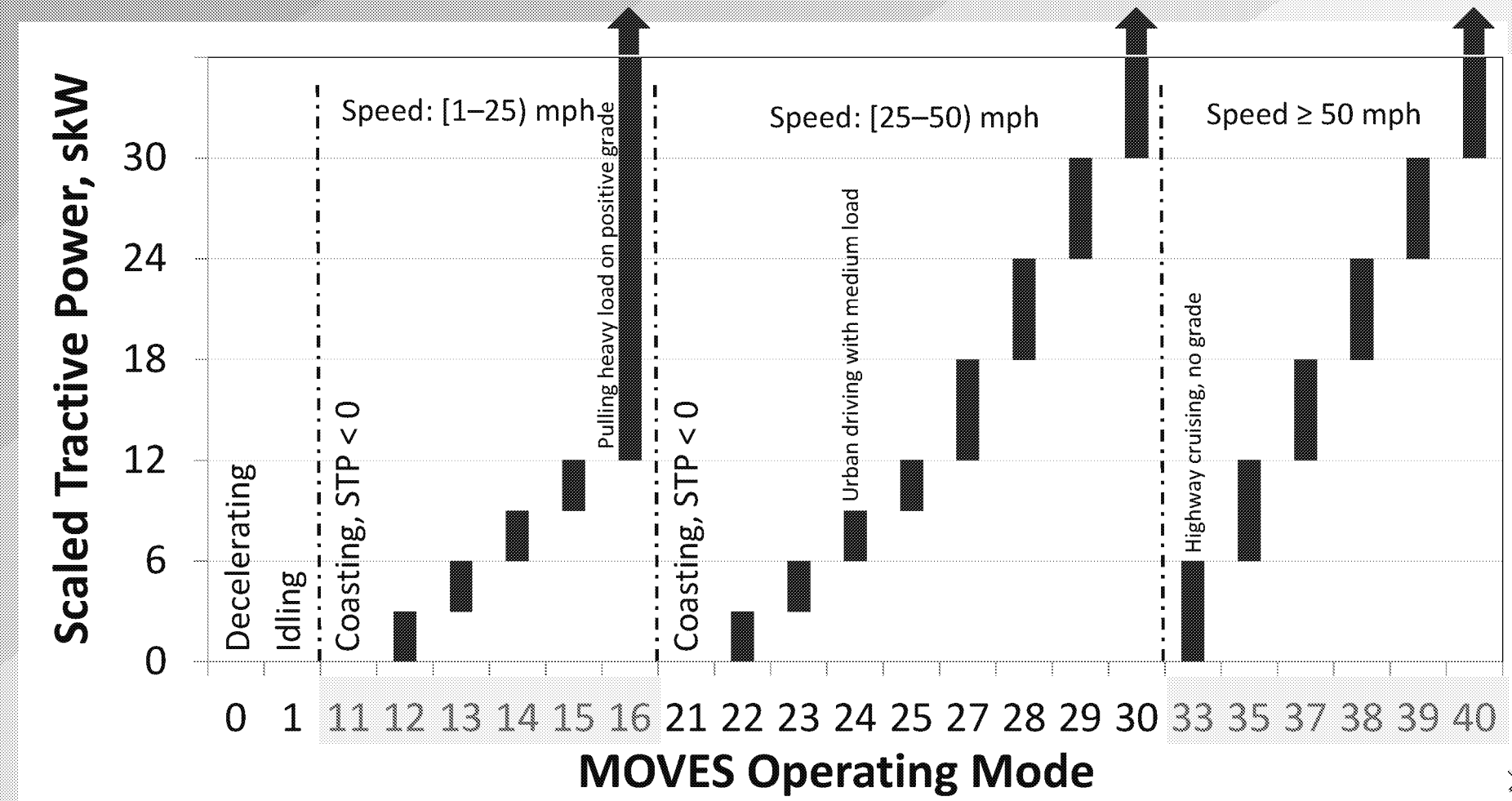
ID	Engine MY	Disp (L)	hp	Odo (10^3 mi)	Test Miles	Test Secs	Controls	Application
E1_T1	2010	15.0	475	246	266	23684	TC, CAC, EGR, DPF, SCR-U	Line Haul
E1_T3			475	268	330	30279		
E1_T4			475	261	153	27034		
E1_T5			475	324	258	39344		
E2_T1	2012	16.0	525	78	394	38039	TC, CAC, EGR, DPF, SCR-U, AMOX	Line Haul
E2_T2			575	127	253	31685		
E2_T3			525	153	322	39021		
E2_T4			525	107	317	33742		
E2_T5			525	166	393	36670		
E3_T1	2011	10.5	380	321	489	34241	TC, CAC, EGR, DPF	Delivery
E3_T2			400	205	190	23744		
E3_T3			380	206	325	34290		
E3_T4			400	131	191	35622		
E4_T1	2011	15.0	450	184	432	33474	TC, CAC, EGR, DPF	Delivery

TC: Turbocharger | CAC: Charge Air Cooler | EGR: Exhaust Gas Recirculation | DOC: Diesel Oxidation Catalyst
DPF: Diesel Particulate Filter | SCR-U: Selective Catalytic Reduction using Urea | AMOX: Ammonia Oxidation Catalyst

Overview of Emission Rates Update Method

- Vehicle activity and emission rates are mapped onto an operating mode (OpMode) modal model.
- For each vehicle tested:
  - OpModes are assigned to each second of real-world emissions data based on estimated power demand at the wheel
  - Average the emissions from all seconds assigned the same OpMode
- Emission rates are estimated by service class (LHDD, MHDD, HHDD, URBU). Within a service class, emission rates are grouped by NO_x family emission limit (FEL) and weighted by the production volume for the same NO_x FEL groups.

MOVES Operating Modes (OpMode)



MOVES Scaled Tractive Power: ECU Torque

$$P_{eng} = \omega_{eng} \tau_{eng}$$

$$P_{axle} = \eta_{driveline} (P_{eng} - P_{loss,acc})$$

$$STP = \frac{P_{axle}}{f_{scale}}$$

P_{eng} – engine out power

W_{eng} – engine angular speed

T_{eng} – ECU reported engine out torque

$N_{driveline}$ – driveline efficiency (90%)

$P_{loss,acc}$ – power loss due to accessory loads

P_{axle} – power at the wheel

F_{scale} – scaling factor (used to align STP values for OpMode bins with the VSP values from light-duty analysis)

Accessory load losses

Table 2-4. Estimates of accessory load in kW by power range

Engine power	HDT	MHD	Urban Bus
Low	8.1	6.6	21.9
Mid	8.8	7.0	22.4
High	10.5	7.8	24.0

Accessory loads for LHDD are assumed negligible.

Engine Power (of max hp)	Vehicle Speed: Low (0-25 mph)	Vehicle Speed: Mid (25-50 mph)	Vehicle Speed: High (above 50 mph)
Lowest Third	Cooling Fan Air cond. Engine Access. Alternator Air Compress	Air cond. Engine Access. Alternator Air Compress	Air cond. Engine Access. Alternator
Middle Third	Cooling Fan Air cond. Engine Access. Alternator Air Compress	Cooling Fan Air cond. Engine Access. Alternator Air Compress	Air cond. Engine Access. Alternator
Highest Third	Cooling Fan Air cond. Engine Access. Alternator Air Compress	Cooling Fan Air cond. Engine Access. Alternator Air Compress	Cooling Fan Air cond. Engine Access. Alternator

Bradley, Ron. "Technology Roadmap for the 21st Century Truck Program." U.S. Department of Energy: Energy Efficiency and Renewable Energy, Washington, D.C., December 2000

Engine Family Name

BCEXH0912XAQ

"base engine family"

Model year (1-9 = 2001-2009, A-Y = 2010-2030 with I,O,Q,U,Z absent)

EPA assigned manufacturer code

Industry sector (H = HD highway diesel >8,500 lbs GVWR)

Engine Displacement (liters XX.X or cubic inches XXXX)

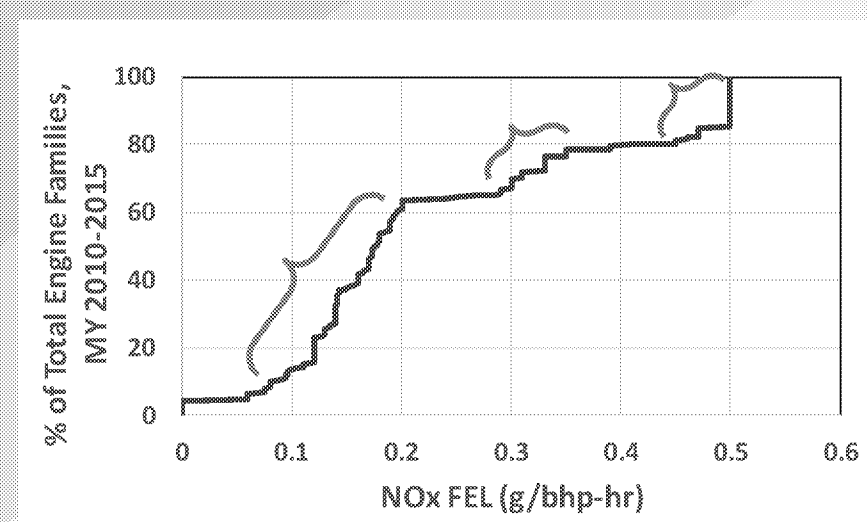
Manufacturer assigned characters

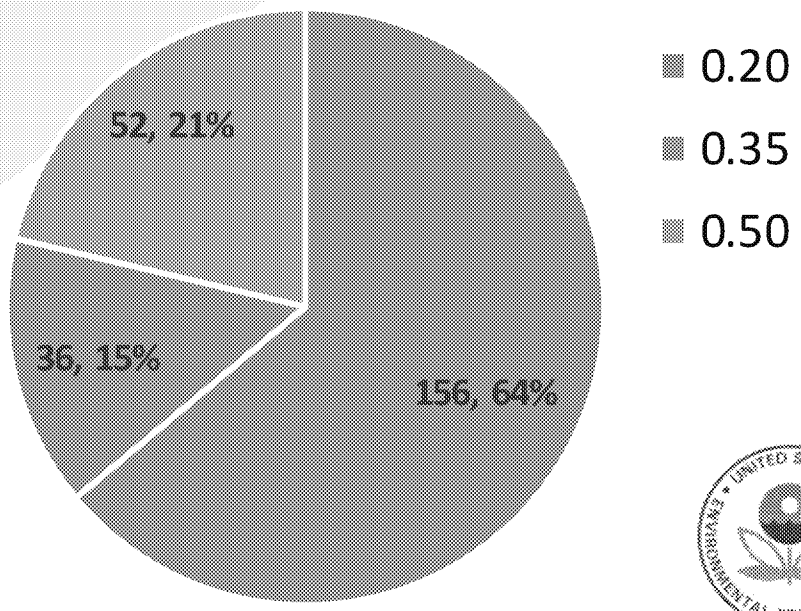
40CFR86.096-24(a)(1): Engine families are "expected to have similar emission characteristics throughout their useful life."

Engine Families Grouped by NO_x FEL

- Group engines within a service class by NO_x FEL.
- NO_x FEL grouping is applied across all pollutants because NO_x FEL data is more widely available and best captures the differences in emission levels.
- Find average emission rates for the given NO_x FEL group and weight it by the production volume for the same group for a given MY.

Group Name	NO_x FEL Limits (g/bhp-hr)
0.20	(0.00, 0.20]
0.35	(0.20, 0.35]
0.50	(0.35, 0.50]





HDIUT Data: Number of Tests

	0.20	0.35	0.50	Total
LHDD	42	0	10	52
MHDD	16	23	10	49
HHDD	65	21	35	121
URBU	0	10	0	10
				232

Method to Estimate Production Volume Weighted Emission Rate, MY 2010-2015

$$ER_{C,MY,pol} = \frac{\sum_{FEL}(ER_{C,pol,FEL} \times PV_{C,MY,FEL})}{PV_{C,MY}}$$

Service Class (C) = LHDD, MHDD, HHDD

Model Year (MY) = 2010 to 2015

Pollutant (pol) = NOx, HC, CO

FEL = NO_x FEL of engine family, grouped in to 0.2g/bhp-hr, 0.35g/bhp-hr, and 0.5g/bhp-hr.

$ER_{C,MY,pol}$ = Emission Rate (ER) for a given Class (C), Model Year (MY), and Pollutant (pol).

$ER_{C,pol,FEL}$ = Emission rate by class, pollutant, and NOx family emission limit (FEL). This is average of all HDIUT data for all engines meeting the *C,pol,FEL* criteria.

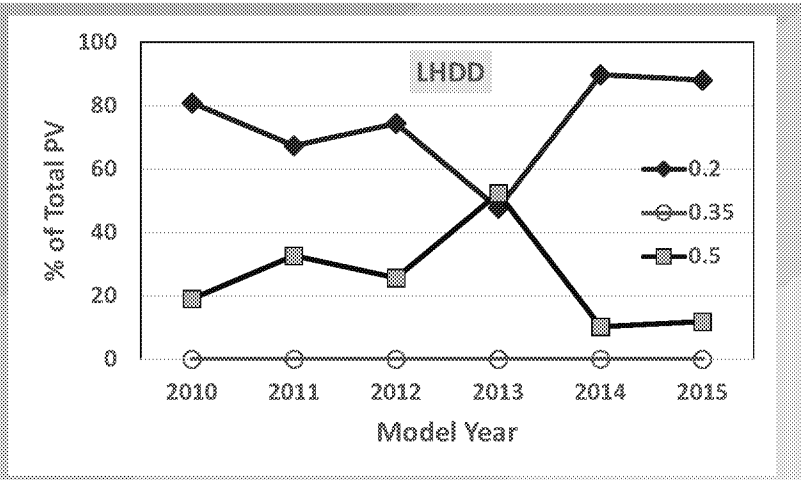
$PV_{C,MY,FEL}$ = Production volume by class, model year, and NOx FEL group

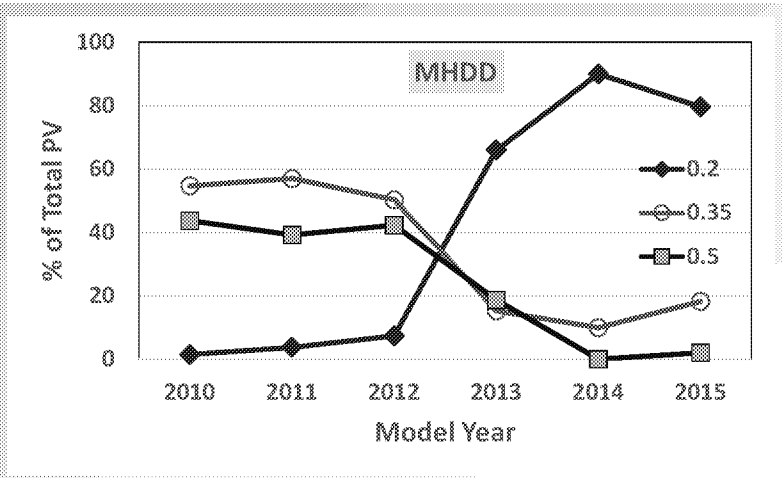
$PV_{C,MY}$ = Total production volume for a class and model year

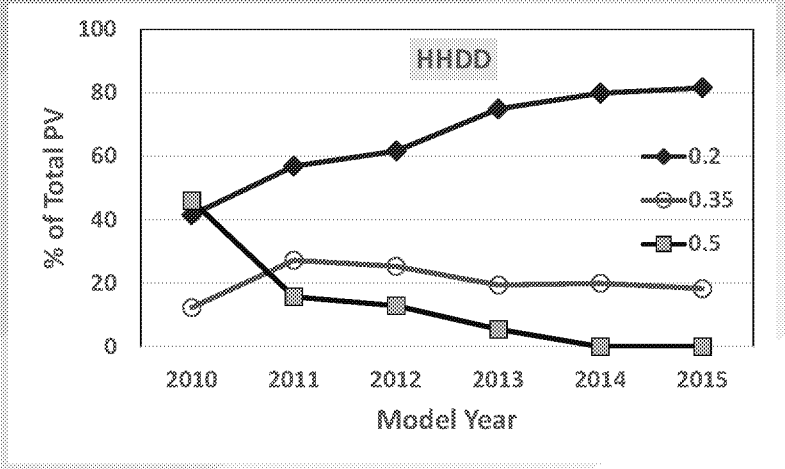
Method to Estimate Production Volume Weighted Emission Rate

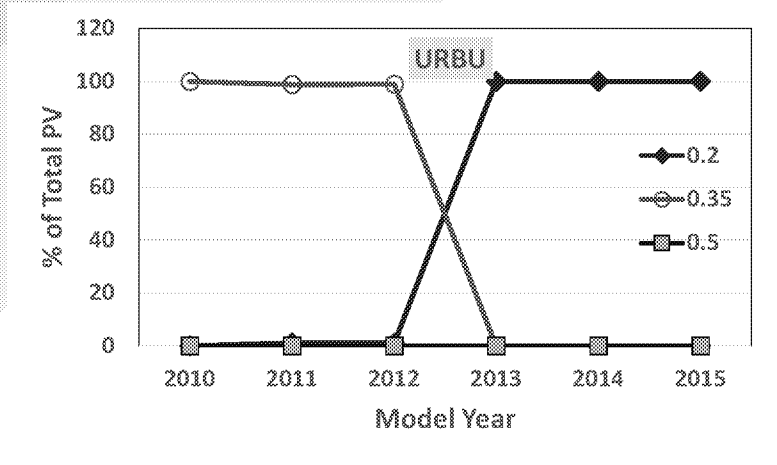
- HDIUT emissions data is not split by model year. The assumption is that engines within a service class and NOx FEL group have the same emissions profile across model years.
- However, the final emissions rates are by model year because they include the production volume weighting by model year.
- URBU rates will be based on HHDD data due to sparse URBU data

Production Volume by NOx FEL Group



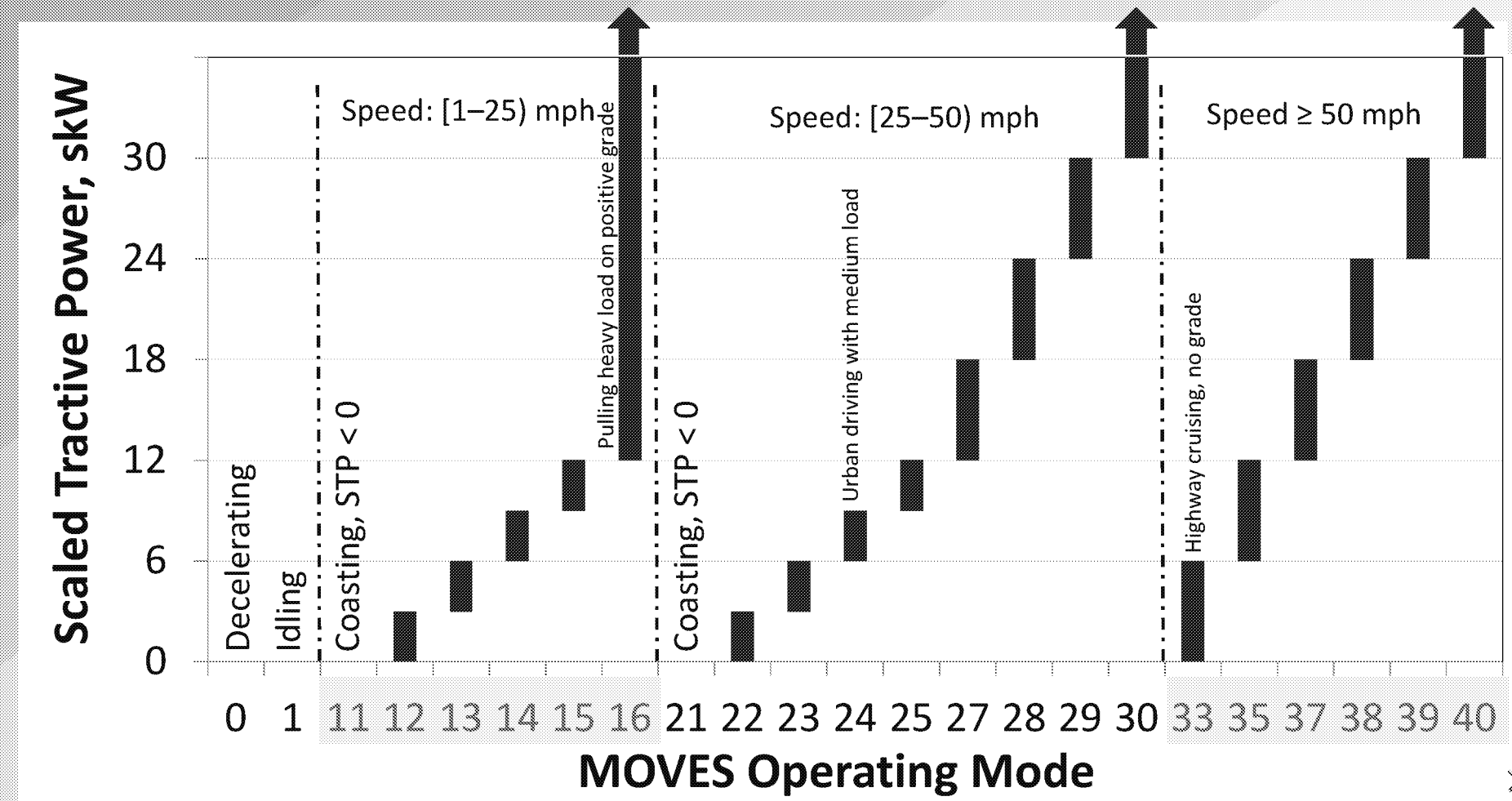






Q: How to assign production volume distribution, by FEL NOx groups, for future years?

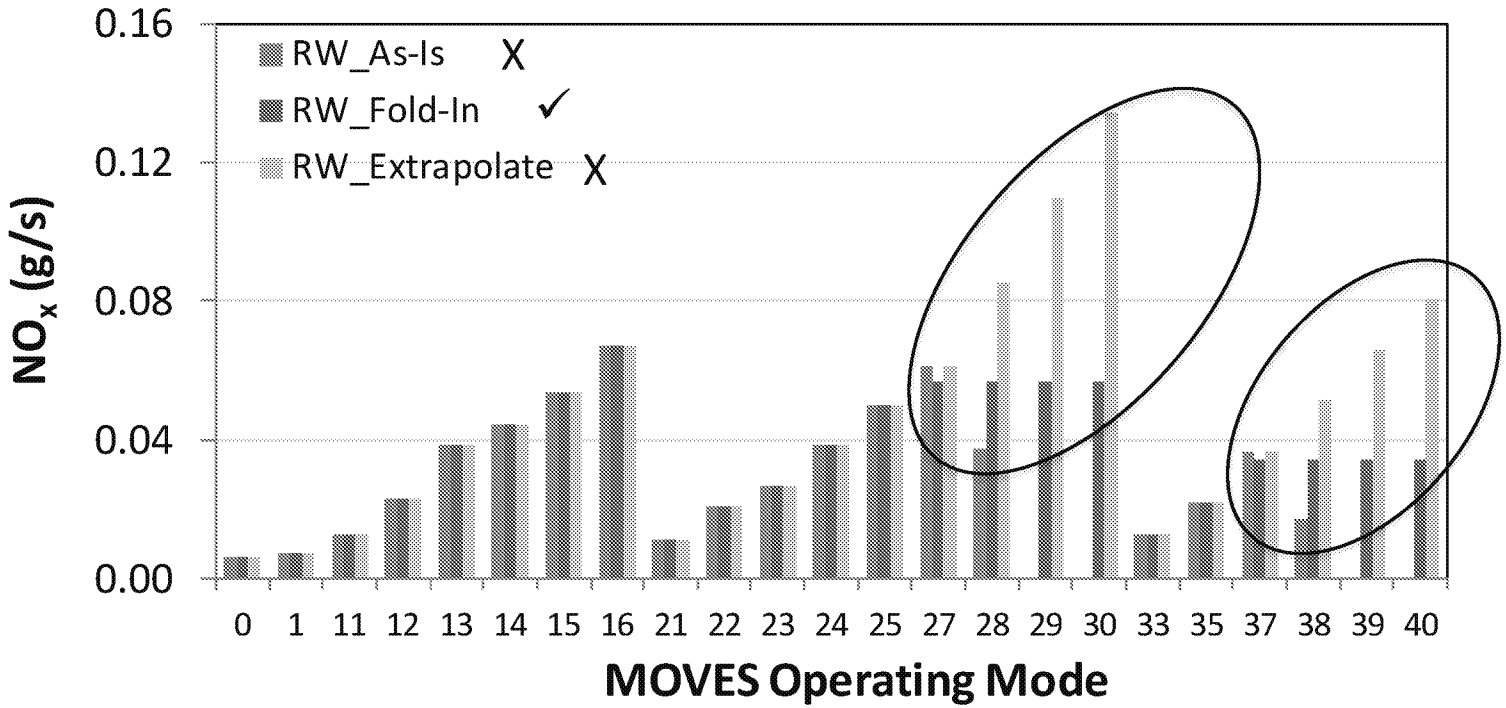
MOVES Operating Modes (OpMode)



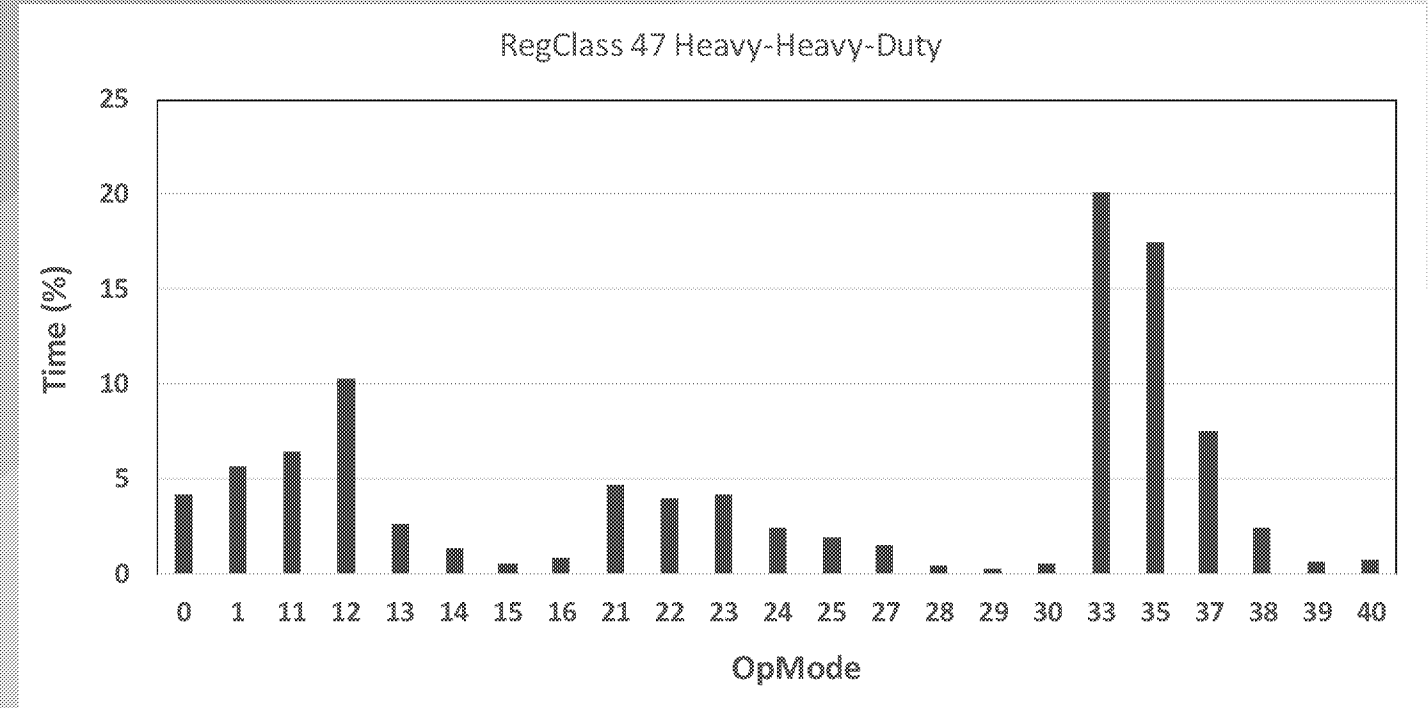
Gap-filling Emission Rates for High Power OpModes

- MOVES estimates little activity in the high power OpMode bins (28-30 and 38-40); and real-world (RW) data often lacks these modes as well.
- In MOVES 2014, the emission rates for these OpMode bins were calculated from emission rates of the highest OpMode with sufficient data (27 or 37) and then "extrapolated" based on STP mid-point values.
- For the next version of MOVES, rates from sparse data OpMode bins are folded-in with highest power OpMode with sufficient data. The "fold-in" is achieved, for the participating OpModes, by taking a sum-product of time and emission rates per OpMode and dividing by total time across OpModes.
- This "fold-in" emission rate is assigned to all participating OpMode bins, including and upward of the highest OpMode with sufficient data.
- The cycle total emissions from the "fold-in" method are identical to real-world "as-is"

Gap-filling Emission Rates for Higher OpModes



OpMode Distribution for Heavy-heavy-duty - MOVES National Mode Run, CY2016



Scale: Onroad, National, Inventory

Time Spans: Year, CY 2016, All Months, Weekend and Weekday, All Hours

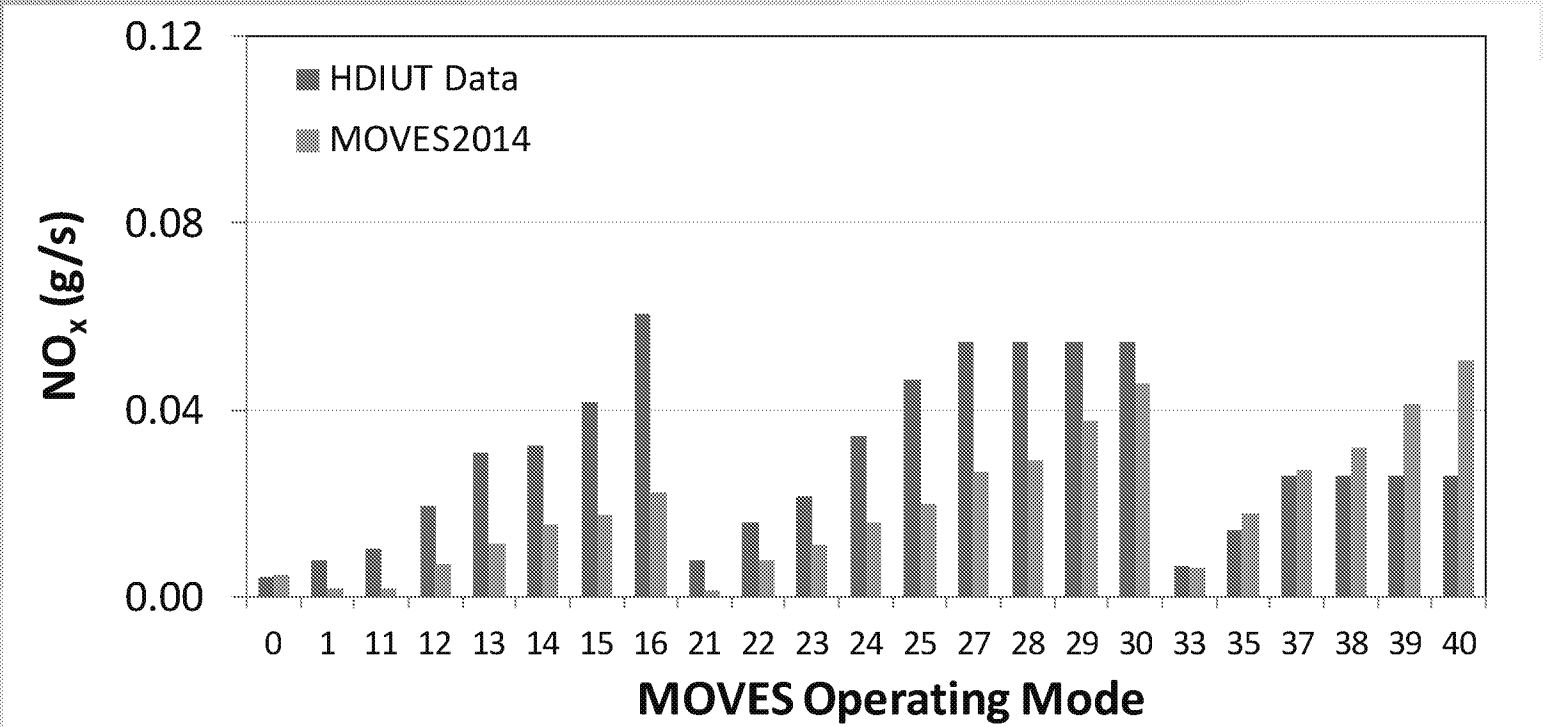
Geographic Bounds: Nation

Vehicles: Diesel Fuel

Road Type: Rural and urban, Restricted and Unrestricted

Preliminary result: NO_x for Heavy-heavy-duty

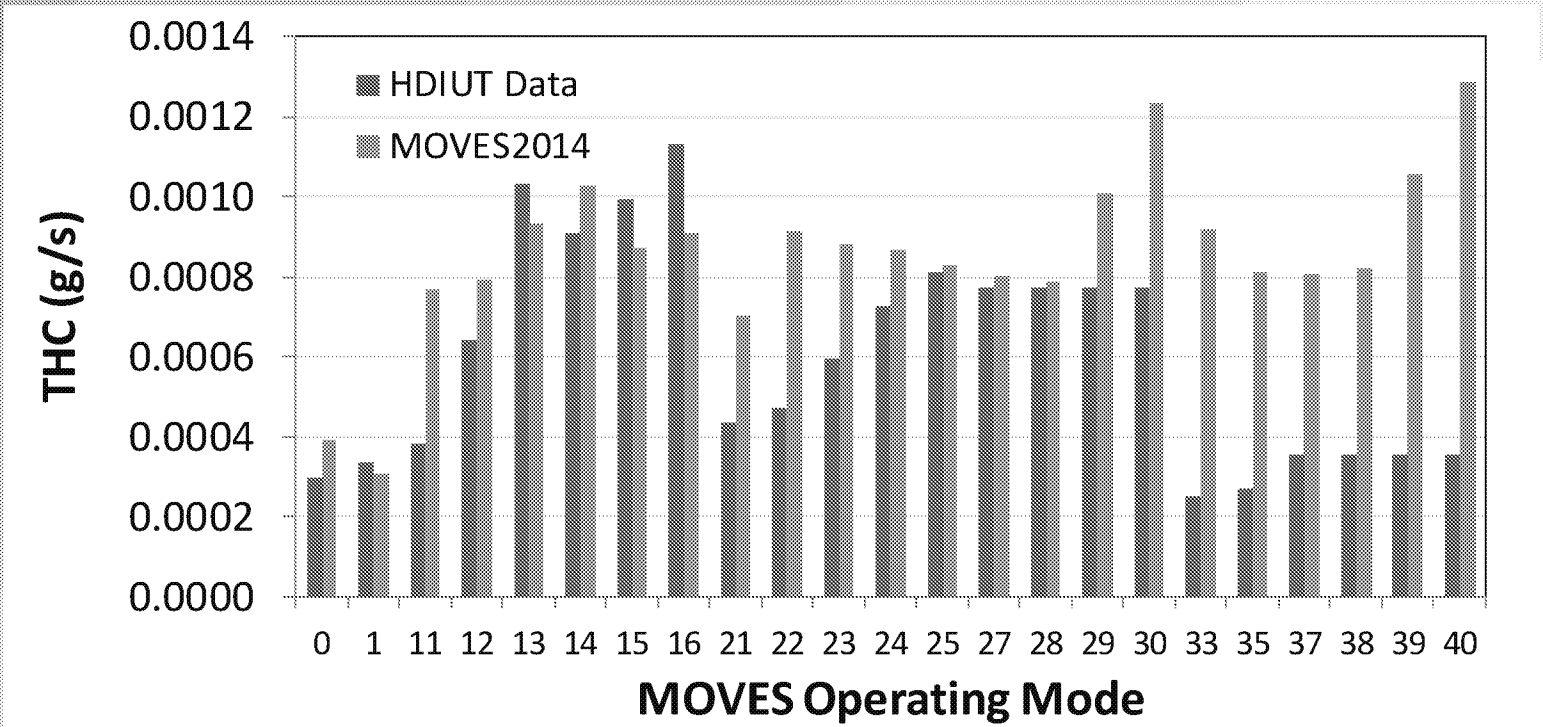
For the OpMode distribution in slide 21, HDIUT data rates lead to a **42% increase** in cycle total NO_x emissions over MOVES2014 rates.



These *preliminary results* are based on 10 trucks, of which nine are certified for 0.2 g/hp-hr while one is certified for 0.5 g/bhp-hr.

Preliminary result: THC for Heavy-heavy-duty

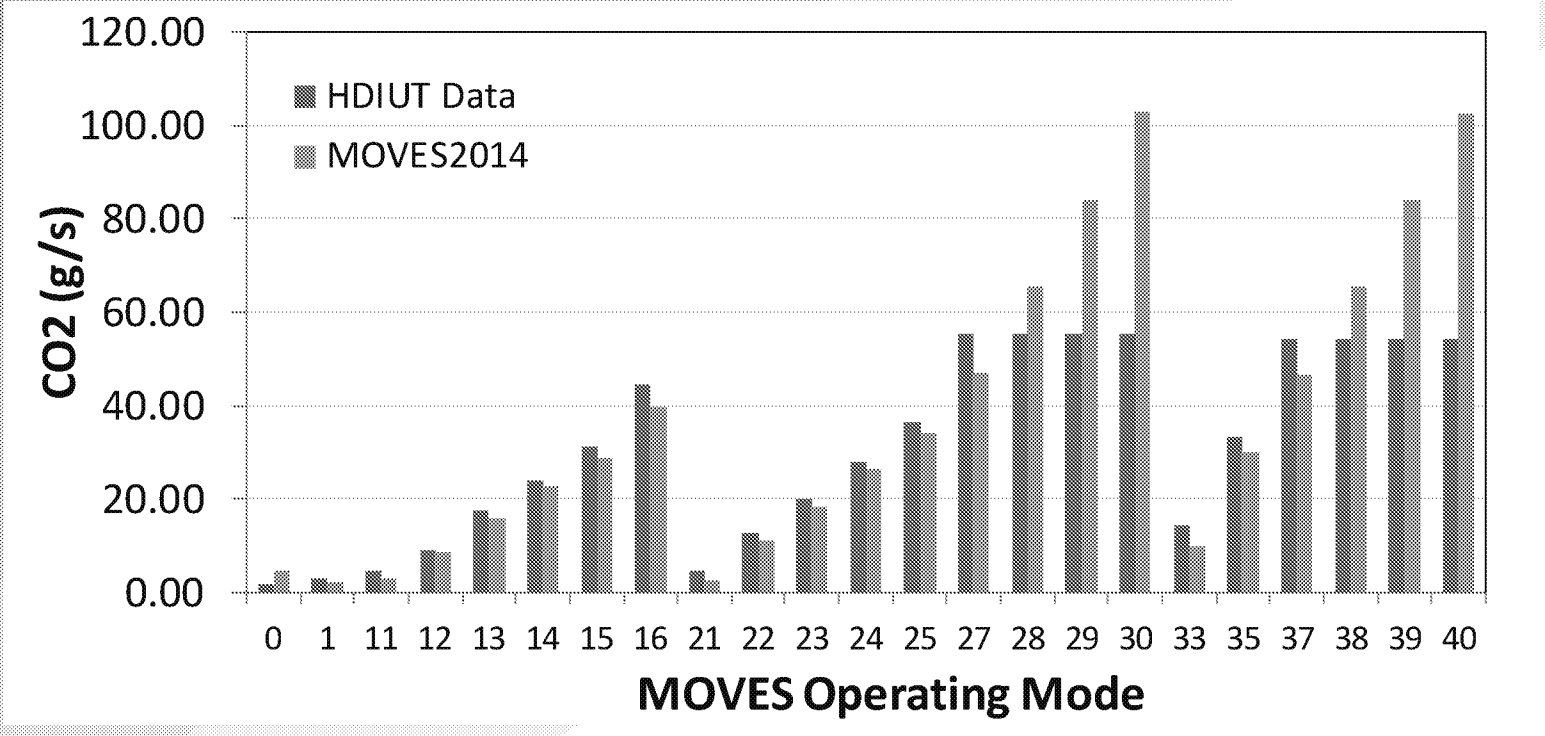
For the OpMode distribution in slide 21, HDIUT data rates lead to a **47% decrease** in cycle total THC emissions over MOVES2014 rates.



These *preliminary results are* based on 10 trucks, of which nine are certified for 0.2 g/hp-hr while one is certified for 0.5 g/bhp-hr.

Preliminary result: CO_2 for Heavy-heavy-duty

For the OpMode distribution in slide 21, HDIUT data rates lead to a **8% increase** in cycle total CO_2 emissions over MOVES2014 rates.



These *preliminary results are* based on 10 trucks, of which nine are certified for 0.2 g/hp-hr while one is certified for 0.5 g/bhp-hr.

Next Steps

- Complete analysis of all HDIUT data and compile emission rates by RegClass
- Estimating the impact of mal-maintenance and high-emitters
- Conduct MOVES runs to estimate impact from updated emission rates on national inventory
- Possibility to include data from other sources, based on timing, for running emissions, deterioration rates, start emissions.

Emerging Questions

- **Analysis Methods:** Improve accessory loss estimates for newer trucks.
- **DPF Regeneration:** What is the frequency of DPF regeneration? Where to assign this in a driving cycle? What is the impact on cycle total emissions and speciation?
- **Deterioration and Failure:** Is deterioration linear? What are the types of failures – severity and associated impact? What, if any, are the cross-effects - failure in one control device affecting other downstream control devices?
- **Control Strategies:** What are the effects of improvements in thermal management, catalyst treatments, and dosing optimization strategies on emissions profile of newer model year vehicles compared to first generation systems?
- **Driving Cycles:** While formulating representative driving cycles in itself is not an emerging question, the issue is highlighted by concerns of reduction in emission control efficiency during low-load and off-cycle operation. How well do our driving cycles represent low-load and off-cycle operation?
- **History Effects:** Continuing on the theme of driving cycles, how can a modal model such as MOVES represent/capture the real-world influence of past vehicle condition on current emission profile?
- **Assigning OpMode:** Driving cycles are converted to OpMode distribution based on equations that use road-load coefficients or driveline efficiency and auxiliary power losses. What are representative road-load coefficients and auxiliary power losses for the truck fleet as the fleet transitions to more aerodynamic chassis, efficient powertrains, and lower resistant tires?

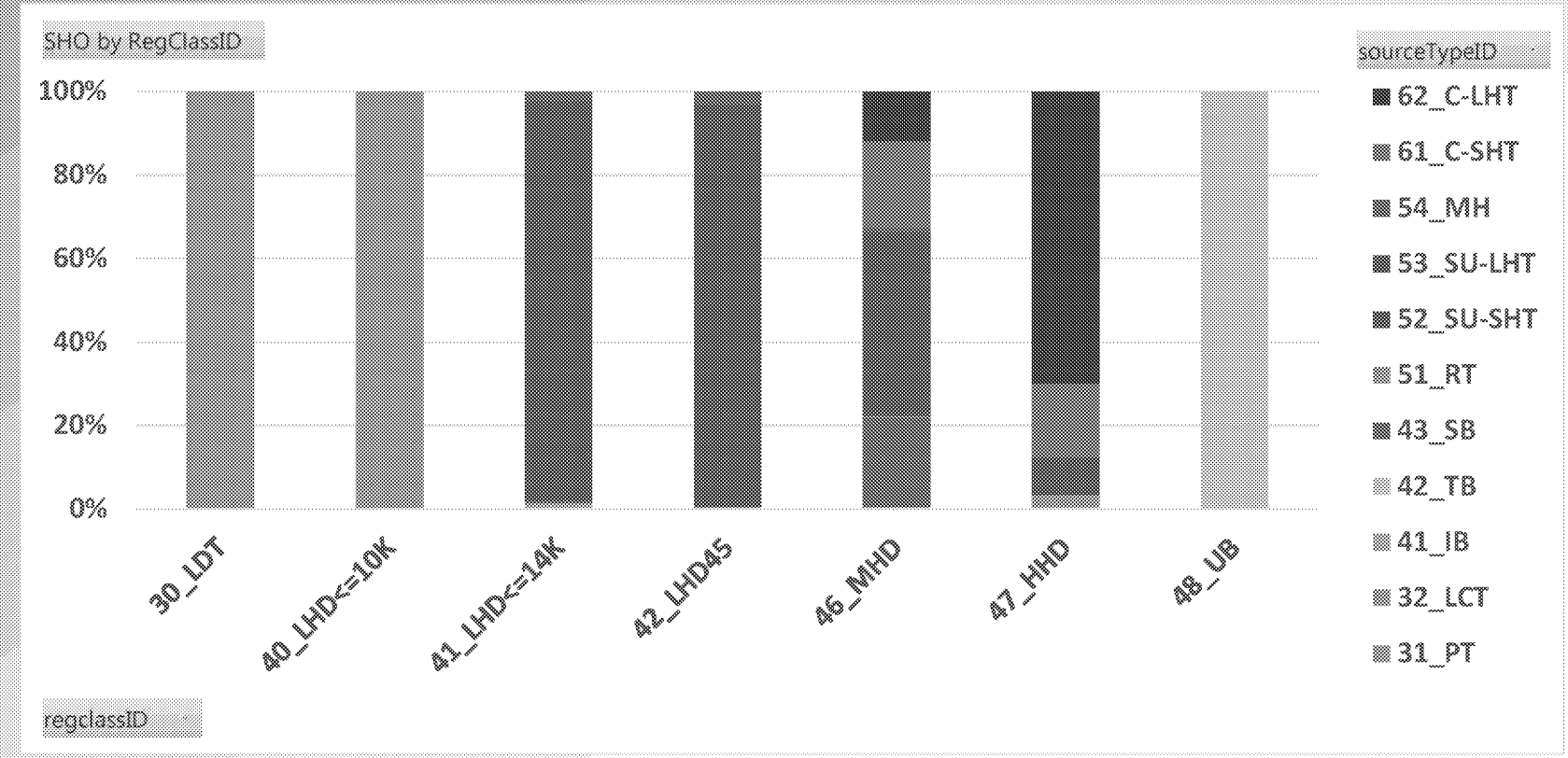
Extra Slides

MOVES Scaled Tractive Power: Road-load Coeff

$$STP_t = \frac{Av_t + Bv_t^2 + Cv_t^3 + mv_t a_t}{f_{scale}}$$

STP_t	=	scaled tractive power at time t, skW
A	=	rolling resistance coefficient [kW-s/m]
B	=	rotational resistance coefficient [kW-s^2/m^2]
C	=	aerodynamic drag coefficient [kW-s^3/m^3]
a_t	=	vehicle acceleration at time t [m/s^2]
m	=	vehicle mass [metric ton]
v_t	=	vehicle speed at time t [m/s]
f_{scale}	=	scaling factor, unitless

Source Hours Operating for CY 2016 by RegClassID



RegClass 47 is **heavy-heavy-duty**. On a source hours operating (SHO) basis, RegClass 47 is comprised of 88% combination trucks, 8% single-unit trucks, and remaining refuse trucks and buses.

HDIUT Data Coverage of Total Production Volume

- Of the total engines produced in a year, how many are covered by the HDIUT data?
- For any engine family, if HDIUT data includes emissions from the "base" engine family, then full coverage of that particular engine family's production volume is assumed.

% Coverage	0.2						0.35						0.5						AVG
	2010	2011	2012	2013	2014	2015	2010	2011	2012	2013	2014	2015	2010	2011	2012	2013	2014	2015	
LHDD	100	100	100	100	99	100							100	98	78	100	100	100	98
MHDD	92	100	80	0	6	4	100	100	100	0	0	0	26	51	23	0	0	0	32
HHDD	85	87	86	68	37	36	90	89	88	0	0	0	100	71	24	23			57
Urban Bus		0	0	0	0	0	61	82	82										50
AVG	87	91	90	45	34	35	96	95	94	0	0	0	77	68	34	35	99	72	55

- Example: HDIUT data includes emission rates from base engine families that constitute 86% of the total production volume of MY 2012 HHDD engines with NOx FEL 0.2 g/bhp-hr.
- However, there are categories (shaded grey) where the coverage is below 10% <u>and</u> production volume is more than 100 units.

% Coverage	0.2	0.35	0.5	AVG
LHDD	100		93	98
MHDD	7	72	29	32
HHDD	59	44	68	57
Urban Bus	0	78		50
AVG	53	57	57	**55**

MOVES

Motor Vehicle Emission Simulator

Updated emission rates for extended idle & auxiliary power units (APUs)

Darrell Sonntag and David Choi

Extended Idle Activity in MOVES

- Hotelling
  - Time spent in layovers between trips where the truck is used as a residence, with a stopped duration of more than one hour
- Extended idle
  - Idling that occurs during hotelling
  - Can include higher engine speed settings and use of accessories by the vehicle operator
- Auxiliary power units (APUs)
  - Optional power source (A/C, heat, and auxiliary power) during hotelling without idling the main engine
- Diesel long-haul combination trucks are only vehicle types with extended idle and APU use in MOVES

Updates to Extended Idle Emission Rates and Activity

- Extended idling activity and MY 2007+ extended idle emission rates were updated in the regulatory version of MOVES used for the final HD GHG Phase 2 rulemaking
- We propose making the same updates in the next version of MOVES
  - Additional details in USEPA (2016) in references

Hotelling Activity Operating Modes

- The assumption for the penetration of diesel and battery APUs was updated in HD GHG Phase 2 final rulemaking
- Based on:
  - Industry data
  - Projected use of APUs to meet the GHG Phase 2 standards for MY 2021 and later trucks

	MOVES2014		HD GHG Phase 2	
Model Years	Diesel APU Penetration	Battery APU Penetration	Diesel APU Penetration	Battery APU Penetration
2009 and earlier	0%		0%	0%
2010-2020			9%	
2021-2023	30%	0%	30%	10%
2024-2026			40%	
2027+				15%

Extended Idle Emission Rate Datasets (1/2)

1. Texas Transportation Institute (TTI, 2014)
   - 15 heavy-duty diesel tractors (2005-2012 model years)
   - Tested in environmental chamber under hot and cold conditions
   - Used 'stabilized' extended idle emission rates
     - Trucks soaked overnight for 12-hours under ambient conditions, no pre-conditioning driving
     - Trucks idled for at least one hour, until emissions reached a 'stabilized' condition
     - No other auxiliary loads besides A/C or heater
     - Trucks were not commanded to be in the 'high-idle' state
     - Two of the cold tests, the trucks had high RPM (>1000 rpm) during the cold test from a 'cold ambient protection' engine control strategy

Test ID	Temperature	Relative Humidity	Auxiliary Load
Hot	100°F (37.8°C)	70%	Air conditioning
Cold	30°F (-1.1°C)	N/A	Heating System

Extended Idle Emission Rate Datasets (2/2)

2. California Air Resources Board (ARB, 2015)
   - 5 heavy-duty diesel tractors (2007 and 2010 model years)
   - Extended Idle emission rates from the 10-minute 'Idle' mode from the ARB HHDDT 4-mode cycle
   - Before testing the 'Idle' mode, the vehicle was first warmed on a pre-conditioning cycle, and then soaked from 10-20 minutes
   - Testing occurred in the laboratory at moderate temperatures with no auxiliary loading

- Note: After we completed this analysis, ARB shared with us additional emissions tests they have conducted on four 2011-2014 trucks (with idling times ~ 1 hr)
  - New ARB program had similar average NOx idling emissions as the ARB, 2015 study we used
    - 20.5 g/hr (ARB, 2015)
    - 23.4 g/hr (new ARB data)

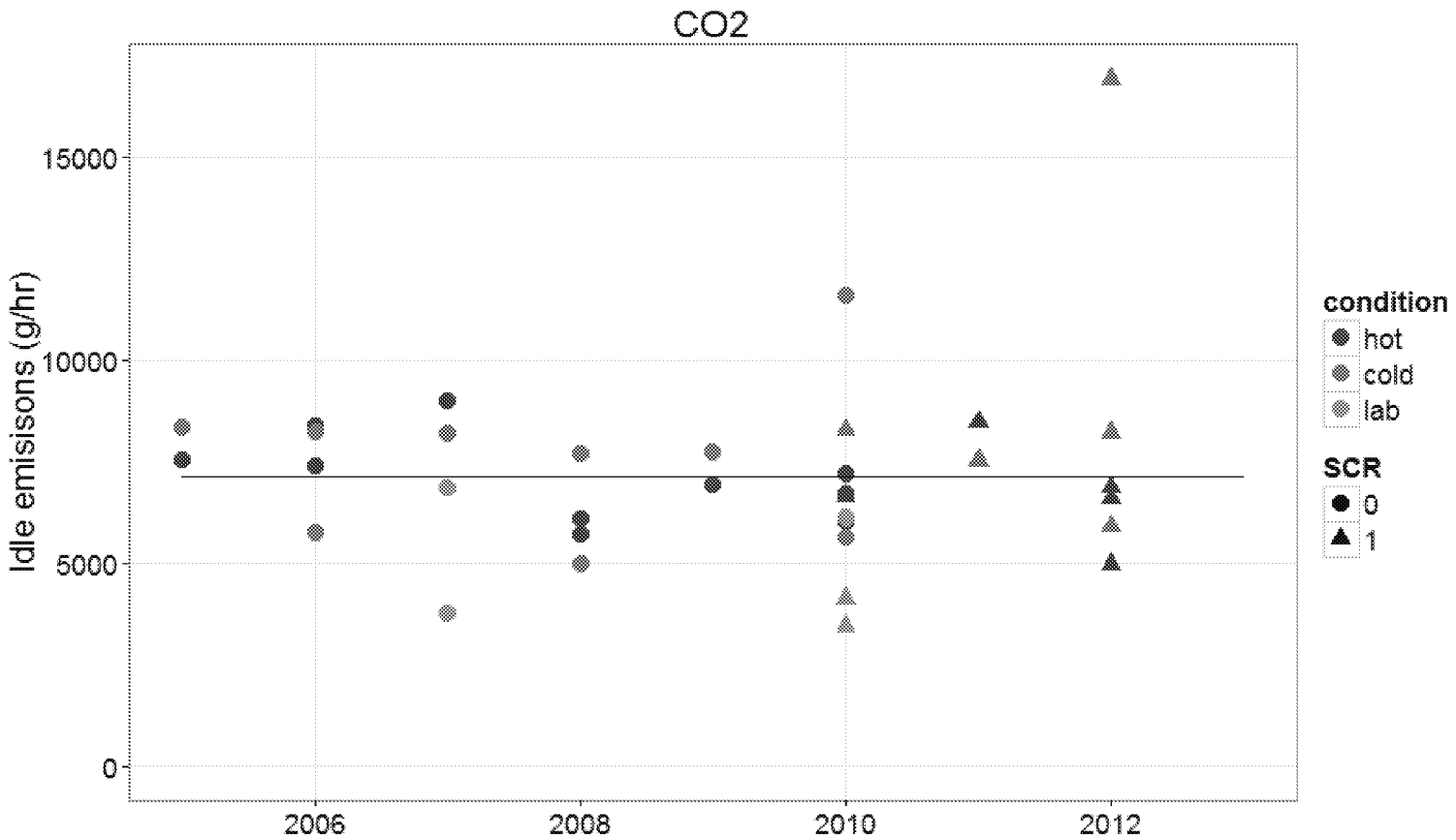
Heavy-duty trucks from the TTI and ARB studies

Study	Engine MY	Engine	Odometer	NOx cert (g/bhp-hr)	Clean Idle Certified?	Aftertreatment
TTI	2005	Caterpillar	484,550	2.4	No	OC
TTI	2006	Cummins	505,964	2.4	No	
TTI	2006	Volvo	640,341	2.4	No	
TTI	2007	Cummins	406,740	1.2	No	OC, DPF
ARB	2007	Cummins	390,000	2.2	No	OC, DPF
ARB	2007	DDC	10,700	1.2	No	OC, DPF
TTI	2008	Cummins	353,945	2.4	Yes	OC, DPF
TTI	2008	Mack	82,976	1.2	Yes	DPF
TTI	2009	Mack	96,409	1.2	Yes	OC, DPF
TTI	2010	Mack	89,469	0.2	Yes	OC, DPF, SCR
TTI	2010	Navistar	73,030	0.5	Yes	OC, DPF
TTI	2010	Navistar	57,814	0.5	Yes	OC, DPF
TTI	2010	Navistar	10,724	0.5	Yes	OC, DPF
ARB	2010	Cummins	13,500	0.35	Yes	OC, DPF, SCR
ARB	2010	Navistar	70,000	0.5	Yes	OC, DPF
ARB	2010	Volvo	68,000	0.2	Yes	OC, DPF, SCR
TTI	2011	Mack	95,169	0.2	Yes	OC, DPF, SCR
TTI	2012	Mack	6,056	0.2	Yes	OC, DPF, SCR
TTI	2012	Mack	11,989	0.2	Yes	OC, DPF, SCR
TTI	2012	Mack	25,148	0.2	Yes	OC, DPF, SCR

Data Analysis

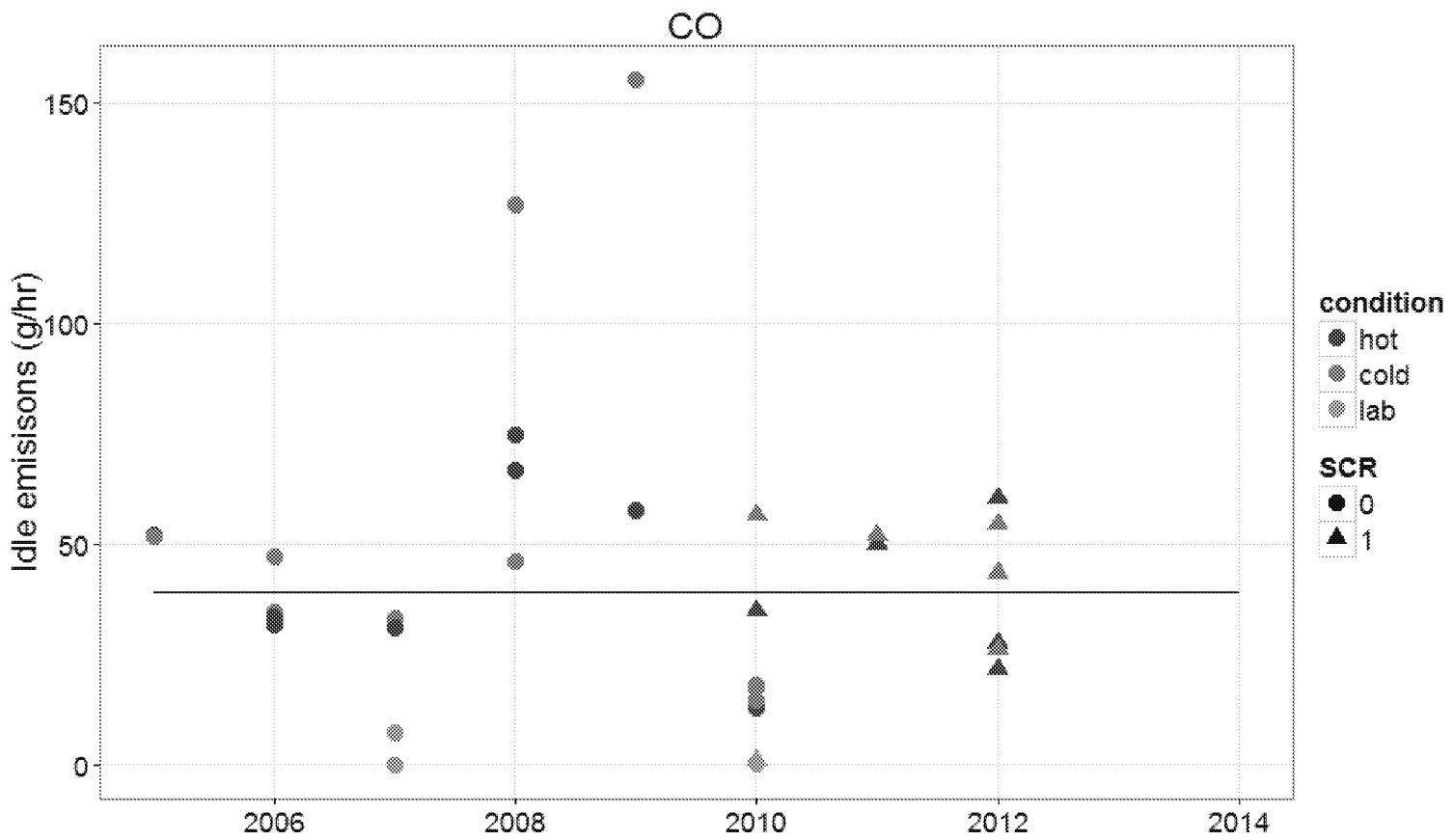
- Emission rates from all the tests are plotted by:
  - Model year
  - Test Conditions: Cold (TTI), Hot (TTI), Lab (ARB)
  - Selective Reductive Catalyst (SCR)
    - More explanatory than diesel particulate filter (DPF) or oxidation catalyst (OC)
- Compute the average, treating each test equally
    - TTI: 15 trucks X 2 conditions = 30 tests
    - ARB: 5 trucks X 1 condition = 5 tests
- Average weighted significantly towards the TTI tests
  - We believe the TTI tests to be more representative of real-world extended idle conditions in the nation, compared to ARB tests
- Compute separate averages by model year ranges where trend is evident in data

CO2 Extended Idle Emission Rates



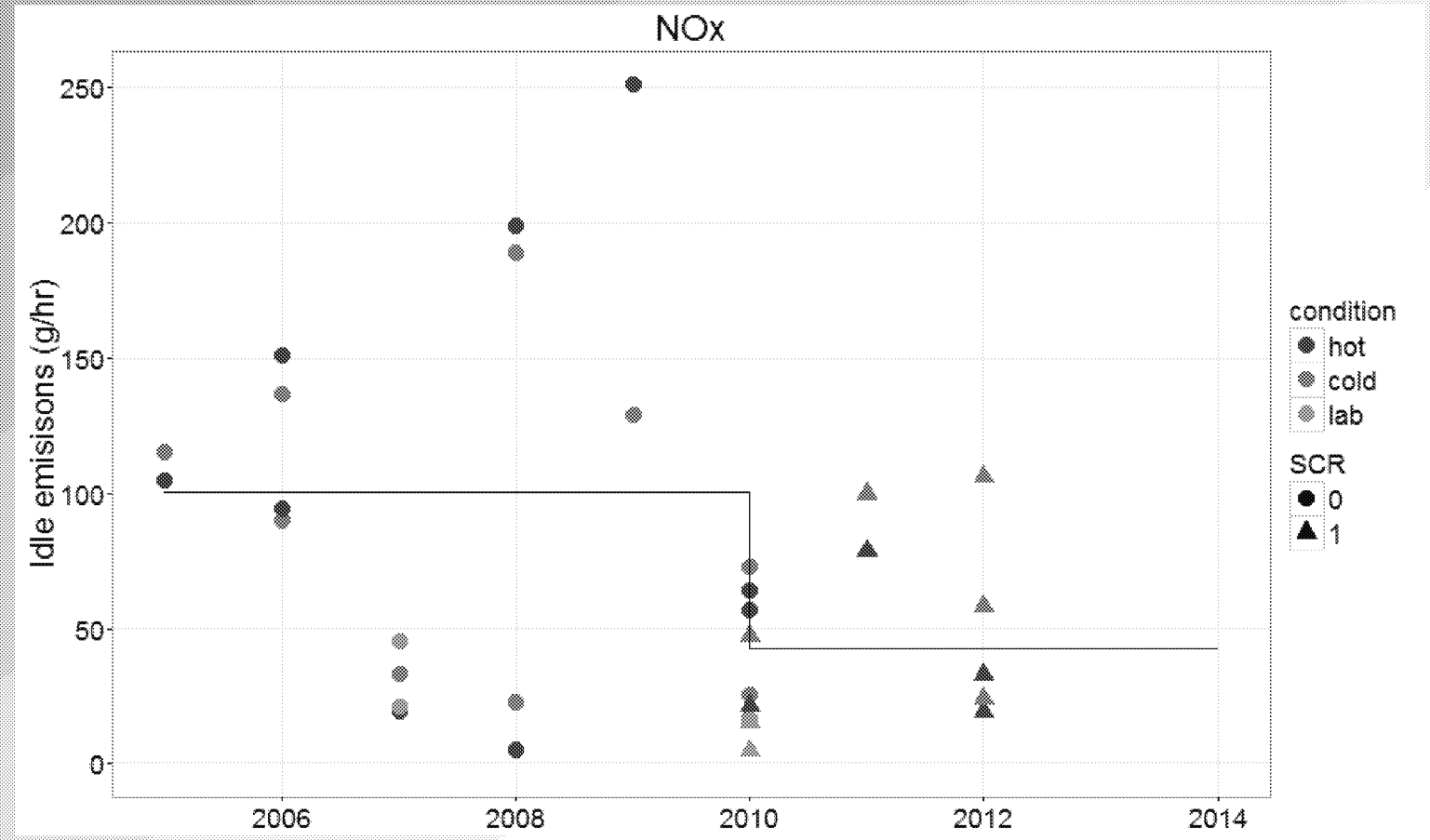
Proposal: Use single average (7,151 g/hr) for all 2007+ trucks

CO Extended Idle Emission Rates



Proposal: Use single average (39.3 g/hr) for all 2007+ trucks

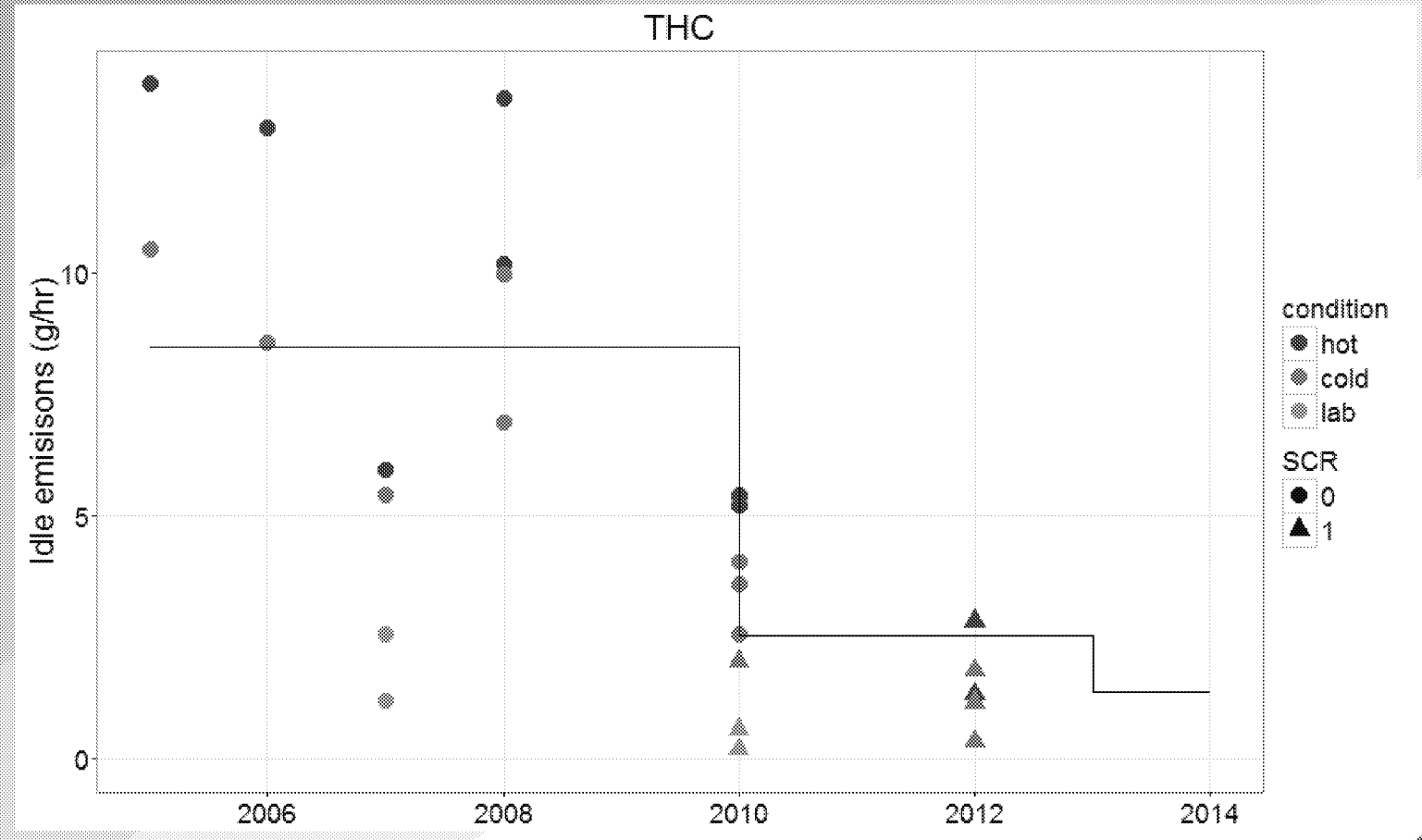
NOx Extended Idle Emission Rates



Proposal: Two groups: 2007-2009 (100.4 g/hr) and 2010+ (42.6 g/hr)

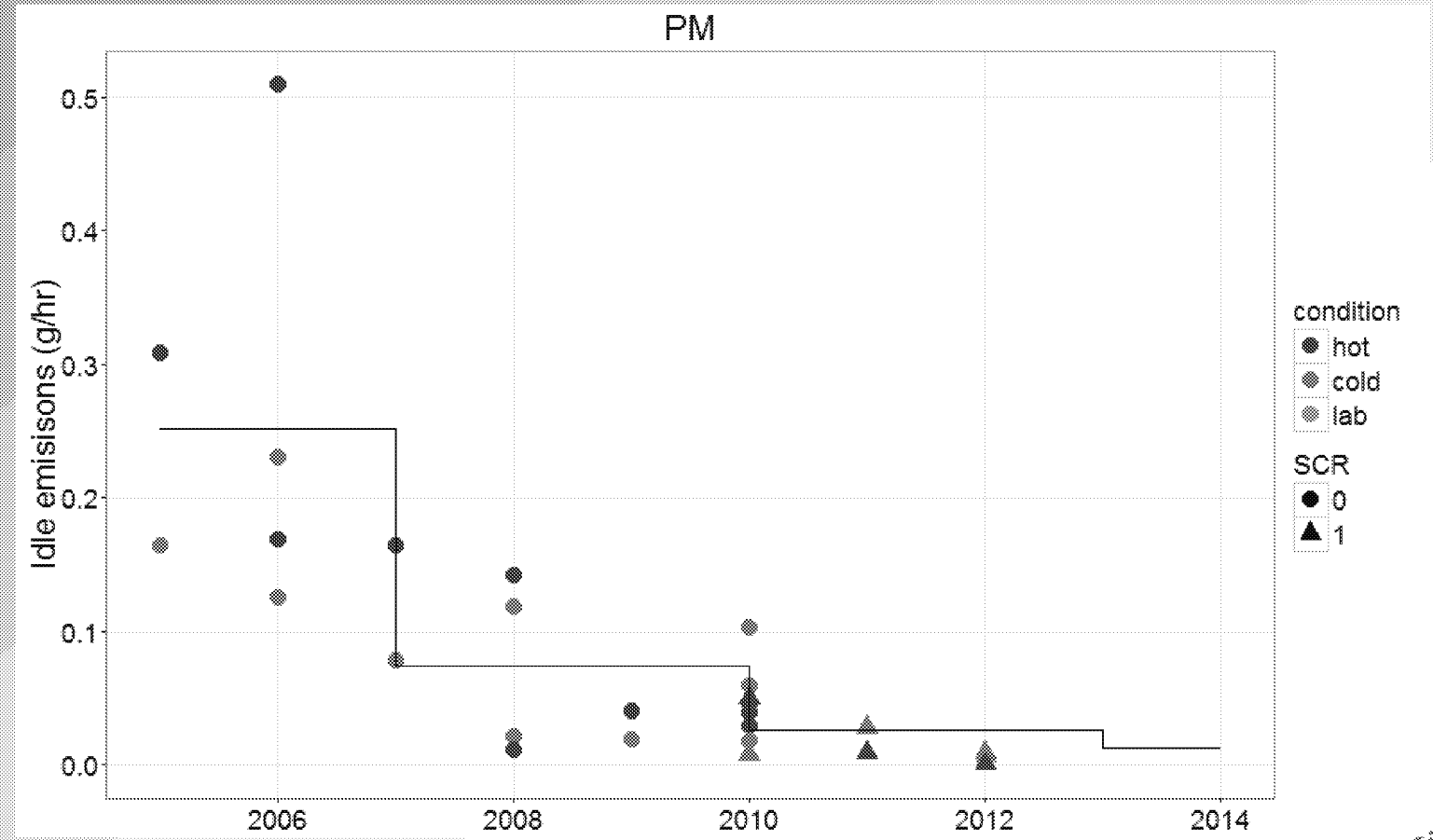
- 2010 and later trucks are certified to lower standards
- Average of 2010+ trucks are lower than the pre-2010 emission rates

THC Extended Idle Emission Rates



Proposal: Three groups: 2007-2009, 2010-2012, 2013+ (SCR only)

PM2.5 Extended Idle Emission Rates



Proposal: Four groups: 2005-2006, 2007-2009, 2010-2012, 2013+ (SCR only)

PM2.5 Extended Idle Emission Rates

- Elemental carbon to PM2.5 fraction (EC/PM) assumed for extended idling

Model Year Group	EC/PM	Source
Pre-2007	0.26	MOVES2014
2007-2009	0.10	ACES Phase I[a]
2010+	0.16	ACES Phase II[b]

Advanced Collaborative Emissions Study (ACES)

[a]Khalek, Imad, Thomas L Bougher and Patrick M. Merritt. *Phase 1 of the Advanced Collaborative Emissions Study (ACES)*. SwRI Project No. 03.13062. Southwest Research Institute, San Antonio, TX; Coordinating Research Council (CRC), Alpharetta, GA; Health Effects Institute, Boston, MA. June 2009. http://www.crcao.org/reports/recentstudies2009/ACES%20Phase%201/ACES%20Phase1%20Final%20Report%2015JUN2009.pdf

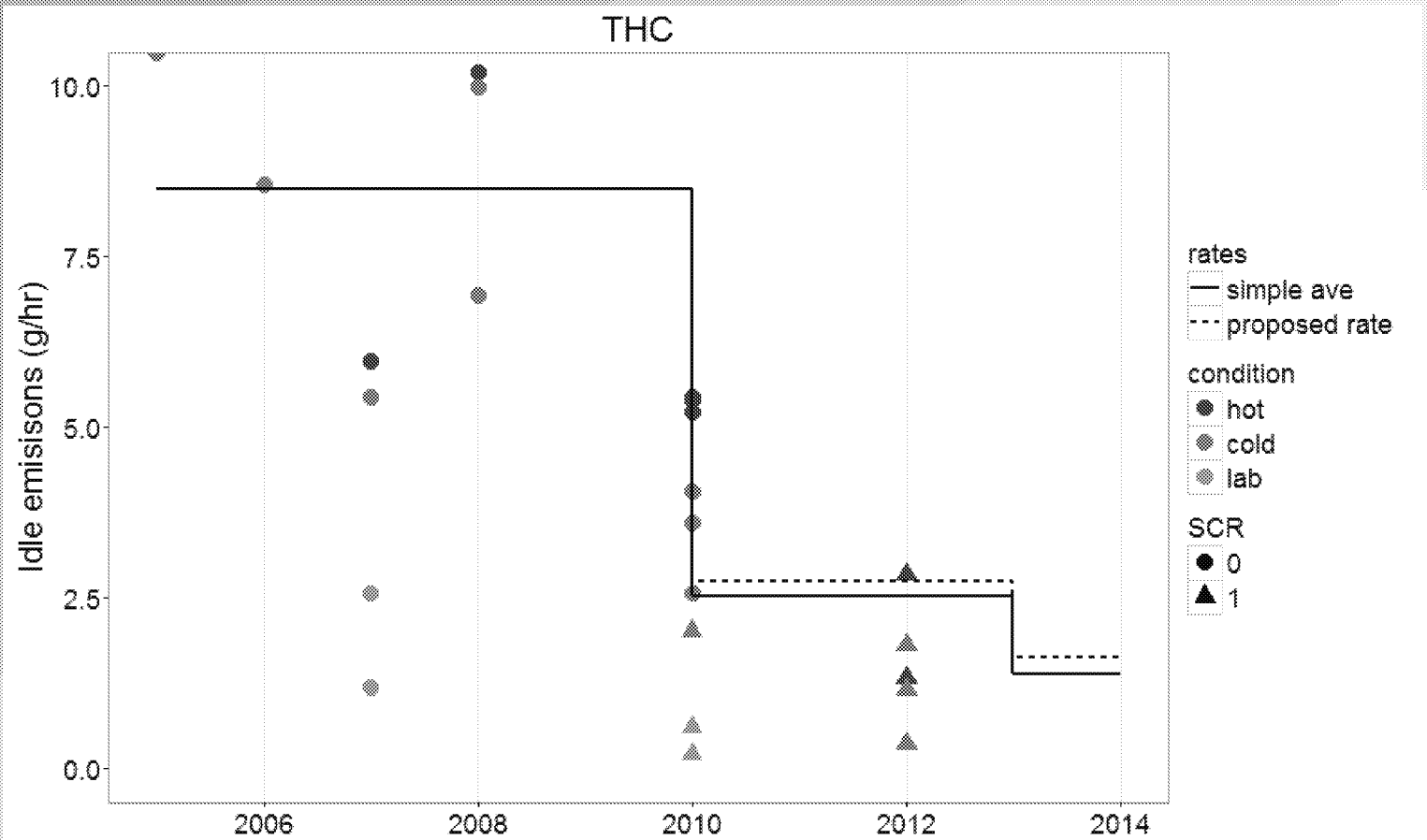
[b]Khalek, I. A., M. G. Blanks, P. M. Merritt and B. Zielinska (2015). Regulated and unregulated emissions from modern 2010 emissions-compliant heavy-duty on-highway diesel engines. Journal of the Air & Waste Management Association, 65 (8), 987-1001. DOI: 10.1080/10962247.2015.1051606.

DPF Deterioration

- We estimated deterioration of emissions in calculating the THC and PM2.5 emission rates for 2007-2009, 2010-2012, and 2013+ model years
  - THC and PM2.5 extended idle emissions demonstrated the largest reductions in 2007 and 2010 and later trucks
  - Believed to be due to continued effectiveness of the diesel particulate filter (DPF) under extended idle conditions
- We estimated the emissions deterioration due to DPF failure
  - We assume that deterioration of properly functioning engine is small compared to the increase in emissions to component failure (tampering and mal-maintenance)
- Assumed DPF failure rate[1] by the end of the engine useful life
  - 10% in 2007-2009 MY
  - 5% for 2010+ MY
- We incorporated the impact of age & deterioration into a single emission rate for extended idle
  - Unlike running and start emission rates, MOVES does not have separate extended idle emission rates by different age
  - 2005-2006 average emission rates used to represent the 'failed' DPF emission rates
  - Assume long-haul combination trucks have a lifetime of 1,530,000 miles
  - Assume failures occur after the end of the engine useful life (435,000 miles)

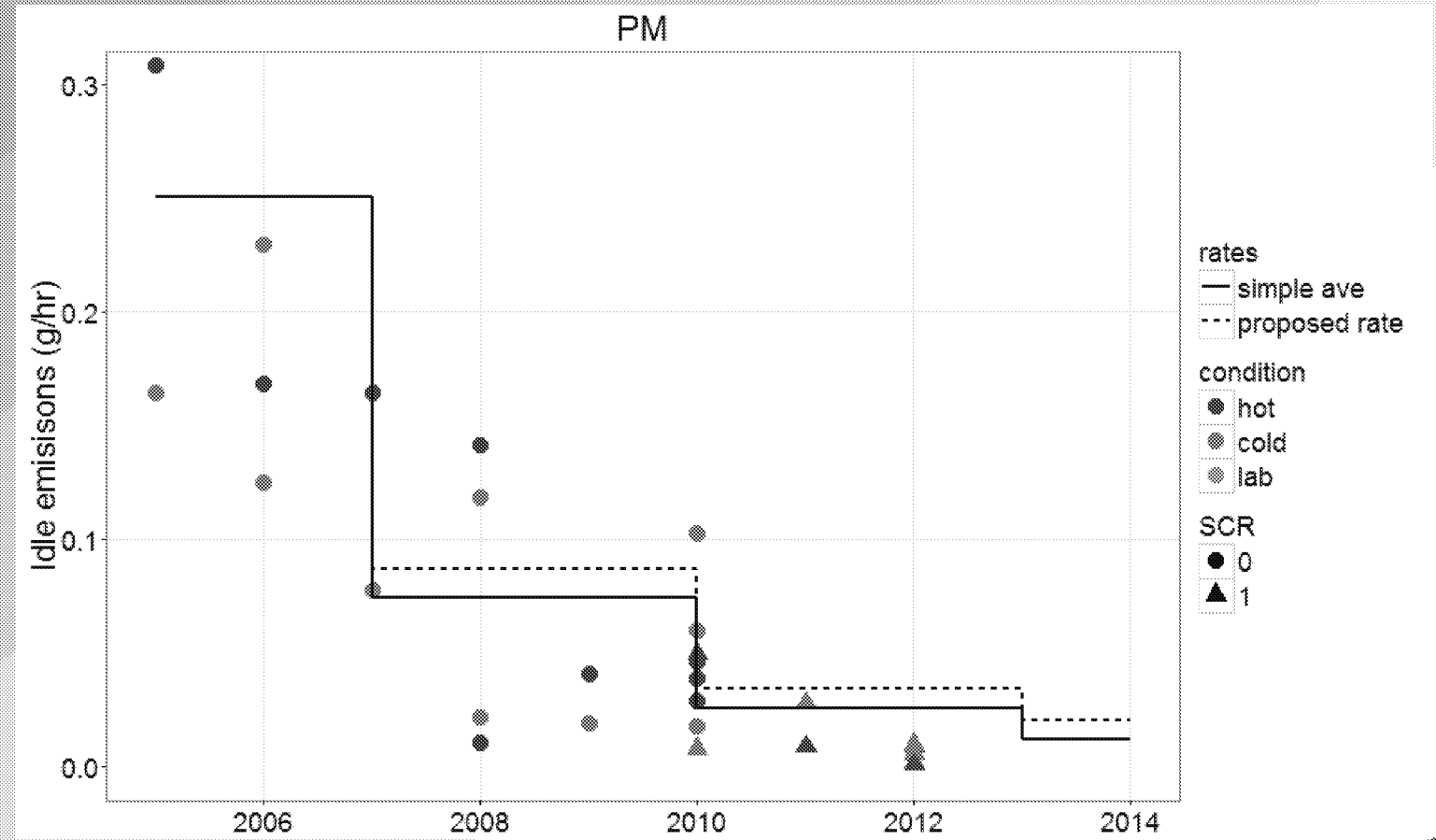
[1]Based on correspondence with ARB and supported with review of data sources listed in the Appendix

Proposed THC Extended Idle Emission Rates



Including deterioration assumption increases THC emissions in the proposed rates by 8% in 2010-2012, and 18% in 2013+

Proposed PM2.5 Extended Idle Emission Rates



Including deterioration assumption increases PM2.5 emissions in the proposed rates by 17% in 2007-2009, 31% in 2010-2012 and 69% in 2013+

Proposed Extended Idle Emission Rates

Model Year Group	CO_2 (g/hr)	CO (g/hr)	NOx (g/hr)	THC (g/hr)	$PM_{2.5}$ (g/hr)	EC (g/hr)	nonEC (g/hr)	EC/PM
2007-2009	7151	39.3	100.5	8.5	0.087	0.012	0.076	0.13
2010-2012	7151	39.3	42.6	2.7	0.034	0.006	0.028	0.18
2013+	7151	39.3	42.6	1.6	0.021	0.004	0.017	0.20

- Applied to both heavy-heavy duty (HHD) and medium heavy-duty (MHD) long-haul diesel trucks

Next Steps: Extended Idle

- We could revise analysis to include additional data sets collected on extended idling trucks
  - Replacing the previous ARB data with new ARB data would have small impact on NOx emission rates
  - Revising methodology (e.g. place additional “weight” on the new ARB data), would have a larger impact on the NOx emission rates

Auxiliary Power Unit Emission Rates

- Emissions data are more limited
- MOVES2014 used an APU emission rate taken from the NONROAD model for small Tier 4 compliant nonroad diesel engine

APU Emission Rate Datasets

1. TTI (2014)
   - One diesel APU system (APU ID 1) with and without diesel particulate filter
     - During testing, the second APU system was found defective and results were removed from analysis
   - Tested in environmental chamber under hot and cold conditions

Test ID	Temperature
Hot	100°F
Cold	0°F

2. Frey and Kuo (2009)
   - 2 APU systems (APU ID 2 and APU ID 3) tested under a range of electric output loads
   - Measured APU electric loads from a fleet of 20 long-haul trucks for over a year
   - Used relationship between energy demand of the APU to estimate average APU emission rates for mild and high temperature scenario

Scenario	Temperature
Hot	100+°F
Mild	50-68°F

APU System Information

Study	APU ID	Engine Model	Engine Year	Displacement (L)	Power (HP/kW)	Tier
TTI 2014	1	Kubota Z482	2011	0.48	14.2/11	Tier 4
Frey and Kuo 2009	2	Kubota Z482	2006	0.48	10.9/8.1	Tier 2
	3	Kubota Z482	2006	0.48	10.9/8.1	Tier 2

- Secondary datasets: TTI (2012) and Storey et al. (2013)
  - Tested at hot and cold conditions
  - These studies had incomplete information regarding the APU systems
  - Used as comparative datasets

Observations on the APU emission rates

- Large impact on PM emissions with use of DPF for APU 1
- No notable emission effects between:
  - Emission standard tier (Tier 2 vs Tier 4)
  - Engine model year
  - Gaseous emission rates with DPF
- Ambient temperature
  - Larger fuel use, NOx, and PM at cold and hot conditions compared to ambient conditions (APU 2 and 3)
  - No consistent trends with respect criteria pollutants (CO, NOx, THC, and PM) between cold and hot conditions
- Results from the primary dataset are in the range of the secondary (comparative) dataset
  - Data shown in appendix

Average APU Emission Rates

- First, we calculated the non-DPF equipped APU emission rates from Study 1 and 2 by the ambient conditions (cold, hot, and mild)

Ambient condition	Temperature	CO_2	CO	NOx	THC	PM	Fuel
	(˚F)	(g/hr)	(g/hr)	(g/hr)	(g/hr)	(g/hr)	(gal/hr)
Cold	0	4340	7.27	18.59	1.35	0.96	0.43
Hot	100	3440	8.80	18.41	1.28	1.02	0.34
Mild	60	2750	13.80	9.85	1.35	0.90	0.28

- Next, we calculated the average emission rate by "weighting" each ambient condition scenario equally:

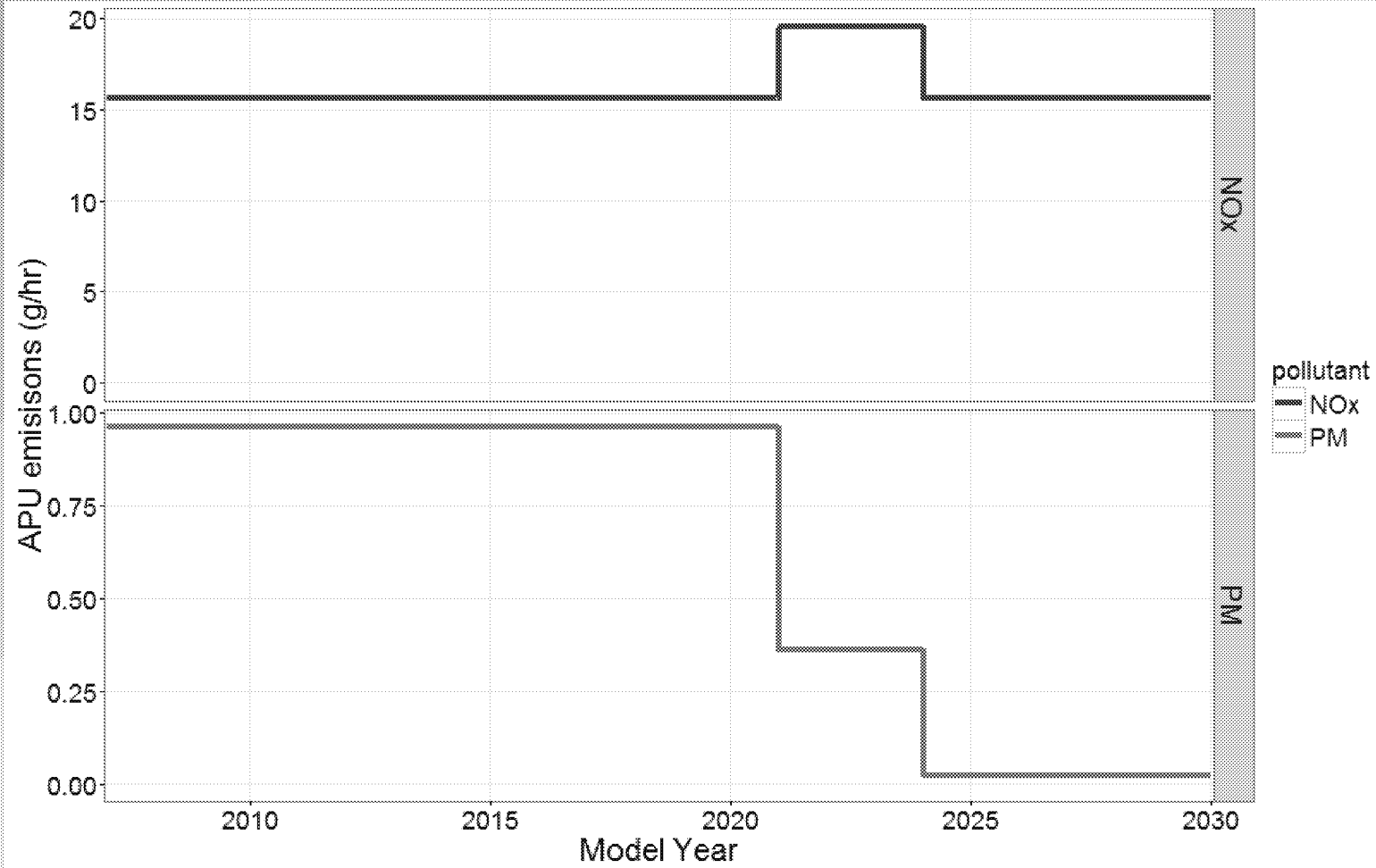
CO_2	CO	NOx	THC	PM	EC	NonEC	EC/PM[1]	Fuel
(g/hr)	(g/hr)	(g/hr)	(g/hr)	(g/hr)	(g/hr)	(g/hr)		(gal/hr)
3510	10.0	15.6	1.3	0.96	0.13	0.83	0.14	0.35

[1]The EC/PM fraction was measured in the TTI (2014) study

Proposed APU Emission Rates

- HD GHG2 rule includes new PM standards for APUs in 2021 and 2024
  - These standards replace the current Tier 4 nonroad standards
  - MOVES will incorporate the emission rates used in the rulemaking
- 2021-2023 APUs
  - PM emission rates will decrease by 63%
    - The ratio between the Tier 4 and 2021 APU PM standards
  - NOx emission rates will increase by 25%
    - Feasible for manufacturers to meet the 2018 standard by engine calibration, without the use of a DPF, which will cause a NOx increase
    - 25% NOx increase was based on evaluating emissions certification data of APU diesel engines that meet and do not meet the proposed 2021 PM standard
  - No impact on other pollutants (HC, CO, CO2)
- 2024+ APUs
  - Use average emission rates from the data for HC, CO, NOx, and CO2
  - Use the same PM emission rates as 2013+ extended idling (0.025 g/hr)
    - Anticipate that the PM standards will be achieved using DPFs (no NOx increase)
    - 2013+ extended idle emission rate is very similar to the average emission rate from the DPF-equipped APU 1 (0.021 g/hr)
    - We are using the same PM emission rate for DPF equipped APU and extended idling trucks because we didn't think we have sufficient data to determine a difference

Proposed APU Emission Rates



Proposed APU Emission Rates

Model Year	CO_2	CO	NOx	THC	PM	EC	NonEC	EC/PM	Fuel
	(g/hr)	(g/hr)	(g/hr)	(g/hr)	(g/hr)	(g/hr)	(g/hr)		(gal/hr)
2010-2020	3510	10.0	15.6	1.3	0.96	0.13	0.83	0.14	0.35
2021-2023	3510	10.0	19.5	1.3	0.36	0.05	0.31	0.14	0.35
2024-2050	3510	10.0	15.6	1.3	0.02	0.002	0.019	0.073[1]	0.35

- [1]We used the EC/PM fraction from the TTI 2014 from the DPF-equipped APU 1

Summary and Feedback

- Due to competing priorities, we are not planning on conducting new analysis on the extended idle and APU emission rates for the next version of MOVES
- We are also not currently planning on revisiting the pre-2007 extended idling rates in the next version of MOVES
- Our recommendation is to devote our resources to address other improvements in modeling heavy-duty trucks in MOVES
  - E.g incorporating start emissions from SCR-equipped trucks
- Comments?

References

1. USEPA (2016). *Updates to MOVES for Emissions Analysis of Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles – Phase 2 FRM*. Greenhouse Gas Emissions Standards and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles - Phase 2 - Docket EPA-HQ-OAR-2014-0827. Office of Transportation and Air Quality. US Environmental Protection Agency. Ann Arbor, MI. August 8, 2016. www.regulations.gov.

2. Farzaneh, M., J. Zietsman, D.-W. Lee, J. Johnson, N. Wood, T. Ramani and C. Gu (2014). *TEXAS-SPECIFIC DRIVE CYCLES AND IDLE EMISSIONS RATES FOR USING WITH EPA'S MOVES MODEL*. FHWA/TX-14/0-6629-1. Texas A&M Transportation Institute. May, 2014. http://tti.tamu.edu/documents/0-6629-1.pdf.

3. ARB (2015). *EMFAC2014 Volume III - Technical Documentation*. California Environmental Protection Agency, Air Resources Board, Mobile Source Analysis Branch, Air Quality Planning & Science Division. May 12, 2015.

4. Zietsman, J. and J. Johnson (2014). *Auxiliary Power Unit Testing for SmartWay Idle Reduction Verification. DRAFT FOR REVIEW*. EP-11-H-000527, Auxiliary Power Unit Testing for SmartWay Idle Reduction Verification. Texas A&M Transportation Institute. August, 2014.

5. Frey, H. C. and P.-Y. Kuo (2009). Real-World Energy Use and Emission Rates for Idling Long-Haul Trucks and Selected Idle Reduction Technologies. *Journal of the Air & Waste Management Association,* 59 (7), 857-864. DOI: 10.3155/1047-3289.59.7.857.

6. TTI (2012). *Development of a NOx Verification Protocol and Actual Testing of Onboard Idle Reduction Technologies*. New Technology Research and Development Program. Texas Transportation Institute. Revised: January 2012.

7. Storey, J. M., J. F. Thomas, S. A. Lewis, T. Q. Dam, K. D. Edwards, G. L. DeVault and D. J. Retrossa (2003). *Particulate matter and aldehyde emissions from idling heavy-duty diesel trucks*. SAE Technical Paper.

EXTRA SLIDES

References used to support DPF failure rate assumptions

Study	Relevant Information
US EPA (2014)	7% of 2007+ trucks in MOVES are assumed to either have a PM filter leak or have the PM filter disabled.
Preble et al. (2015)	20% of trucks produce 80% of black carbon (BC) emissions from Port of Oakland 2013 truck fleet, where 99% of the trucks are equipped with DPFs
Bishop et al. (2014)	3% of 2007+ trucks at Port of LA PM emissions 3× the standard. 9% of 2008+ trucks at Cottonwood site have PM emissions 3× the standard
CARB (2015)	35% to 4% of trucks submitted warranty claims related to the PM filter between 2007 and 2011
CARB (2015)	8% of trucks were classified as high emitters (emitting over 5% opacity) from a sample of >1,800 trucks test in the snap-idle acceleration test by CARB, about ~1/2 equipped with DPFs
CARB correspondence (2016)	~10% of 2007-2009 DPFs and ~5% of 2010+ DPFs to fail in real-world, based on their observations from warranty claims, snap-idle acceleration opacity tests, and their review of the Bishop et al. (2014)[26] and Preble et al. (2015)[25] studies.

In-Use APU Emission Rates

APU ID	CO_2 (g/hr)	CO (g/hr)	NOx (g/hr)	THC (g/hr)	PM (g/hr)	Fuel (gal/hr)	Ambient condition	Temperature (°F)	DPF
1	4340	7.3	18.6	1.35	0.96	0.43	Cold	0	0
1	4270	5.1	20.0	0.73	0.02	0.43	Cold	0	1
1	2820	6.2	23.5	1.35	0.56	0.29	Hot	100	0
1	2800	5.2	23.7	1.52	0.03	0.28	Hot	100	1
2	3000	20.4	6.3	1.4	1	0.3	Mild	60[a]	0
3	2500	7.2	13.4	1.3	0.8	0.25	Mild	60	0
2	3900	13.9	11.5	1.5	1.3	0.38	Hot	100	0
3	3600	6.3	20.2	1	1.2	0.36	Hot	100	0
4	3100	5.8	19	1.3	1.23	0.3	Hot	100	0
5	3600	7.3	24	0.8	0.58	0.35	Hot	100	0
4	4000	3.9	22	1.2	0.75	0.39	Cold	0	0
5	2800	24	14	2.4	0.98	0.28	Cold	0	0
6	2146	25	8.7	7.8	0.48	0.22	Cold	0	0
6	2351	10.8	11.4	4.2	1.00	0.24	Hot	90	0

[a] Frey and Kuo 2009 report the mild condition for auxiliary loads on the trucks is for ambient temperatures ranging from 10-20°C (50-68°F),

Emission Standards that pertain to APU systems

Emission Standard	CO	NMHC + NOx	PM
	g/kW-hr (g/hp-hr)	g/kW-hr (g/hp-hr)	g/kW-hr (g/hp-hr)
Tier 2 2005-2007	6.6 (4.9)	7.5 (5.6)	0.8 (0.6)
Tier 4 2008-2020	6.6 (4.9)	7.5 (5.6)	0.40 (0.30)
APU 2012-2023			0.15 (0.11)
APU 2024+			0.02 (0.015)

MOVES
Motor Vehicle Emission Simulator

MOVES Onroad Vehicle Population and Activity Update

Daniel Bizer-Cox

FACA MOVES Review Workgroup
December 7, 2016

Agenda

- Introduction
- MOVES2014 data sources and methodology
- Proposed updates for next MOVES release
- Request for feedback

Introduction

- MOVES links vehicle population and activity information to emission processes and rates
- The primary data are national default:
  - VMT
  - Vehicle Populations
  - Age Distributions
- These are then distributed among the following to link the activity to an emission rate:
  - Calendar Year
  - Source Type
  - Regulatory Class
  - Fuel Type
  - Age
- This information is primarily used at National Scale

MOVES

Motor Vehicle Emission Simulator

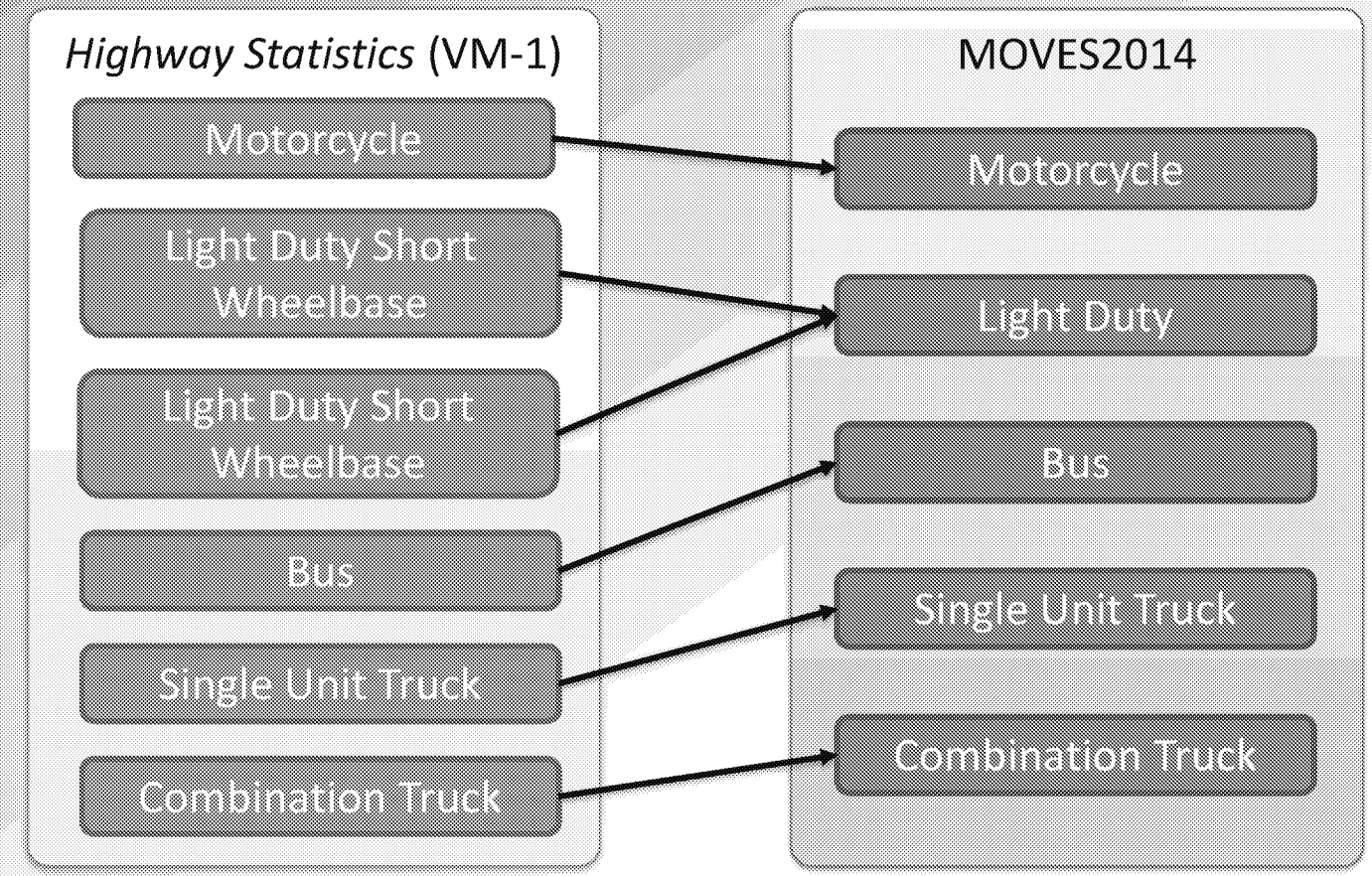
Vehicle Miles Travelled (VMT)

Historic VMT in MOVES2014

- Calendar years 1990 and 1999-2011
- All data come from FHWA's *Highway Statistics*[1]
- National default VMT are input by HPMS class*
  - VMT is allocated to source type, reg class, fuel type, and model year during model run time through Relative Mileage Accumulation Rates (from VIUS) and the Sample Vehicle Population
  - LD categories are combined because MOVES does not differentiate by wheelbase

*HPMS classes are groupings used by the Dept. of Trans. Highway Performance Monitoring System.

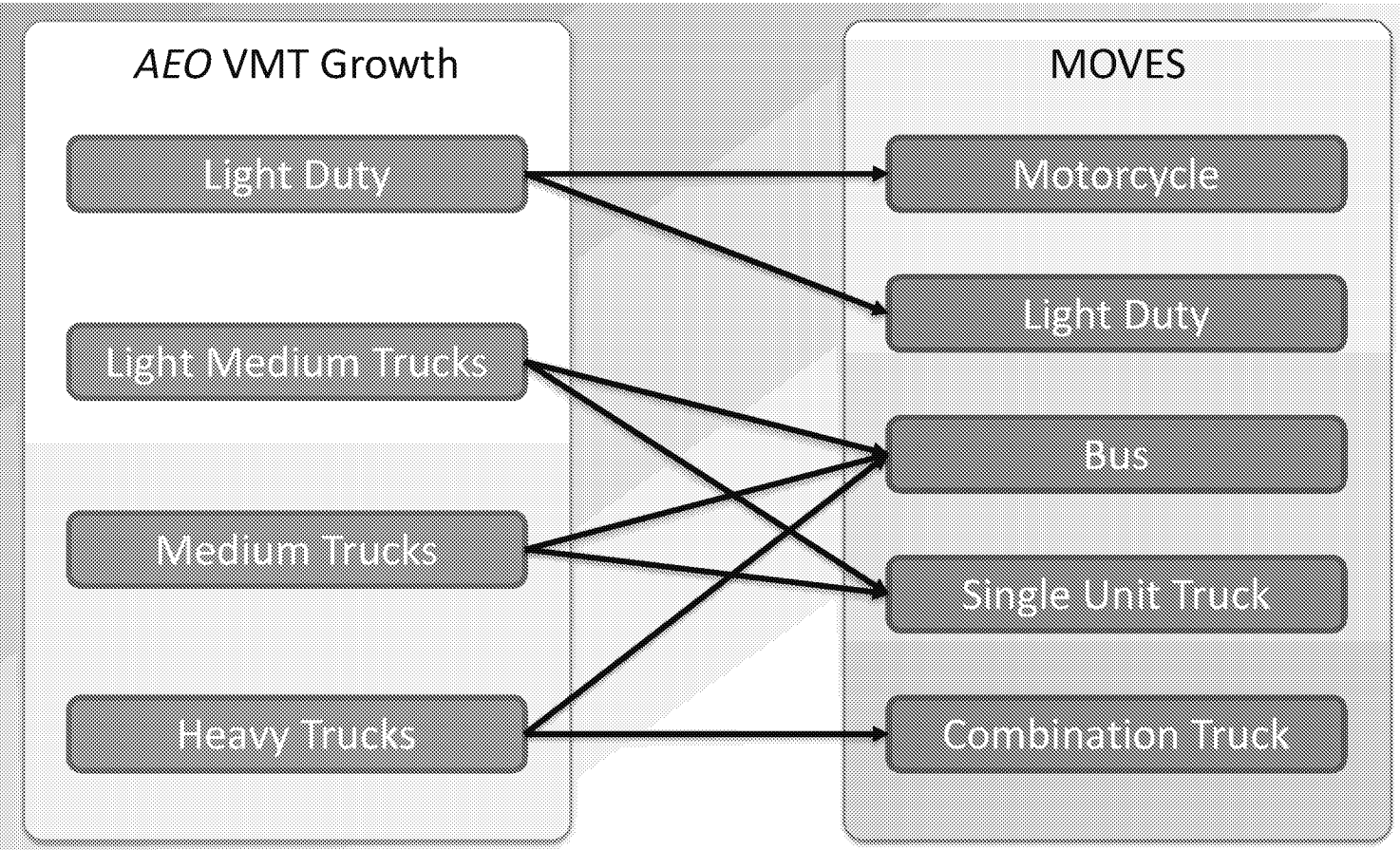
Historic VMT in MOVES2014



Projected VMT in MOVES2014

- VMT projections from Dept. of Energy's Annual Energy Outlook[2] (AEO) 2014
  - Year-over-year growth rates in VMT were calculated by AEO vehicle classifications
    - Light duty
    - Freight: Light Medium, Medium, and Heavy heavy duty
  - Growth rates applied to last historic year (2011) VMT through a mapping between AEO classes and HPMS classes
  - Average VMT growth rate for 2031-2040 used for 2041-2050

Projected VMT in MOVES2014



Proposed VMT Changes for Next Version of MOVES

- Historic VMT
  - Include data up to 2015 from *Highway Statistics* if available, otherwise use 2014
    - Highway Statistics 2015 scheduled to be released Dec 2016
- Projected VMT
  - Calculate from AEO2017 if available, otherwise use AEO2016
    - AEO2017 scheduled to be released Jan 2017
  - Project beyond final year of AEO using the final year growth as a surrogate
    - AEO2016 projects out to 2040
    - AEO2017 will project out to 2050
    - The next version of MOVES will project out to 2060

MOVES

Motor Vehicle Emission Simulator

Vehicle Populations

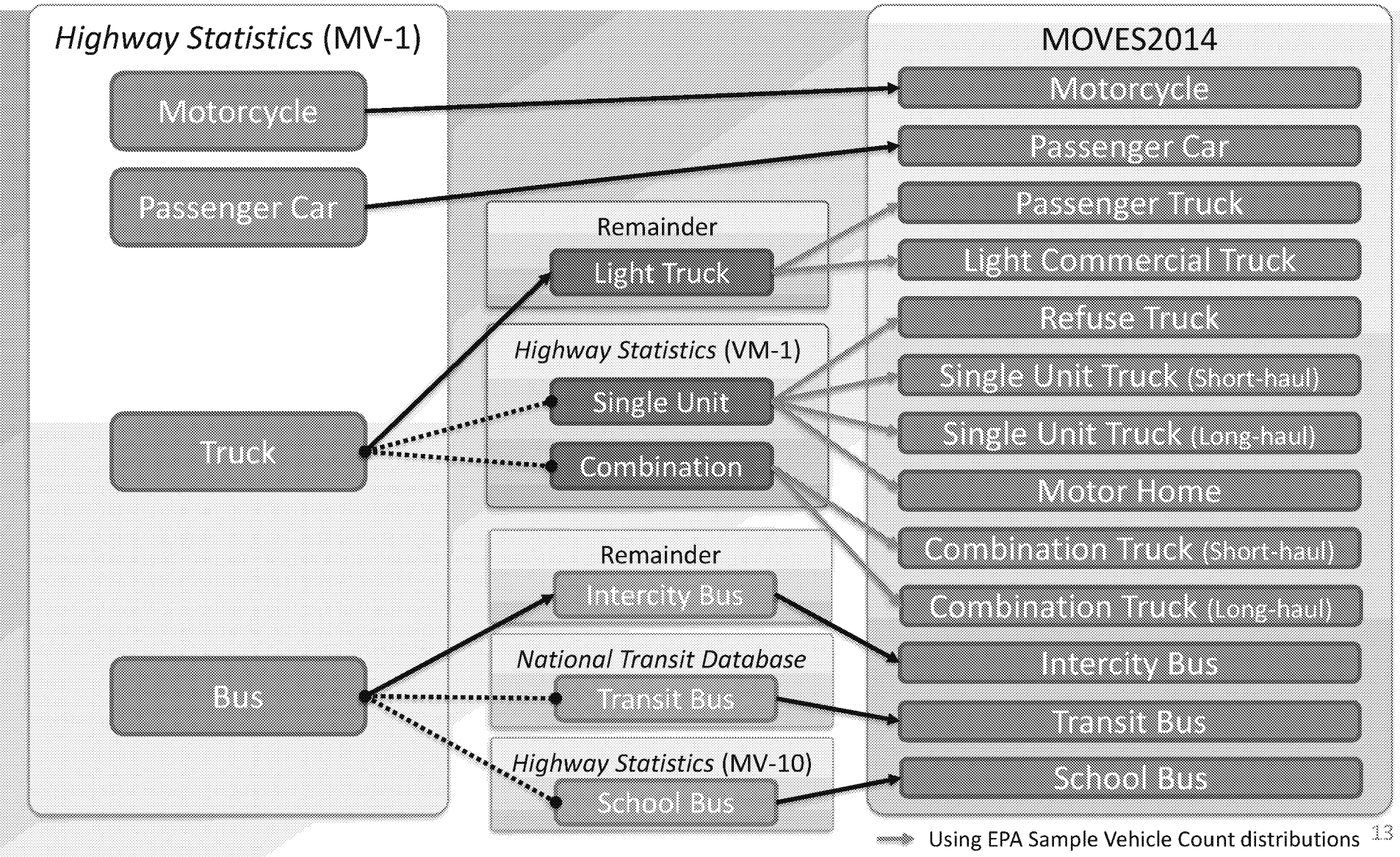
Sample Vehicle Population

- Based on EPA Sample Vehicle Counts
  - Contains representative vehicle counts by source type, fuel type, model year, and regulatory class
  - Distributions calculated from the vehicle counts are used in MOVES
    - To allocate default activity to fuel types and regulatory classes
    - With Alternative Vehicle and Fuel Technologies (AVFT) importer to allocate user input activity
  - Combines 2011 registration data from IHS Automotive with 2002 Vehicle Inventory and Use Survey (VIUS) for most source types
    - Bus distributions come from unpublished FHWA data and published National Transit Database[3] data. Motor home distributions come from same FHWA data

Historic Populations in MOVES2014

- Calendar years 1990 and 1999-2011
- Principal data source is FHWA's *Highway Statistics*
- Bus populations also use National Transit Database

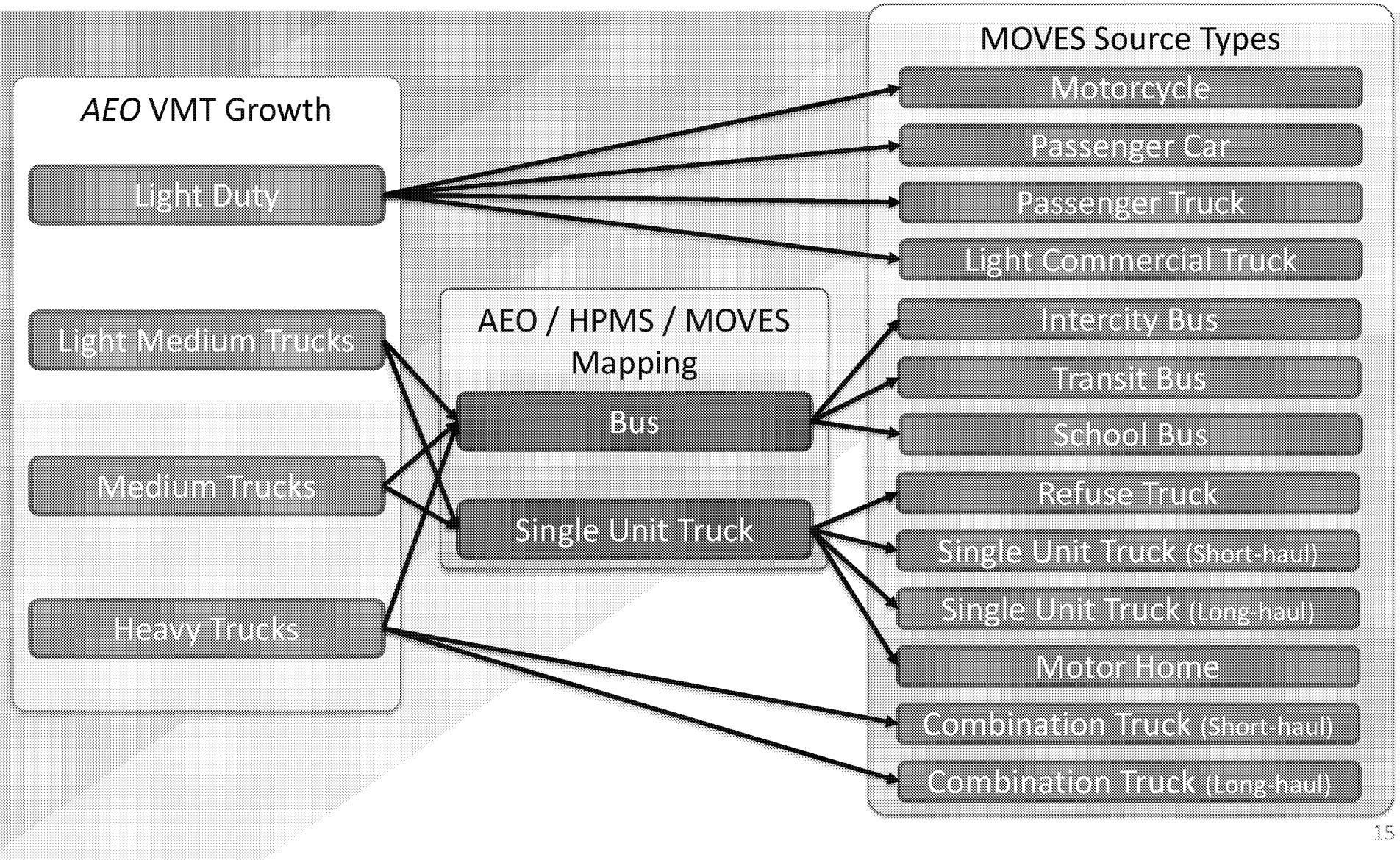
Historic Populations in MOVES2014



Projected Vehicle Populations in MOVES2014

- Used VMT projections from AEO 2014
  - VMT per vehicle by HPMS class was relatively constant from 1999-2011
  - Year-over-year growth rates in VMT were calculated by AEO vehicle classifications
    - Light duty
    - Freight: Light Medium, Medium, and Heavy heavy duty
  - Growth rates applied to last historic year (2011) populations through a mapping between AEO classes, HPMS classes, and MOVES source types

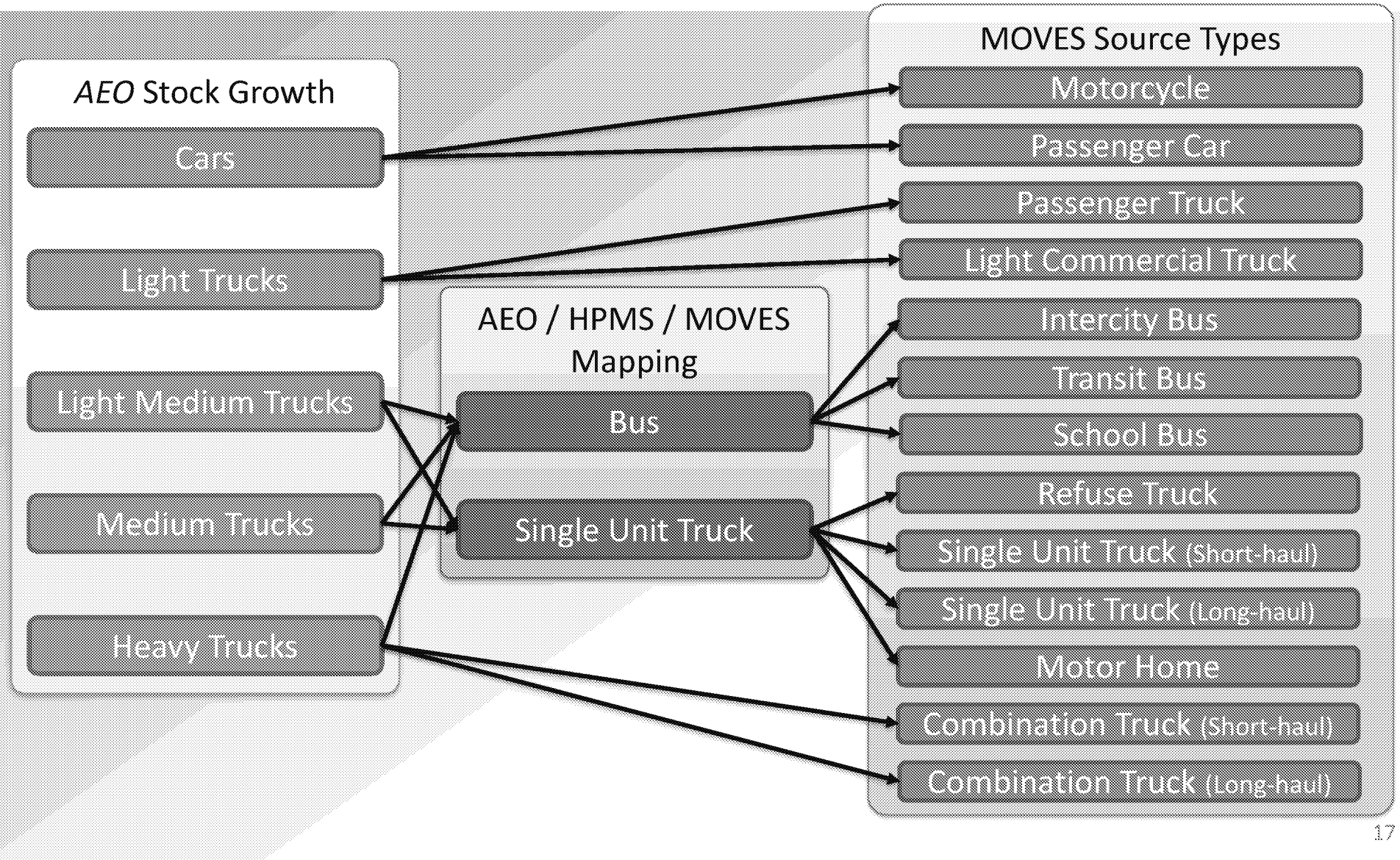
Projected Vehicle Populations in MOVES2014



Proposed Vehicle Population Changes for Next Version of MOVES

- For both Historic and Projected Populations
  - Correct an error in EPA Sample Vehicle Counts, which impacts fuel and regulatory class distributions for class 2a/2b trucks
- Historic Populations
  - Include data up to 2015 from *Highway Statistics* and *National Transit Database* if available, otherwise use 2014
- Projected Populations
  - Calculate from AEO2017 if available, otherwise use AEO2016
  - Use vehicle stock instead of VMT projections

Proposed Vehicle Population Changes for Next Version of MOVES



MOVES

Motor Vehicle Emission Simulator

Age Distributions

Historic Age Distributions in MOVES2014

- Calendar years 1990 and 1999-2011
- Vary by source type
- 2011 age distributions from EPA Sample Vehicle Count (IHS + VIUS)
- Algorithm to backcast from 2011 to 1999:

$$P_{y-1} = P_y - N_y + R_{y-1}$$

  - P is population in year y or y-1
  - N is new vehicle sales in year y
  - R is the removed (scrapped) vehicles in year y-1

Historic Age Distributions in MOVES2014

- Source type populations known
- Historic sales data sources:
  - Motorcycle Industry Council[4]: motorcycles
  - *Transportation Energy Data Book*[5] (TEDB): light duty, single unit trucks, combination trucks
  - *School Bus Fleet Fact Book*[6]: school buses
  - EPA Certification Data: transit buses
  - No known source for intercity bus sales, so these are estimated based on the other two bus categories

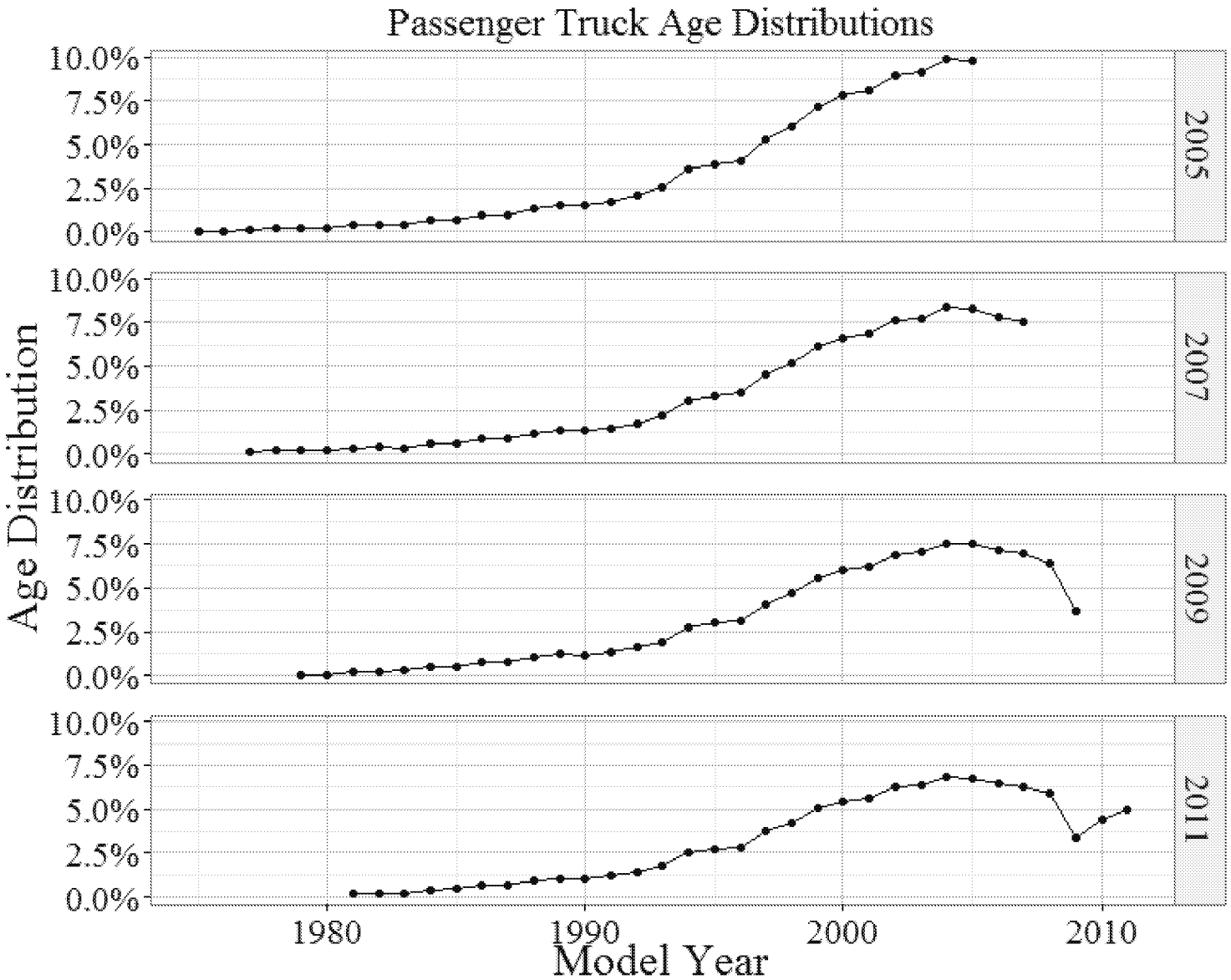
Historic Age Distributions in MOVES2014

- No known source for annual scrappage, so we calculate it from:

$$P_{y-1} = P_y - N_y + \boldsymbol{R_{y-1}}$$

- Distribute scrapped vehicles by age:
  - Start with a base scrappage profile
    - Light duty scrappage from 2002 National Highway Traffic Safety Administration (NHTSA) study
    - Heavy duty scrappage from TEDB
  - Scale scrappage profile so the sum total of scrapped vehicles satisfies the above equation
  - Calculated at HPMS level, and applied to each source type within HPMS class

Historic Age Distributions in MOVES2014



Projected Age Distributions in MOVES2014

- Calculated for calendar years 2012-2050
- Vary by source type
- Based on 2011 age distributions from EPA Sample Vehicle Count (IHS + VIUS)
- Algorithm to forecast from 2011 to 2050:

$$P_{y+1} = P_y + N_{y+1} - R_y$$

  - P is population in year y or $y+1$
  - N is new vehicle sales in year $y+1$
  - R is the removed (scrapped) vehicles in year y

Projected Age Distributions in MOVES2014

- Source type populations known
- Sales fractions calculated from AEO using sales and stock numbers for each of the AEO categories
  - E.g.: $\text{LD sales fraction} = \frac{\text{Car Sales} + \text{Truck Sales}}{\text{Car Stock} + \text{Truck Stock}}$
- Projected sales by HPMS class calculated from sales fractions and populations, using AEO to HPMS mapping
  - E.g.: $\text{LD sales} = \text{LD sales fraction} * \text{LD population}$

Projected Age Distributions in MOVES2014

- No known source for projected scrappage, so we calculate it from:

$$P_{y+1} = P_y + N_{y+1} - \boldsymbol{R_y}$$

- Distribute scrapped vehicles by age using same technique as historical age distributions
  - Start with a base scrappage profile
  - Scale scrappage profile so the sum total of scrapped vehicles satisfies the above equation
  - Calculated at HPMS level, and applied to each source type within HPMS class

Projected Age Distributions in MOVES2014

Proposed Age Distribution Changes for Next Version of MOVES

- Historic Age Distributions
  - Recalculate historic age distributions using updated historic populations
  - Use calendar year 2014 for base year age distributions from a new IHS data purchase
  - Use latest sales data from Motorcycle Industry Council, TEDB, and *School Bus Fleet Fact Book*
  - Use latest data from *National Transit Database* for transit buses
  - Update algorithm:
    - In $P_{y-1} = P_y - N_y + R_{y-1}$, the distribution of scrapped vehicles depends on the age distribution for P_{y-1} which is the output of the algorithm. Use an iterative approach to calculate the scrappage distribution

Proposed Age Distribution Changes for Next Version of MOVES

- Projected Age Distributions
  - Calculate from AEO2017 if available, otherwise use AEO2016
  - Perform calculations at the source type level, instead of HPMS class
    - Use same AEO / HPMS / Source Type mapping

Other Potential Changes

- If timing and resources allow:
  - Update base scrappage profiles using IHS registration data from 2011 and 2014
  - Update EPA Sample Vehicle Counts dataset and the Sample Vehicle Population table for model years 2012+ using 2014 IHS registration data
  - Include default age distributions by county
    - Use national sales estimates for projecting and backcasting from 2014
    - Adjust scrappage for counties with a younger or older average age in 2014 to maintain that delta

Requested Feedback

- Are we missing any data sources for national scale vehicle population or activity?
- Feedback on our proposed changes

Citations

1. *Highway Statistics Series.* Federal Highway Administration. https://www.fhwa.dot.gov/policyinformation/statistics.cfm
2. *Annual Energy Outlook.* Energy Information Administration. https://www.eia.gov/forecasts/aeo/
3. *National Transit Database.* Federal Transit Administration. https://www.transit.dot.gov/ntd
4. *Statistical Annual.* Motorcycle Industry Council. https://mic.org/StatAnnual.aspx
5. *Transportation Energy Data Book.* Oak Ridge National Laboratory. http://cta.ornl.gov/data/index.shtml
6. *School Bus Fleet Fact Book.* School Bus Fleet. http://digital.schoolbusfleet.com/
7. *Population and Activity of On-road Vehicles in MOVES2014.* U.S. EPA. http://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100O7VJ.pdf

MOVES

Motor Vehicle Emission Simulator

Updating Hotelling Hours in MOVES

David Brzezinski

FACA MOVES Review Work Group

December 7, 2016

Hotelling Hours

- Hotelling is the name we use in MOVES to refer to the hours spent by drivers of long-haul trucks with their trucks parked during mandatory rest periods.
- Engine idling and auxiliary power unit (APU) use occurs during these hotelling hours.
- MOVES accounts for idling and APU use as separate emission processes in addition to truck operation on roadways.

Hotelling Operating Modes

- The time spent during hotelling is distributed to different modes:
  - Engine idle.
  - Diesel auxiliary power unit (APU) use.
  - Engine(s) off.
- The fraction of time spent in each mode is a separate table that varies by model year.
- Hotelling refers to the time spent during rest periods in all modes.

Need for Change

- MOVES2014a uses a different default method to calculate the allocation of default hotelling hours than EPA's National Emission Inventory (NEI) for both 2011 and 2014.
  - MOVES uses only rural VMT.
  - NEI uses both rural and urban VMT.
- The only option for MOVES2014a users to supply hotelling hours for runs is to populate the large HotellingHours table manually.

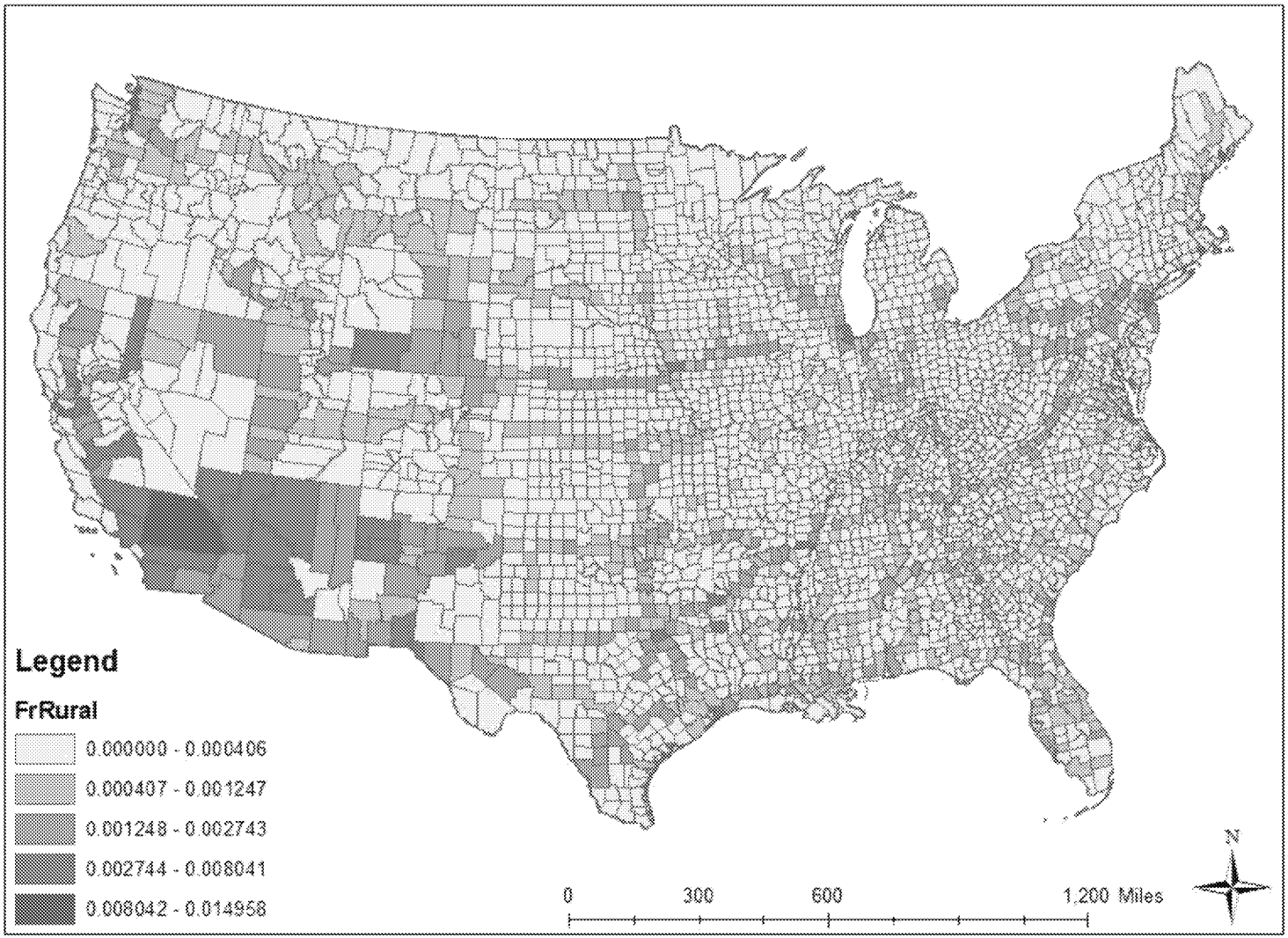
Proposed Design Changes

- Alter the calculation of default hotelling hours to match the methodology used by the NEI.
- Alter the Hotelling importer to use new "shaping" tables to calculate hotelling hours from smaller user input tables.

New Default Hours Calculation

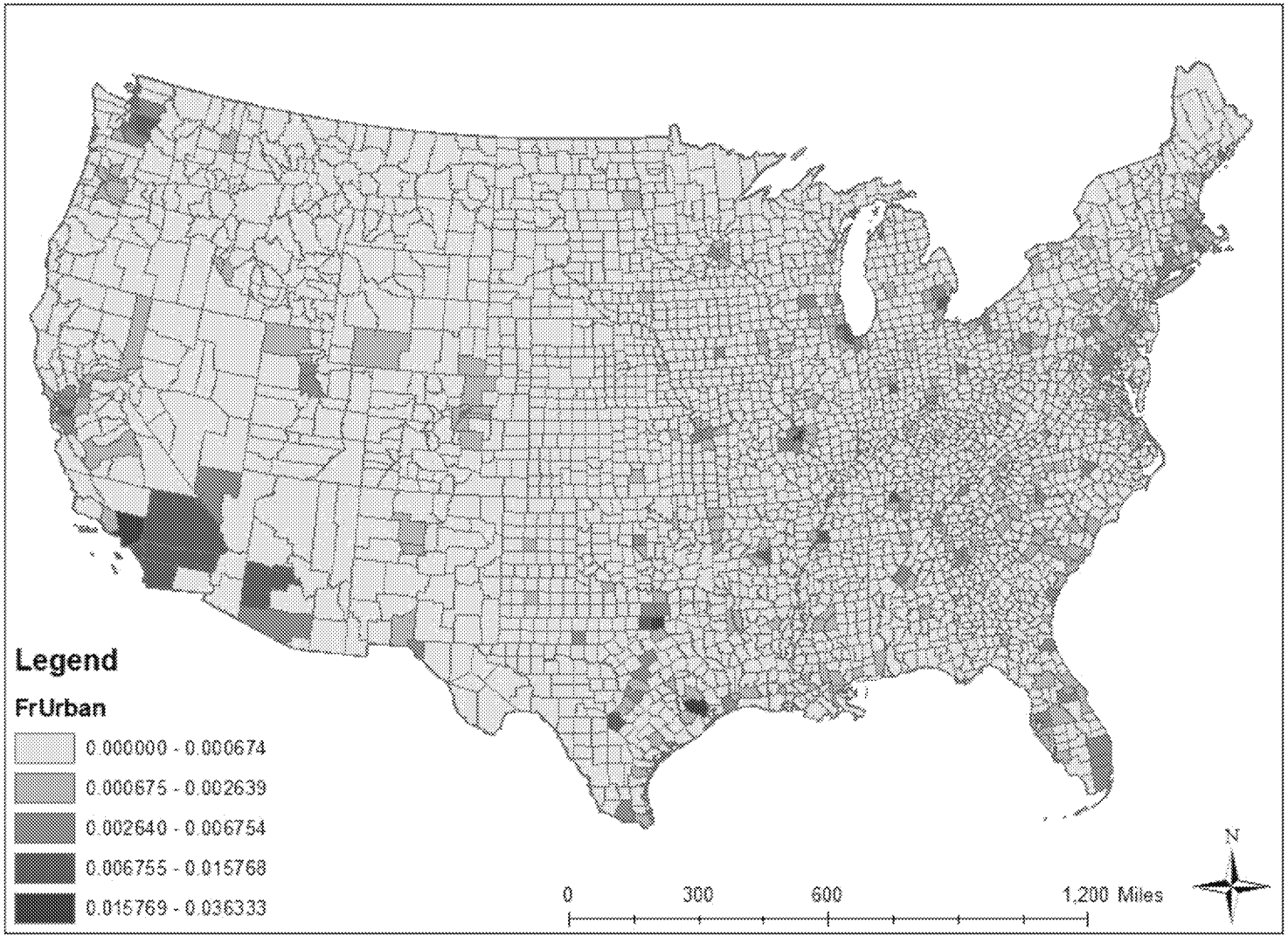
- Use both rural and urban VMT from restricted access roads from diesel long-haul combination trucks to calculate default hotelling hours. (See next slides.)
- The hotelling rate (hours per mile) will need to be updated to reflect the change in the method.
- Default hotelling hours will be calculated if no user input is provided.
  - Users may provide their own estimates.

Current (Rural Only) Allocation



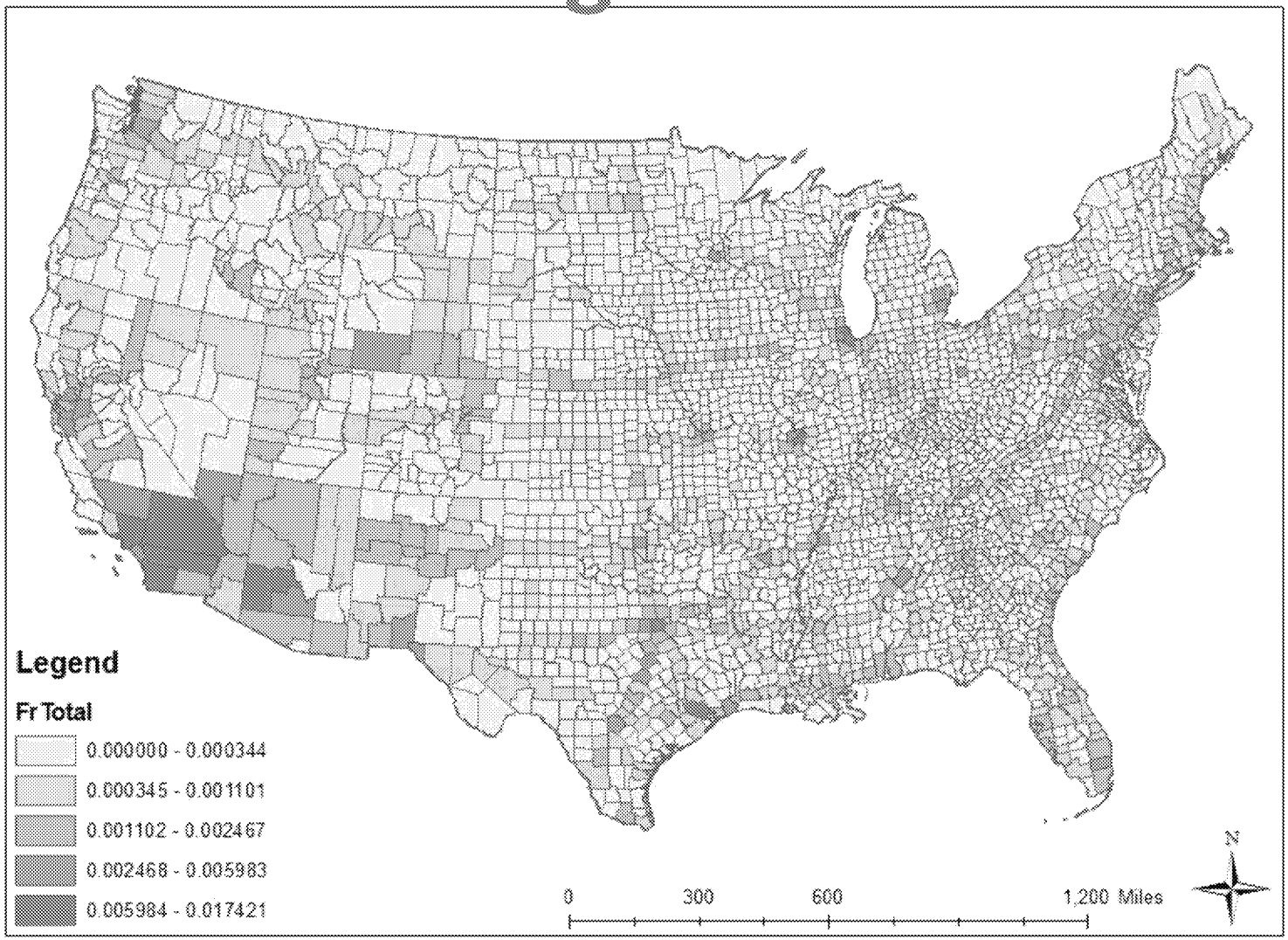
Values are fractions of total national vehicle miles traveled by long-haul combination trucks.

Additional (Urban) Allocation



Values are fractions of total national vehicle miles traveled by long-haul combination trucks.

Final Proposed Default Hotelling Allocation



Values are fractions of total national vehicle miles traveled by long-haul combination trucks.

Total National Hotelling Hours

- The default hotelling rate (hotelling hours per mile of travel) is calculated from the total national source hours operating (as calculated by MOVES) from the combination of vehicle miles traveled and default average speeds for diesel long-haul combination trucks.
- Federal regulations require that drivers spend at least 8 hours of rest after each 10 hours of driving.

Rest Hours = Total Hours * 8/10

Default Hotelling Rate

- The rest hours are distributed to locations using VMT.
  - Assuming all resting occurs in locations with interstate (restricted access) roads.
  - Assuming the resting hours are proportional only to VMT on restricted access roads.
- The default hotelling rate (hours per mile) is calculated from total national rest hours divided by total national restricted access VMT:

Hotelling Rate = Hours / VMT

User Supplied Hotelling Hours

- MOVES2014a users supply hotelling hours using the HotellingHours core model input table (CMIT) and not designed for users.
- This table contains 17,856 rows by:
  - hourDayID
  - monthID
  - yearID
  - ageID
  - zoneID (County)
  - sourceTypeID

New Tables for User Input

- Instead of using the HotellingHours table for input, users will supply the same data using four additional tables:
  - HotellingHoursPerDay
  - HotellingHourFraction
  - HotellingAgeFraction
  - HotellingMonthAdjust
- These tables will be used to generate the contents of the HotellingHours CMIT.

New User Input Features

- Users may enter data for only some of the tables. MOVES default information will be used for any data not provided.
- All hotelling input tables will include zoneID, which will allow storage of state supplied data in the default MOVES database.

New User Input Features

- The redesign of the Hotelling importer will allow users to import all tables located in a single spreadsheet with a single selection.
  - Reduce repetitive file/tab selection.
- The Hotelling importer will allow for some checking of user inputs.

Requested Feedback

- Are there any issues with changing MOVES to using the NEI approach to hotelling allocation to counties?
- Are the proposed changes to the hotelling importer adequate?

Requested Feedback

- Are there data sources that we should be reviewing that include measurements of truck activity that would include useful statistics for:
  - Allocating hotelling hours spatially or temporally.
  - Correlating hotelling hours to activity among long-haul trucks.

Further Data Improvements

- Are there nationwide data sources for factors that may influence EPA local estimates for:
  - APU use in preference to engine idling.
  - Engine idling during hotelling hours.
  - Options, such as rest stop electrification.
  - Technical innovations.

MOVES

Motor Vehicle Emission Simulator

Thanks!

FACA MOVES Review Work Group Meeting

EPA Responses to Comments and Questions Received on Presentation Topic:
MOVES2014 Overview and Plans for the Future

Submitter: Chris Voigt, Virginia Department of Transportation (representing AASHTO; via email)
Submission: *The extension of the modeling year limit to 2060 (if not later) is supported. In general, recommend increasing the range of long-range forecasts, as current highway design years are already in the 2040s and the MOVES model limit at present is 2050.*

EPA Response:
Thank you for your comment. We plan to extend MOVES modeling capabilities to calendar year 2060 in the next public version of MOVES.

Submitter: Chris Voigt, Virginia Department of Transportation (representing AASHTO; via email)
Submission: *Place a higher priority on needs for project-level analyses: Overall, strongly recommend an increased emphasis on improvements needed to support project-level analyses, which are the focus for state DOTs and other project sponsors.*
○ EPA might survey and/or host a webinar with the AASHTO Air Quality, Climate Change and Energy Subcommittee for this purpose.
○ Slide 13 of the EPA Overview presentation from 9/14 lists "user need" as the first point, and "Impact on total inventory" as the fourth, which may suggest that the latter may effectively supersede the former when they conflict, as they may with project-level analyses (versus regional). It would be helpful to clarify that project-level needs are a high priority.
○ As a high priority, a specific recommendation is to improve the methodologies, database, and activity parameters for predicting brake wear and tire wear components of PM emissions. For background, a proposed research project on this topic received significant interest for potential NCHRP funding in the past year (see http://environment.transportation.org/teri_database/idea_details.aspx?rid=1026).

EPA Response:
Thank you for your suggestion about prioritizing project level analysis. This type of feedback is very helpful. We will continue to seek input/feedback from the user communities through our interaction with stakeholders and through MOVES Inbox. We'd like to clarify that the list on slide 13 is not in particular order of priorities and they all are carefully weighed in making decisions to update MOVES.

Regarding brake wear and tire wear, we recognize that they can be important contributors to PM emissions and we are interested in additional research on this topic.

Submitter: Chris Voigt, Virginia Department of Transportation (representing AASHTO; via email)
Submission: *Create a "Running Emissions" Option in the Pollutants and Processes Panel: With regard to the proposed improvements to "Simplify pollutants and processed panel", recommend creating an option to select all pollutant processes to be included in the calculation of running emissions, which are typically the focus of project-level analyses. This would help modelers avoid mistakes in the selection of specific pollutant processes to be included.*
▪ For example, when a modeler selects this option for CO, the MOVES interface should automatically select exhaust emissions as well as crankcase emissions.
▪ Similarly, the new MOVES option would select all running emissions processes for PM, NOx, and VOC, which are needed for modeling impacts of projects funded under the federal Congestion Mitigation and Air Quality (CMAQ) programs as well as other pollutants.

EPA Response:
Thank you for the comment. We will consider your suggestions when we improve the pollutants and processes panel in the next version of MOVES.

Submitter: Cecilia Ho, Federal Highway Administration (via email) **Submission:** *Slide 21 indicates that EPA is thinking about removing the fuel options from the "Vehicles and Equipment" panel. This could make it more difficult (or impossible) to do runs reflecting emissions for only diesel vehicles (e.g., when modeling diesel particulate matter for MSAT analysis, or evaluating a retrofit program that only affects diesel vehicles). Also see comment under "General MOVES Improvements" about adding diesel particulate matter to the pollutant and processes panel.*
EPA Response: The selection of fuel choices has been a source of user confusion for a long time and we believe this feature will help reduce user errors. Selecting only diesel vehicles in the Vehicles and Equipment panel will often result in wrong answer because MOVES will assign some of the VMT the user enters in the County Data Manager to gasoline, CNG, or E-85 vehicles depending on the vehicle type. Users who want to only model diesel vehicles need to also change the Alternative Vehicle and Fuel Technologies (AVFT) table in MOVES to include only diesel vehicles. Removing fuels from the Vehicles and Equipment panel will help ensure that users are not misled into thinking that this is the only step required. Instead, users would be directed toward the proper way to use the AVFT input to get results only for diesel vehicles. Also, it will still be possible to distinguish emissions from gasoline and diesel vehicles in the MOVES output; thus reporting diesel particulate matter will require only simple filtering.

FACA MOVES Review Work Group Meeting

EPA Responses to Comments and Questions Received on Presentation Topic:
Options for Simplifying MOVES Onroad Source Types and Ramps

Submitter: Gil Grodzinsky, Georgia Department of Natural Resources (representing NACAA; via email)
Submission: *Short and long haul single unit trucks (and quick thought on refuse/motorhomes)...merging these would be a good idea, it is really hard to differentiate these two types, in fact we only could use old VIUS estimates and we are talking about 95/5 splits (short/long) anyhow. In addition, especially in this case you would have the same truck used long and short routes. As for refuse trucks and motorhomes, I would support refuse trucks staying separated. It is easily defined and involves much different driving patterns. Motor homes can be merged with the single unit trucks with little benefit of keeping this source type.*

EPA Response:
Thank you for your input.

Submitter: Gil Grodzinsky, Georgia Department of Natural Resources (representing NACAA; via email)
Submission: *Light duty passenger trucks vs. light duty commercial trucks: Would support merging these two types as many times the same truck is used for both purposes unless you redefine commercial trucks as specifically related to fleets like UPS, government etc. Otherwise, while driving behavior might differ a little between the two, they are similar enough, especially when I notice from emission factor tables that emission factors between type 31 and 32 by the 2020's is small.*

EPA Response:
Thank you for your input.

Submitter: Gil Grodzinsky, Georgia Department of Natural Resources (representing NACAA; via email)
Submission: *Combination trucks, short vs. long haul: In this case, it appears that there are easier ways to identify one from the other (cab style, room for sleeping cab etc.) versus the above types. Also, long haul is tied into idling while short haul is not. I could see support for keeping these apart, although if others disagree, definitely would like a way to run it separately as a secondary option.*

EPA Response:
It would be easier to just keep this split, rather than making it a secondary option. Allowing the user to choose the detailed breakdown of the source types would require that MOVES include all the data it has already, and add complexity to the coding.

Submitter: Gil Grodzinsky, Georgia Department of Natural Resources (representing NACAA; via email)
Submission: *Last note about vehicle types: The MJO MOVES group worked with EPA/FHWA to propose a way to compile a national population/age distribution database using IHS Automotive data (with a consultant to help analyze the data) into as many of the sourcetypes as possible. I think it would be great if those in EPA/FHWA could report on this experience. This could be used to help further clarify which source types are more trouble than worth keeping as a separate category (if so hard to get a good estimate, why bother with it). I understand that this registration project will take a while and if so, may be too late. But just a thought.*

EPA Response:
EPA is in the process of purchasing a full set of age distributions by source types for calendar year 2014 from IHS through a contractor. A full report of this process will be included with the results, which should address your questions about how difficult the determination can be.

Submitter: Gil Grodzinsky, Georgia Department of Natural Resources (representing NACAA; via webinar chat)
Submission: *When you say remove ramps, do you mean going back to roadtypes without an option to just run ramps? Or is there more to it (like no longer having a road type input table in the input database)?*

EPA Response:
Yes, the proposal is to remove the ramp roadtypes from MOVES, without an option to estimate emissions from just ramps (except in project mode). The proposal will not change the inputs for users to supply the distribution of vehicle miles traveled (VMT) across different roadtypes (using the roadtypedistribution table) for county-scale MOVES runs. Users will no longer supply the rampFraction in the road type definition table (roadtype table).

Submitter: Lubna Shoaib, East-West Gateway Council of Governments (via webinar chat)
Submission: *Can you please elaborate on the ramp VMT; it will not be considered at all or will it be merged with the mainline VMT?*

EPA Response:
In your words, the ramp VMT will be merged with the mainline VMT. In this proposal, we are not excluding the VMT that occurs on ramps; instead the VMT that occurs on ramps will be included in the VMT estimates for Urban Restricted Access and Rural Restricted Access roadtypes.

Submitter: Sally Otterson, Washington State Department of Ecology (via email)
Submission: *I had one comment/question on simplifying MOVES vehicle types. EPA is proposing combining some of the truck types. Would it make any sense to consider combining intercity and transit buses?*

EPA Response:
This could be done as well. However, transit buses actually are regulated differently than other bus types and thus have different emission rates than intercity buses, which makes the distinction more important than for other truck types.

Submitter: Chris Frey, North Carolina State University (via email)
Submission: *In general, the idea of trying to simplify the source categories in MOVES is worth pursuing. In fact, MOVES gives some misleading sense of complexity in that multiple source types actually use the same underlying default operating mode emission rates (e.g., short haul vs. long haul trucks). Thus, there is no real value to splitting these into multiple categories unless their duty cycles are different. Perhaps a way forward is to define op mode rates by regulatory class and define duty cycles by vocational categories. For example, a refuse truck has a different duty cycle than a long-haul single unit truck, but if they are of the same regulatory class, they might have the same default opmode rates.*

In my work, I have found that light commercial truck and passenger trucks appear to have the same opmode rates and, therefore, there is not much value in separating these from an emission rate perspective.

EPA Response:
Thank you for your input.

Submitter: Chris Voigt, Virginia Department of Transportation (representing AASHTO; via email)
Submission: *The proposed removal of freeway ramps from national and county scale runs is supported. It may be retained as an option if that does not cause undue issues with programming.*

EPA Response:
As part of this proposal, we are not considering retaining ramps in MOVES as an option (except at project scale) because 1) the MOVES estimates for total freeway emissions would vary whether user selected the ramp option and 2) we believe MOVES is more accurate by not considering ramps. Maintaining ramp output, while achieving the same level of accuracy as removing ramps, would require both programming and data collection efforts.

Submitter: Chris Voigt, Virginia Department of Transportation (representing AASHTO; via email)
Submission: *Converge MOVES on-road source types to the FHWA/HPMS vehicle types: To the extent feasible, and perhaps as a longer term objective, consider revising the MOVES on-road source types to match the FHWA/HPMS vehicle types, as traffic data are much more readily available for the latter than the former. Work with FHWA and AASHTO as needed for this purpose.*

- *Otherwise, consolidating source types as proposed is supported.*
  - *As suggested on the 9/14 MOVES FACA call, if MOVES source types are consolidated as proposed, EPA should also provide modelers an option or means to continue to use the current set of source types. For example, it would be prudent to keep the long-haul vs short haul distinction as an option for projects or studies in which there may be significant differences in long- and short-haul truck traffic, such as may occur at a given intermodal freight terminal, port or border crossing, or inter-state highway that happen to have relatively high proportions of long haul traffic.*
- *For reference, as it may affect your planning, the vehicle-is-use-survey (VIUS) was the subject of public consultation last year by FHWA and others. Suggest checking with FHWA on its current status.*

EPA Response:
MOVES already allows direct input of VMT by the HPMS vehicle types. A full proposed collapse of the current MOVES source types (removing long/short haul, commercial/passenger, refuse truck and motorhome distinctions) would eliminate most of the differences between the HPMS vehicle types and the MOVES source use types. Only buses and the passenger car/light truck distinctions would remain. It will be easier to just keep the source type splits, rather than making a secondary feature for these breakdowns. Allowing the user to choose the detailed breakdown of the source types would require that MOVES include all the data it has already, and add complexity to the coding. Projects or studies that require a detailed breakdown of fleet and fleet activity have always had the option to use multiple MOVES runs, where the characteristics of the existing source use types can be manipulated to better match the specific activity of the target vehicles. EPA has been an active participant with FHWA and others in the planning for a new VIUS sometime in the future.

Submitter: Cecilia Ho, Federal Highway Administration (via email)
Submission: Reducing the number of Source Types:

- *FHWA strongly supports the proposal to reduce the number of source types that MOVES users select and provide input data on. FHWA believes this will ease the burden on users since less source type detail will be required for many inputs and MOVES run time will be improved.*
- *Based on the capabilities of vehicle counting devices, and data availability FHWA recommends that EPA considers the vehicle classification data sources such as HPMS, when finalizing on the source types FHWA recommends five vehicle types:*
  - *Motorcycles*
  - *Light duty vehicles: cars and light trucks*
  - *Buses*
  - *Single Unit Trucks*
  - *Combination Trucks*
- *FHWA suggests still maintaining more detailed vehicle types "under the hood" to strike the right balance between ease of user inputs and accurate emissions estimates. For example, you may want to maintain default drive cycles for 13 source types, but use default data to map the 13 source types to the consolidated vehicle types.*

FHWA agrees that the discontinuation of the Vehicle In-Use Survey in 2002 makes it difficult to maintain detailed "under the hood" defaults, but notes that there is a current effort to restore the VIUS[1]. We will attempt to get more information from other FHWA offices to share with you on the status of this effort.

[1] https://www.nptc.org/download-footer/legislative-regulatory-resources/979-vius-handout-final-jun15/file

EPA Response:
Many of the characteristics of the source types are shared (such as driving cycles and emission rates) and the major differences are primarily in activity, which is why combining them will not affect the accuracy of the results. Allowing

the user to choose the detailed breakdown of the source types would require that MOVES include all the data it now already must support. EPA is currently an active participant in the planning for a new VIUS.

Submitter: Cecilia Ho, Federal Highway Administration (via email)
Submission: *Removing Freeway Ramps from National and County Scale:*

- *FHWA supports the proposal to remove freeway ramps from the national and county scale in MOVES, but keep ramps available in the project scale. FHWA believes this will ease the burden on users since the ramp fraction input will no longer be required and MOVES run time will be improved.*
- *Note that FHWA/Volpe MOVES regional sensitivity analysis showed only modest sensitivity to varying the ramp fraction input for most pollutants and vehicle types, which supports the notion that removing ramps from national/county scale will have little impact on accuracy. However, this analysis did show substantial sensitivity (-15% to +22%) for PM2.5 emissions from passenger cars when varying the ramp fraction input between 0 and 0.20. Do these substantial sensitivity results suggest that accuracy would be lost in some cases by removing ramps or are there explanations available to say why that would not be the case (such as low absolute PM2.5 values from passenger cars, current ramp operating mode distributions in MOVES are too aggressive and correcting them may lead to modest sensitivity results across the board)? FHWA suggests considering these sensitivity results in the analysis to support removal of ramps.*
- *In the 60 trip evaluation of removing ramps there should be a third scenario with county scale and ramp fraction calculated using current technical guidance. This scenario would act as the "control" and the main comparison should be between county scale with ramp fraction=0 and county scale with ramp fraction calculated using current guidance. As noted on slide 27 of the FACA presentation, an inherent difference is expected between project scale and county scale; therefore, the comparison currently made cannot differentiate between those inherent differences and those due to changes in representing ramps.*

EPA Response:
Our analysis of ramp activity suggests that the current MOVES ramp operating mode distributions are too aggressive, which is a major motivation for removing separate ramp calculations from MOVES road type results. Regarding using a third scenario, we calculated emissions for the 60-trips using the current ramp methodology and ramp operating mode distributions, which over-predicted emissions significantly compared to using the project-level analysis, and using the county-scale with ramp fraction=0. We showed a comparison between using the current ramp methodology and removing ramps on three urban county emission inventories (slide 28). This demonstrated the emission reductions that are expected from removing ramps for a typical user. We intend to gather further information on ramp activity to better understand the impacts of ramps on overall inventory estimates, and to support users modeling ramp emissions in project-level.

FACA MOVES Review Work Group Meeting

EPA Responses to Comments and Questions Received on Presentation Topic:
MOVES-NONROAD Model Plans and Data Updates

Submitter: Gil Grodzinsky, Georgia Department of Natural Resources (representing NACAA; via email)
Submission: *I like the importer feature for non-road as shown in slide 12 with the ability of easily importing met and fuel. Used it for inventory work. Any additional tabs to provide further inputs beyond generic like retrofits or month/day/hour allocations would be a nice addition if that is not a great effort or drain of resources with all the other priorities. Either way, great job with that addition with MOVES2014. A technical guidance document would be great!*

EPA Response:
While EPA does not intend to add additional nonroad importer tabs for the next release of MOVES, we intend to incorporate GUI features (such as tabs) that would improve the overall user experience into the later redesigned Nonroad model.

Submitter: Chris Frey, North Carolina State University (via email)
Submission: *While the initial focus on activity data is certainly appropriate, given the age of the emission factors that are used for nonroad sources, it seems important that the emission factors be updated and that the plan for this update be discussed as part of this review cycle, even if the actual work might occur later.*

Issues like the ones I mentioned during the call, including engine rebuilds, retrofit of emission controls, repowering (e.g., conversion from diesel to natural gas) may be significant for some source categories or engine sizes, or be useful for those states and other users who are evaluating programs of this type. Secondly, there can be more than one duty cycle for a given type of equipment that leads to differences in cycle average emissions. An example is motor graders (e.g., see Frey, H.C., Kim, K., S. Pang, W. Rasdorf, P. Lewis, "Characterization of Real-World Activity, Fuel Use, and Emissions for Selected Motor Graders Fueled with Petroleum Diesel and B20 Biodiesel," Journal of the Air & Waste Management Association, 58(10):1274-1287, October 2008). Another issue that would need to be addressed when updating emission rates is the potential for updating of deterioration of emission rates related to Tier 4 controls such as selective catalytic reduction, diesel oxidation catalysts, and diesel particulate filters. Another committee member mentioned altitude effects. This work group can be used to help develop longer term plans even if the work might not be conducted until later.

EPA Response:
Thank you. While EPA does not intend for the next release of MOVES to include updates to nonroad emission factors, we appreciate your help as we endeavor to remain informed of related data collection efforts that will inform future model development work.

Submitter: Chris Frey, North Carolina State University (via email)
Submission: *We have been doing PEMS measurements of diesel locomotive passenger trains for about 8 years with the NC Department of Transportation, including over-the-rail measurements during revenue-generating passenger service. If these data might be useful to EPA, we would be happy to share. Examples of papers on this work include:*

Frey, H.C., H.W. Choi, and K. Kim, "Portable Emissions Measurement System for Emissions of Passenger Rail Locomotives," Transportation Research Record, 2289:56-63 (2012). DOI: 10.3141/2289-08.

Graver, B.M., and H.C. Frey, "Comparison of Locomotive Emissions Measured during Dynamometer versus Rail Yard Engine Load Tests," Transportation Research Record, 2341:23-33 (2013).

Graver, B.M., and H.C. Frey, "Comparison of Over-the-Rail and Rail Yard Measurements of Diesel Locomotives," Environmental Science and Technology, 49(21):13031-13039 (2015), DOI: 10.1021/acs.est.5b02497.

Frey, H.C., B.M. Graver, and J. Hu, Locomotive Biofuel Study – Rail Yard and Over the Road Measurements Using Portable Emissions Measurement System, DOT/FRA/ORD-16/04, Prepared by North Carolina State University for Federal Railroad Administration, U.S. Department of Transportation, Washington, DC, March 2016. 388 pages
EPA Response: While EPA has no immediate plans to update the modeling tools used to estimate emissions from locomotives, we appreciate your help as we endeavor to remain informed of related data collection efforts that could inform future model development work.

Submitter: Cecilia Ho, Federal Highway Administration (via email) **Submission:** *Do the changes to the national county list need to be incorporated on the on-road side also or are they already using a single county table?*
EPA Response: MOVES uses a single table of past and present counties to calculate onroad and nonroad emissions. The nrstatesurrogate table, however, contains entries for two counties that were annexed (FIPS code 30113) or added to another county (FIPS code 51780). These counties were deleted prior to 1999, and are therefore not included in the MOVES county table. EPA proposes to update the nrstatesurrogate table to remove these defunct FIPS codes. Relatedly, EPA is proposing to update the nrstatesurrogate table to assign surrogates to three Alaska counties (FIPS codes 2201, 2232, and 2280) that were deleted by the U.S. Census Bureau in 2007-2008 but are included in the MOVES county table (see https://www.census.gov/geo/reference/county-changes.html).

FACA MOVES Review Work Group Meeting

EPA Responses to Comments and Questions Received on Presentation Topic:

HD GHG Phase 2 in MOVES

Submitter: Cecilia Ho, Federal Highway Administration (via email) **Submission:** *Slide 9 mentions that the Phase 2 provisions also include a requirement "for most gliders to have engines installed that meet the same requirements new emissions-compliant engines must meet." However, it is not clear from the rest of the presentation how this requirement will be accounted for in the next version of MOVES in terms of impact on greenhouse gas emissions and criteria pollutants. Does MOVES currently consider the practice of gliders with new frames and older engines or does this fall under the category of things against the letter/spirit of the law that MOVES does not consider (like the VW scandal)?*
EPA Response: The current public version of MOVES (MOVES2014a) currently does not account for the gliders in the fleet. We are in the process of assessing the impacts they have on criteria pollutants and greenhouse gases. We plan to update FACA on this specific topic in a future FACA workgroup meetings. Also, note that we intend for MOVES to account for all factors that have an important and well understood impact on emissions, regardless of their legality.

FACA MOVES Review Work Group Meeting

EPA Responses to Comments and Questions Received on Presentation Topic:
General Comments

Submitter: Gil Grodzinsky, Georgia Department of Natural Resources (representing NACAA; via email)
Submission: *I like the idea of any MOVES modification that could reduce run times or if not that, requires less computer memory/processing requirements to run effectively (it trips a "JAR" error for "weaker" computers for big MOVES runs).*

EPA Response:
Thank you for your input.

Submitter: Chris Frey, North Carolina State University (via email)
Submission: *Regarding the assessment of MOVES predictions of NOx emissions compared to real world emissions, this paper may be helpful:*

Liu, B., and H.C. Frey, "Variability in Light Duty Gasoline Vehicle Emission Factors from Trip-Based Real-World Measurements," Environmental Science & Technology, 49(20):12525-12534. DOI: 10.1021/acs.est.5b00553 (2015)

This paper, and its supporting information, includes comparison of PEMS data for 100 light duty gasoline vehicles, and nearly 600 measured trip-based driving cycles, with predictions of MOVES. Figures 3 and 4 of the main paper indicate that MOVES is predicting higher emission rates than were observed in the PEMS data. It is possible that MOVES is accounting for a higher share of high emitters than observed in the PEMS data, but the exact reason for the difference could not be confirmed.

MOVES could and should be better documented regarding how default opmode emission rates are developed, including more clarity on how high emitters are addressed and incorporated into the rates. It was very difficult for us to find sufficient information to address reviewer comments.

EPA Response:
Thank you for your input.

Submitter: Chris Frey, North Carolina State University (via email)
Submission: *In a recent study of 18 diesel refuse trucks, we typically found that the MOVES NOx emission rates were lower than observed based on PEMS data. Examples can be found in the following papers:*

Sandhu, G.S., H.C. Frey, S. Bartelt-Hunt, and E. Jones, "In-Use Measurement of the Activity, Fuel Use, and Emissions of Front-Loader Refuse Trucks," Atmospheric Environment, 92:557-565 (August 2014).
http://dx.doi.org/10.1016/j.atmosenv.2014.04.036

Sandhu, G.S., H.C. Frey, S. Bartelt-Hunt, and E. Jones, "In-Use Activity, Fuel Use, and Emissions of Heavy Duty Diesel Roll-off Refuse Trucks," Journal of the Air & Waste Management Association, 65(3):306-323 (2015). DOI:10.1080/10962247.2014.99058

Sandhu, G.S., H.C. Frey, S. Bartelt-Hunt, and E. Jones, "Real-World Activity, Fuel Use, and Emissions of Diesel Side-Loader Refuse Trucks," Atmospheric Environment, 129:98-104 (March 2016). doi:10.1016/j.atmosenv.2016.01.014

We did not attempt to diagnose any reasons for the differences. On the positive side, the trend in NOx emission rates between MOVES and the PEMS data was generally qualitatively consistent in that the newer model year trucks with more stringent emissions controls, had lower emission rates than the older trucks.

EPA Response:
Thank you for your input.

Submitter: Chris Frey, North Carolina State University (via email)
Submission: *It would be helpful if EPA would more clearly document what are the base ambient conditions by source type, regulatory class, model year (or combinations of calendar year and age), and pollutant. It seems that the base ambient conditions differ by age and sometimes by pollutant.*

Furthermore, it would be helpful if there was an option to run MOVES to compare vehicle energy use and emissions with versus without air conditioning usage, to assess the effect of AC usage. Perhaps this can be done for a limited range of plausible temperatures in which the AC may or may not be used (e.g., 70 °F to 80 °F).

EPA Response:
Thank you for the suggestions. We will consider them.

Submitter: Chris Frey, North Carolina State University (via email)
Submission: *In some of our current work, we are finding that MOVES is very sensitive to ambient temperature when estimating CO emission rates for E85-fueled vehicles compared to comparable gasoline-fueled vehicles, to the point where MOVES can sometimes predict that the E85 fueled vehicle has higher CO emission rates than the gasoline fueled vehicle. This latter result does not seem realistic. We are not finding this type of result in PEMS data that we have collected on selected flex fuel vehicles.*

EPA Response:
Thanks. We have added to our list of potential bugs for investigation.

Submitter: Chris Frey, North Carolina State University (via email)
Submission: *It appears that MOVES does not currently treat hybrid electric vehicles separately even though they tend to have a growing market share and there appears to be a power train option in MOVES for HEVs – is this correct? Yet, these vehicles have energy use and emission rates that are different from conventional fuel vehicles. We have been looking at HEVs and are in the process of comparing HEV vs. conventional vehicles. We have reported some limited results at recent conferences. An example is:*

Delavarrafiee, M., and H.C. Frey, "Comparison of Hybrid Electric Vehicle and Conventional Gasoline Vehicle Energy Use and Emissions Based on Real-World Measurements," Paper No. 203, Proceedings, Annual Meeting of the Air & Waste Management Association, Raleigh, NC, June 22-25, 2015

Are there plans to include HEV energy use and emission rates in MOVES?

EPA Response:
There are no immediate plans to separately account for hybrid electric vehicles in MOVES. We will consider this for the future.

Submitter: Chris Frey, North Carolina State University (via email)
Submission: *With the growing market share of gas direct injection (GDI) among new LDGVs, are there plans to develop emission rate data that are representative of GDI?*

EPA Response:
We are looking into this now with an initial focus on PM.

Submitter: Chris Voigt, Virginia Department of Transportation (representing AASHTO; via email)
Submission: *Post-Processing Improvement for the MOVESRATES script: Add idle emission rates to the MOVESRATES script. This can be done in the near term and should be a priority.*

EPA Response:
Thank you for the suggestion.

Submitter: Chris Frey, North Carolina State University (via email)
Submission: *In the MOVES default database, energy OpMode rates do not vary by age. However, MOVES seems to report some differences in cycle average energy use rates that depend on age. The reason for this is not very clear – can you please point to where this is explained or offer an explanation for it? How will trends in energy use rates be addressed in the update to MOVES?*

EPA Response:
In MOVES2014, variation in energy consumption by age for a given sourcetype is due to changes in regulatory class mix over time.
For our next version of MOVES, the operating mode distributions will change with model year to reflect changing requirements as mentioned on slide 15 of the "HD GHG Phase 2 in MOVES" presentation (Sept. 14, 2016).

Submitter: Chris Frey, North Carolina State University (via email)
Submission: *The EPA definition of Operating Mode rates for running exhaust emissions includes braking, idle, and three speed ranges each with modes based on either VSP or STP. Unfortunately, the cut points for the VSP or STP modes are not consistent across speed ranges, making comparisons difficult among emission rates for similar loads but different speeds. There are 23 op modes. Is this perhaps too many modes? Can the op modes be simplified into fewer modes?*

With regard to heavy duty vehicles equipped with SCR and DPF, there is evidence in some cases that low exhaust temperatures associated with extended idling could lower the emissions control efficiency of such devices. This came up as a discussion point at the 2016 CRC On-Road Vehicle Emissions Workshop. However, it would seem infeasible to attempt to model exhaust temperature in a model such as MOVES. The modal-based approach can be calibrated with representative data, in which case the question would be what constitutes representative data for a given regulatory class and vocation. Is EPA proposing anything new or different regarding how emissions rates will be estimated for vehicles with SCR, DPF that might account for episodes of low control efficiency related to idling?

EPA Response:
We appreciate the suggestion to simplify the model by reducing the number of op modes and will consider it in our long term planning.
The second question will be addressed in a presentation at the December 7 meeting.

Submitter: Chris Voigt, Virginia Department of Transportation (representing AASHTO; via email)
Submission: *Improve software installation procedures: Continue improvements to the installation and subsequent updates to the MOVES model and ancillary software.*
- *An option to the MySQL database may be needed.*
- *Provide assistance in software installation to create an alternative output to MySQL, e.g., other database format. (So users are not locked into MySQL & its issues)*

EPA Response:
Thank you for the suggestion.

Submitter: Chris Voigt, Virginia Department of Transportation (representing AASHTO; via email)
Submission: *Automate the execution of scripts in batch operation: If feasible, automate the execution of MOVES scripts in batch runs, e.g., MOVESRATES, and decoding output and activity output. Otherwise, when a large number of runs are completed, the modeler has to open each run-spec at the completion of the MOVES run to execute the individual scripts. It would be much more efficient if they could be made to automatically execute with the batch operation, if that is possible.*

EPA Response:
Thank you for the suggestion.

Submitter: Chris Voigt, Virginia Department of Transportation (representing AASHTO; via email)
Submission: *Improve linkages with traffic models: e.g., CUBE Voyageur (regional analyses), Synchro (project level analyses).*

EPA Response:
Thank you for the suggestion.

Submitter: Chris Voigt, Virginia Department of Transportation (representing AASHTO; via email)
Submission: *Create a Scenario Manager: The new "scenario manager" should be designed to allow users to better manage modeling multiple runs and compare incremental results or differences. It should include setting up model runs, conducting batch operations and sensitivity testing, automatic post-processing using MOVES scripts, etc. The design of the scenario manager should be made the subject of a user survey by EPA, including with the AASHTO Air Quality, Climate Change and Energy Subcommittee*

EPA Response:
Thank you for the suggestion.

Submitter: Chris Voigt, Virginia Department of Transportation (representing AASHTO; via email)
Submission: *Consider NCHRP 25-48 TRAQS User Interface linkages: Consider potential coordination with the new graphical user interface from NCHRP 25-48, which links the MOVES emission model to EPA dispersion models with a combined graphical user interface based on open source software. See: http://apps.trb.org/cmsfeed/TRBNetProjectDisplay.asp?ProjectID=3674*

EPA Response:
Thank you for the suggestion.

Submitter: Chris Voigt, Virginia Department of Transportation (representing AASHTO; via email)
Submission: *Road Grade Limitations: Limit the range to which road grades can be modeled to the range observed in practice or the range to which the model has been shown to be valid, whichever is smaller. In support of these limitations, conduct modeling road grade sensitivity tests as needed to document the performance of the model for each pollutant and on-road vehicle/source type to identify acceptable ranges. As a new feature with MOVES, EPA may allow modeling of road grades outside the new limits but issue a warning to modelers that: a) the modeling is outside the expected limits for roadways in the US, and 2) the model may not behave as well for higher road grades, and modelers should plot speed-emission factor curves by vehicle type covering the range needed for their application to ensure that the MOVES model is behaving acceptably. Alternatively, modelers may be prevented by MOVES from running the model outside the acceptable ranges for road grades. Background:*

- *First, it would seem obvious that the modeling of road grades with MOVES should be limited to the maximum that would be actually be expected in practice, rather than be unlimited as it appears to be at present. For example, MOVES could either be limited by the software to the value listed in the current version of the American Association of State and Highway Transportation Officials (AASHTO) "Green Book" which lists maximum road grades for different road types, or as otherwise recommended by the US DOT based on any data that they may have or may obtain or generate.*
- *Second, preliminary modeling shows unexpected anomalous behavior of speed-CO emission factor curves for higher road grades that are within AASHTO Green Book limits for the road type. Model behavior at these higher road grades needs to be investigated to determine the underlying cause and develop and implement appropriate corrections.*
  - *Implementing this recommendation should involve detailed sensitivity analyses (by pollutant, vehicle and fuel type, and road type) to identify the maximum road grade that MOVES can at present reasonably be applied. EPA can then undertake additional research and analysis as needed to identify the underlying issues within MOVES and its handling of higher road grades and take corrective action to address these issues and improve MOVES in future updates of the model.*

- *This question arises because preliminary modeling with MOVES2010b of CO fleet average emission factors by speed for road grades on unrestricted access facilities up to 15% (the upper limit that might be expected for unrestricted access roads based on the maximum grades listed in the AASHTO 2011 Green Book) shows very anomalous behavior for road grades above about 7%. That is, the EF-speed curves become inverted with a maximum at about 25-30 mph. Spot checking with MOVE2014 showed similar anomalous behavior. Modeling results for road grades below about 7% (down to -15% for unrestricted access facilities) do not show anomalous behavior. Modeling results for restricted access facilities (up to 8%) also do not show the same anomalous behavior, but do not appear entirely free of anomalies at higher road grades. The relatively frequency of occurrence of unrestricted access facilities with road grades about 7% may be limited but the problem with MOVES modeling of higher road grades should still be addressed by EPA. Also, recently, more detailed modeling with MOVES2014a shows the same effect (i.e., the anomalous behavior), the degree of which varies by vehicle and fuel type. In other words, the upgrades from MOVES2010b to MOVES2014a have not resolved the underlying problems with MOVES and its handling of road grades.*

▪ *The advantage with this recommendation is that, if MOVES has not yet been validated for the more extreme road grades that may exist in practice, then modelers would be either warned or prevented by MOVES from using model results beyond a certain upper limit for road grades. EPA would need to provide guidance (i.e., a work-around) for these situations, e.g. simply use the emission factor or estimate for the highest road grade for which MOVES has been validated and note with the analysis that this was done.*

EPA Response:
Thank you for the suggestion.

Submitter: Chris Voigt, Virginia Department of Transportation (representing AASHTO; via email)
Submission: *Improve QA/QC:*

▪ *Provide context-sensitive guidance, checks on input data, etc.*

▪ *Alpha and Beta testing of model updates should include comprehensive checks of Emission Factor vs Speed Curves: Improve QA/QC for the model by creating a means to automatically generate speed-emission factor curves for a wide range of road grades, by pollutant, vehicle/source type and road type and then charting the results so that they can be reviewed for anomalies.*

- *It's a significant effort but needs to be done to document that the model is working as expected and correctly before updates is released.*
- *Conducting this type of QA/QC on an official regulatory model should not be up to users, who are subject to litigation on the modeling results for studies (and should not be at risk for the model itself being unreliable under certain conditions).*
- *For background, see the related comment below on "Road Grade Limitations"*

EPA Response:
Thank you for the suggestion.

Submitter: Cecilia Ho, Federal Highway Administration (via email)
Submission: *MOVES2014 made great progress on start emissions by allowing users to provide optional start inputs. As a next step, FHWA suggests updating default starts data in the MOVES model since many users are not able to collect local start information and some comparisons to travel survey data have suggested that MOVES defaults may be too high, especially for light duty vehicles (source types 21, 31, 32)[1]. The current default start information is based on six instrumented vehicle studies conducted between 1992-2005. FHWA suggests using electronic origin destination data from vendors like AirSage or the National Household Travel Survey (latest one currently underway). MOVES default start information should vary by county to account for fewer starts in dense urban areas with good transit service.*

[1] *"Evaluation of MOVES2014 Start Processes and Inputs." Presented by Dan Szekeres and Ying-Tzu, Michael Baker International at 2016 Northern Transportation Air Quality Summit (NTAQS). Baltimore, MD. August 31, 2016. Available at: http://baltometro.org//phocadownload/Events/NTAQS_2016/7.2Szekeres_NTAQS2016.pdf*

EPA Response:
We are planning to update start activity data. More information will be presented at future FACA meetings.

Submitter: Cecilia Ho, Federal Highway Administration (via email)
Submission: *FHWA suggests adding other CNG vehicles to MOVES besides CNG transit buses. We get many requests for CNG emission rates for light duty vehicles, buses, refuse trucks, and single unit trucks for CMAQ emission reduction estimation purposes. AFLEET, which is part of the GREET model prepared by Argonne National Lab, may be a source for CNG and other alternative fuel emission rates to incorporate into MOVES. Currently low national penetration of these alternative fuel vehicles could be reflected in the default fuel type and technology input (AVFT table), but allow areas with higher number of CNG vehicles to override these defaults with local data.*

EPA Response:
Thank you for the suggestion.

Submitter: Cecilia Ho, Federal Highway Administration (via email)
Submission: *FHWA suggests looking at the National Performance Management Research Dataset (NPMRDS)[2] and similar electronic speed datasets from vendors like HERE, INRIX, TomTom, and ATRI as a source of new data for default speed distributions and operating mode distributions. This may help supplement the speed distributions developed for MOVES2014 with TomTom data and help fill gaps in the available drive schedules for certain vehicle type average speed combinations.[3] See NCHRP Report 210 Volume 1 Section 4.7.4.1[4] for examples of how this type of data can be used to create speed distributions.*

[2] http://www.ops.fhwa.dot.gov/freight/freight_analysis/perform_meas/index.htm#data
[3] *See description of current data sources for default average speed distributions and drive cycles in sections 9 and 10 of "Population and Activity On-road Vehicles in MOVES2014" located at:* https://www3.epa.gov/otaq/models/moves/documents/420r16003a.pdf
[4] http://www.trb.org/Publications/Blurbs/172040.aspx

EPA Response:
Thank you for the suggestion.

Submitter: Cecilia Ho, Federal Highway Administration (via email)
Submission: *FHWA would be interested in fuel cycle emissions, especially for greenhouse gases. We are suggesting that fuel cycle GHG emissions be included in NEPA documents to meet CEQ guidance. MOVES2010 had a placeholder for well to pump emissions and EPA previously indicated plans to incorporate GREET. Is this still in the plans for MOVES?*

EPA Response:
To limit the scope of the MOVES model we removed the well-to-pump modeling option. We have no current plans to add it back again.

Submitter: Cecilia Ho, Federal Highway Administration (via email)
Submission: *Brake and Tire Wear Emissions:*

- *Improve brake and tire wear emissions rates with more data, and factor in the effects of newer technologies like regenerative braking, longer-lasting tires, weight reductions to meet GHG standards, etc. (e.g., provide a fleet turnover benefit for brake and tire wear).*
- *Another potential improvement to brake and tire wear would be more work to quantify the particle size distribution (PM10/PM2.5 split). It is currently pretty rudimentary. If EPA is planning tunnel studies as a way of validating other emissions rates[5], can they also sample for PM, and then analyze samples to both verify the brake and tire rates and to sort by particle size?*

[5] *Slide 16 of "MOVES2014 Overview and Plans for the Future" mentions tunnel studies, but it is unclear whether these have already been conducted or not.*

EPA Response:
Thank you for the suggestion.

Submitter: Cecilia Ho, Federal Highway Administration (via email) **Submission:** *Functional improvements:* ○ *On the "Pollutants and Processes" panel or the "Output Emissions Detail" panel, provide an option for MOVES to not report precursor pollutants. This would clean up the output for users who don't need to have emissions or emissions rates for those pollutants.* ○ *On the "Pollutants and Processes" panel, add an option to model Diesel Particulate Matter, which would streamline MSAT analysis. Also see first comment under 9/14/16 meeting material.*
EPA Response: Thank you for the suggestions.

Results: December 7, 2016 EPA Federal Advisory Committee Act (FACA) Motor Vehicle Emission Simulator (MOVES) committee met. If there are any questions or comments about the materials, they must be sent to EPA by January 11, 2017. EPA will work on updating MOVES2014 and is targeting 2018 for the major release.

Summary / Conclusions:
The MOVES FACA acting co-chair is Megan Beardsley. Dr. Matthew Barth, from CE-CERT, is the other co-chair.

Regarding the September FACA meeting, there were 44 comments from 6 people. EPA replied in writing.

Heavy-Duty Trucks with Selective Catalytic Reduction are not as robust in-use as assumed in MOVES. Preliminary results show heavy-duty in-use vehicle emissions are different than current MOVES: THC -47%, CO2 +8%, and NOx +42%.

The assumed DPF failure rate by the end of the engine's useful life is 10% in 2007-2009 MY and 5% for 2010+ MY. So, EPA has incorporated the impact of age & deterioration into a single emission

Regarding auxiliary power unit emission (APU) rates, for model year (MY) 2021-2023 APUs, PM emission rates will decrease by 63%, but NOx emission rates will increase by 25%. For MY 2024+ APUs will use average emission rates from the data for HC, CO, NOx and CO2, and the same PM emission rates as MY 2013+ extended idling (0.025 g/hr). EPA will not be doing more analysis on this.

EPA is proposing changes to vehicle miles traveled. The groupings are changing for populations, but the bins are not changing. EPA does not have enough resources to consolidate bins before the next revision. There is no known source of information to obtain scrappage rates.

The default hoteling rate (hotelling hours per mile of travel) is calculated from the total national source hours operating from the combination of vehicle miles traveled and default average speeds for diesel long-haul combination trucks. Federal regulations require drivers spend at least 8 hours of rest after each 10 hours of driving. So, instead of using the only the Hotelling Hours table for input, users will supply the same data using four additional hoteling tables: hours per day, hour fraction, age fraction and month adjust.

PROTECTED 関係者外秘

PROTECTED 関係者外秘

Email distribution:

To: barth@cert.ucr.edu
Beardsley, Megan <Beardsley.Megan@epa.gov>
Gil.Grodzinsky@dnr.ga.gov
Dale Wells <dale.wells@state.co.us>
Chris.Kite@tceq.texas.gov
ddonofrio@atlantaregional.com
rpatronsky@cmap.illinois.gov
Christopher.Voigt@VDOT.Virginia.gov
vhughes@arb.ca.gov
jjakuta@otcair.org
janssen@ladco.org
james_kliesch@ahm.honda.com
gambrozaitis@autoalliance.org
Susan Collet (TEMA TTC)
<susan.collet@toyota.com>
lax@api.org
mgeller@meca.org
tfrench@clpchicago.com
cecilia.ho@dot.gov
Matthew.Thornton@nrel.gov
cwolfe@edf.org
john@theicct.org
frey@ncsu.edu
baholmen@cems.uvm.edu
vernon.hughes@arb.ca.gov
msolomon@nescaum.org

Cc: david.kall@dot.gov
lubna.shoaib@ewgateway.org
Jamie Davies Shawhyde <jamie_davies@ahm.honda.com>
coolidln@dhec.sc.gov
wei.zhang@deq.idaho.gov
david.chou@arb.ca.gov
dhardy@ampo.org
bkeyrouze@ampo.org
sott461@ecy.wa.gov
Jennifer.Cole@deq.idaho.gov
dorian.kvale@state.mn.us
Jolyon.Shelton@state.de.us
Jeff.Merrell@vermont.gov
Ltonachel@nrdc.org
stobert.lesley@ecrweb.com
Alden West <west.alden@ecrweb.com>
m-boardman@tti.tamu.edu
Eyth, Alison <Eyth.Alison@epa.gov>
sam.pournazeri@arb.ca.gov
jeff.long@arb.ca.gov
zhen.dai@arb.ca.gov
Julie McDill <jmcdill@marama.org>
sbai@sonomatech.com
Doug@sonomatech.com
Sonya Lewis-Cheatham <sonya.lewis-cheatham@deq.virginia.gov>
christopher.bovee@wisconsin.gov
John.Gorgol@dep.nj.gov
Jim.Koroniades@dep.nj.gov
ychung@mbakerintl.com
Steve Potter <steven.potter@ct.gov>
Marc.Corrigan@tn.gov
swierman@marama.org
James.R.Smith@tn.gov
louis.corsino@ct.gov
christopher.boyd@shelbycountytn.gov
Britt Holmen <Britt.Holmen@uvm.edu>
Anthony McClard <mcclarad@dhec.sc.gov>
jnarvaez@nctcog.org
jloza@nctcog.org
vthimmavajjhala@nctcog.org
M-Venugopal@tti.tamu.edu
Shan, Yue <Yue.Shan@mbakerintl.com>
gustafson@boydengrayassociates.com

Agenda:

MOVES FACA Review Work Group Meeting Agenda: December 7, 2016	
Time	**Topic**
1:00 - 1:15	Welcome and Opening Remarks
1:15 – 2:00	Update to Running Exhaust Criteria Pollutant Emission Rates for Model Year 2010+ Heavy-Duty Diesel Vehicles
2:00 – 2:30	Updated Emission Rates for Extended Idle and Auxiliary Power Units
2:30 – 2:45	Break
2:45 – 3:30	MOVES Onroad Vehicle Population and Activity Update
3:30 – 3:45	Updating Hoteling Hours in MOVES
3:45 – 4:00	Closing Remarks

To: Corey, Richard@ARB[richard.corey@arb.ca.gov]; Cliff, Steve@ARB[Steve.Cliff@arb.ca.gov]; Hengst, Benjamin[Hengst.Benjamin@epa.gov]; Cook, Leila[cook.leila@epa.gov]; Fuentes, Mark@ARB[mfuentes@arb.ca.gov]; Haugen, David[haugen.david@epa.gov]; Hebert, Annette@ARB[annette.hebert@arb.ca.gov]; Grundler, Christopher[grundler.christopher@epa.gov]; Charmley, William[charmley.william@epa.gov]; mike mccarthy[michael.mccarthy@arb.ca.gov]; Bunker, Byron[bunker.byron@epa.gov]; Carter, Michael@ARB[michael.carter@arb.ca.gov]; Morris, Desirey@ARB[Desirey.Morris@arb.ca.gov]; Bevan, Analisa@ARB[analisa.bevan@arb.ca.gov]; Fuentes, Mark@ARB[mfuentes@arb.ca.gov]; Kitowski, Jack@ARB[jack.kitowski@arb.ca.gov]
From: Simon, Karl
Sent: Mon 11/20/2017 7:39:39 PM
Subject: RE: November OTAQ/ARB Senior Leadership Coordination: Monday, November 20 - Call for Agenda Items

Thanks to our friends from the West Coast. Best Thanksgiving wishes for you all as well

From: Corey, Richard@ARB [mailto:richard.corey@arb.ca.gov]
Sent: Monday, November 20, 2017 1:22 PM
To: Cliff, Steve@ARB <Steve.Cliff@arb.ca.gov>; Hengst, Benjamin <Hengst.Benjamin@epa.gov>; Cook, Leila <cook.leila@epa.gov>; Fuentes, Mark@ARB <mfuentes@arb.ca.gov>; Haugen, David <haugen.david@epa.gov>; Hebert, Annette@ARB <annette.hebert@arb.ca.gov>; Simon, Karl <Simon.Karl@epa.gov>; Grundler, Christopher <grundler.christopher@epa.gov>; Charmley, William <charmley.william@epa.gov>; mike mccarthy <michael.mccarthy@arb.ca.gov>; Bunker, Byron <bunker.byron@epa.gov>; Carter, Michael@ARB <michael.carter@arb.ca.gov>; Morris, Desirey@ARB <Desirey.Morris@arb.ca.gov>; Bevan, Analisa@ARB <analisa.bevan@arb.ca.gov>; Fuentes, Mark@ARB <mfuentes@arb.ca.gov>; Kitowski, Jack@ARB <jack.kitowski@arb.ca.gov>
Subject: RE: November OTAQ/ARB Senior Leadership Coordination: Monday, November 20 - Call for Agenda Items

Understood. We wish you, Karl, Chris and our other EPA colleagues a wonderful Thanksgiving. Talk soon.

Richard

On November 20, 2017 at 9:01:40 AM PST, Charmley, William <charmley.william@epa.gov> wrote:

Dear all –

I apologize, but both Karl and I now have a conflict that can't be moved, and Chris Grundler is on leave today.

So, I have asked Chris's secretary to cancel our call for this afternoon.

Jack/Mike C. – I will catch up with both of you within the next few days regarding a few highway heavy-duty topics.

I hope everyone has a nice Thanksgiving break.

Best regards,

Bill

From: Charmley, William
Sent: Friday, November 17, 2017 2:49 PM
To: Grundler, Christopher <grundler.christopher@epa.gov>; Cook, Leila

<cook.leila@epa.gov>; Hengst, Benjamin <Hengst.Benjamin@epa.gov>; Haugen, David <haugen.david@epa.gov>; Simon, Karl <Simon.Karl@epa.gov>; steve.cliff@arb.ca.gov; Hebert, Annette@ARB <annette.hebert@arb.ca.gov>; jack.kitowski@arb.ca.gov; Carter, Michael@ARB <michael.carter@arb.ca.gov>; richard.corey@arb.ca.gov; analisa.bevan@arb.ca.gov; mark.fuentes@arb.ca.gov; Bunker, Byron <bunker.byron@epa.gov>; Fuentes, Mark@ARB <mfuentes@arb.ca.gov>; McCarthy, Mike@ARB <mmccarth@arb.ca.gov>; Morris, Desirey@ARB <Desirey.Morris@arb.ca.gov>
Subject: November OTAQ/ARB Senior Leadership Coordination: Monday, November 20 - Call for Agenda Items

Dear all –

Our November ARB/OTAQ senior leadership coordination call is scheduled for this upcoming Monday, November 20 from 12-1pm pacific, 3-4 eastern.

Here are a few suggestions I have for agenda items:

1. **Highway Heavy-duty Topics**

1. EPA Update on Heavy-duty Gliders [Charmley]

2. CARB & EPA Update on Heavy-duty NOx work

3. CARB Update on Adoption of Heavy-duty Phase 2 Program [Carter/Kitowski]

2. **EPA Light-duty Mid-term Evaluation Update** [Charmley]

3. **CARB Advanced Clean Cars 2026+ Update** [Cliff/Hebert/McCarthy]

Please send me other topics you would like added to the Agenda. I will send out a final agenda on Monday morning.

Thanks

Bill

To: Charmley, William[charmley.william@epa.gov]
Cc: Grundler, Christopher[grundler.christopher@epa.gov]; Cook, Leila[cook.leila@epa.gov]; Hengst, Benjamin[Hengst.Benjamin@epa.gov]; Haugen, David[haugen.david@epa.gov]; steve.cliff@arb.ca.gov[steve.cliff@arb.ca.gov]; Hebert, Annette@ARB[annette.hebert@arb.ca.gov]; jack.kitowski@arb.ca.gov[jack.kitowski@arb.ca.gov]; Carter, Michael@ARB[michael.carter@arb.ca.gov]; richard.corey@arb.ca.gov[richard.corey@arb.ca.gov]; analisa.bevan@arb.ca.gov[analisa.bevan@arb.ca.gov]; mark.fuentes@arb.ca.gov[mark.fuentes@arb.ca.gov]; Bunker, Byron[bunker.byron@epa.gov]; Fuentes, Mark@ARB[mfuentes@arb.ca.gov]; McCarthy, Mike@ARB[mmccarth@arb.ca.gov]; Morris, Desirey@ARB[Desirey.Morris@arb.ca.gov]
From: Simon, Karl
Sent: Fri 11/17/2017 8:00:05 PM
Subject: Re: November OTAQ/ARB Senior Leadership Coordination: Monday, November 20 - Call for Agenda Items

December meeting in Sacramento. Thx

On Nov 17, 2017, at 2:49 PM, Charmley, William <charmley.william@epa.gov> wrote:

Dear all –

Our November ARB/OTAQ senior leadership coordination call is scheduled for this upcoming Monday, November 20 from 12-1pm pacific, 3-4 eastern.

Here are a few suggestions I have for agenda items:

1. **Highway Heavy-duty Topics**

•□□□□□□□□ EPA Update on Heavy-duty Gliders [Charmley]

•□□□□□□□□ CARB & EPA Update on Heavy-duty NOx work

•□□□□□□□□ CARB Update on Adoption of Heavy-duty Phase 2 Program [Carter/Kitowski]

2. **EPA Light-duty Mid-term Evaluation Update** [Charmley]

3. **CARB Advanced Clean Cars 2026+ Update** [Cliff/Hebert/McCarthy]

Please send me other topics you would like added to the Agenda. I will send out a final agenda on Monday morning.

Thanks

Bill

To: Corey, Richard@ARB[richard.corey@arb.ca.gov]
From: Grundler, Christopher
Sent: Mon 10/23/2017 10:24:54 PM
Subject: Update: HD GHG Phase 2--Gliders

Richard—on Friday the agency sent to the WH/OMB for review a proposal (NPRM) to **rescind the standards in the HD Phase 2 final rule that apply to glider vehicles and engines**. Recall, we established both ghg and criteria emission standards to glider vehicles effective January 1, 2018. The proposal under review proposes that EPA erred in its determination that it had authority to regulate gliders and glider engines as "new motor vehicles" under the Act

Call me with questions. I am flying to LA tomorrow morning, landing around 10:15 am PDT

Chris

Christopher Grundler, Director

Office of Transportation and Air Quality

U.S. Environmental Protection Agency

202.564.1682 (Washington, DC)

734.214.4207 (Ann Arbor, MI)

To: dan.kieffer@paccar.com[dan.kieffer@paccar.com]; Matthew Psota[matthew.psota@cummins.com]; gerald.freitag@daimler.com[gerald.freitag@daimler.com]; Pat Quinn[pquinn@theaccordgroup.com]; Dorobantu, Mihai[MihaiDorobantu@eaton.com]; Miller Marc[marc.miller@volvo.com]; Jackie M Yeager[jackie.m.yeager@cummins.com]; Guzlas, Cortney[Cortney.Guzlas@Navistar.com]; david.kayes@daimler.com[david.kayes@daimler.com]; Berry Steve[steve.berry@volvo.com]; Gardner, David[David.Gardner@Navistar.com]; Greg Mann[greg.mann@allisontransmission.com]; Timothy A. Blubaugh[TBlubaugh@emamail.org]; donald.keski-hynnila@daimler.com[donald.keski-hynnila@daimler.com]
Cc: francis.seymour_jr@daimler.com[francis.seymour_jr@daimler.com]; brian.lavoie@daimler.com[brian.lavoie@daimler.com]; ErikDykes@eaton.com[ErikDykes@eaton.com]; Ricart-Ugaz, Laura M[Laura.Ricart@Navistar.com]; Mark Malowicki[Mark.Malowicki@PACCAR.com]; inderpal.singh@daimler.com[inderpal.singh@daimler.com]; MarcoADiniz@Eaton.com[MarcoADiniz@Eaton.com]; igor.gruden@daimler.com[igor.gruden@daimler.com]; Zia, Seiar (NHTSA)[seiar.zia@dot.gov]; Maurice.Hicks@dot.gov[Maurice.Hicks@dot.gov]; Cooper, Coralie (VOLPE)[Coralie.Cooper@dot.gov]
From: Spears, Matthew
Sent: Thur 3/30/2017 2:40:22 PM
Subject: Presentation materials from "HD Phase 2 Powertrain Testing Meeting at EPA in Ann Arbor"
Eaton EPA meeting 3-29-2017.pdf
EPA_PowertrainTest_29Mar2017.pptx
EPA GHG Discussion - Calibrations March 2017.pptx
WA_1-08_2016-10-19.pptx
WA_1-08_2016-11-01.pptx
WA_2-08_2017-01-07.pptx
WA_2-08_2017-02-07.pptx
WA_2-08_2017-02-13.pptx

To all:

Thank you for participating in our meeting yesterday. I think we all thought it was productive.

The presentations from the meeting are attached to this email, and please let me know if you have any questions about the SwRI bi-weekly update presentations, thanks.

Regards,

Matthew Spears

Center Director, Heavy-Duty Diesel Standards U.S. Environmental Protection Agency

2000 Traverwood Dr.

Ann Arbor, MI 48105

spears.matthew@epa.gov

w. 734-214-4921

m. 734-276-7079

-----Original Appointment-----
From: Spears, Matthew
Sent: Tuesday, March 07, 2017 10:58 AM
To: Spears, Matthew; Schaefer, Ron; Duncan, Allen; Steele, Lauren; dan.kieffer@paccar.com; Matthew Psota; gerald.freitag@daimler.com; Pat Quinn; Dorobantu, Mihai; Healy, Stephen; Miller Marc; Jackie M Yeager; Moulis, Charles; Cullen, Angela; Sanchez, James; Guzlas, Cortney; david.kayes@daimler.com; Berry Steve; Zhang, Houshun; Gardner, David; Greg Mann; Timothy A. Blubaugh; donald.keski-hynnila@daimler.com
Cc: Costi Nedelcu; He Yuesheng; francis.seymour_jr@daimler.com; brian.lavoie@daimler.com; ErikDykes@eaton.com; Ricart-Ugaz, Laura M; Mark Malowicki; inderpal.singh@daimler.com; MarcoADiniz@Eaton.com; Maurice.Hicks@dot.gov; seiar.zia@dot.gov; vina.nagabhushana@dot.gov; kevin.ennis.ctr@dot.gov; Coralie.Cooper@dot.gov; igor.gruden@daimler.com
Subject: HD Phase 2 Powertrain Testing Meeting at EPA in Ann Arbor (EPA, OEMs and transmission suppliers)
When: Wednesday, March 29, 2017 8:30 AM-5:00 PM (UTC-05:00) Eastern Time (US & Canada).
Where: EPA Office Building Lobby Conference Room, C126, 2000 Traverwood Dr, Ann Arbor, MI 48104, telecon and AdobeConnect

To all:

Based on recent feedback from Eaton and other OEMs and suppliers, EPA is interested in hosting an informal meeting to discuss HD Phase 2 Powertrain Testing.

The overall purpose of this meeting would be to share recent experiences conducting powertrain testing and to discuss any lessons learned and/or any new issues that we all should be considering further.

I would like to propose to hold this meeting on Wednesday March 29th, from 8:30am-5:00pm EDT in the lobby conference room (C126) of our office building, located at 2000 Traverwood Drive, Ann Arbor, MI 48104.

For those who would wish to join this meeting remotely, here is call-in and AdobeConnect information:

Meeting Name: HD Phase 2 Powertrain Testing

When: 03/29/2017 8:30 AM - 5:00 PM

Time Zone: (GMT-05:00) Eastern Time (US and Canada)

Conference Number(s): Ex. 5 - Deliberative Process

Participant Code: Ex. 5 - Deliberative Process

To join the meeting: http://epawebconferencing.acms.com/r2baylgusnf/

Room Passcode: HDPhase2

To test your connection:
http://epawebconferencing.acms.com/common/help/en/support/meeting_test.htm

DRAFT AGENDA

I would also like to propose the following draft agenda, and I invite you to provide me with suggestions for revisions to this agenda:

8:30am Welcome, Introductions, Review Agenda

8:45am Setting the stage: EPA to provide overview of motivation for finalizing powertrain test option in HD Phase 2, including related issues from light-duty (certifying vehicles with multiple shift strategies) --Matt Spears

9:00am EPA experiences conducting powertrain testing at SwRI --Houshun Zhang and James Sanchez

9:45am Transmission supplier experiences conducting powertrain testing -Eaton?

10:30am Break

10:45am OEM experiences conducting powertrain testing --PACCAR?

11:30am Identify and summarize testing and test procedure open issues—driver model and dyno tuning? Default vehicle configurations?

12:00pm Lunch

1:00pm Potential for in-use issues (post-sale shift strategy changes?, warranty and defect reporting?, in-use compliance?) --Eaton?

2:00pm Break

2:15pm Open discussion to clarify interpretations and intent of HD Phase 2 Regulations (1036, 1037, 1065, 1068, etc.) --EPA/all

3:00pm Identify any other potential barriers for manufacturers to utilize the powertrain testing option and identify EPA concerns about enforcing HD Phase 2 when the powertrain testing option is exercised

3:30pm Identify next steps for all meeting participants: additional testing plans?, EPA consideration of issuing future guidance and/or clarifications to regulations via technical amendments?

4:30pm Wrap-up

5:00pm End of meeting

Please let me know if you have any questions about this proposed meeting, thanks.

Regards,

Matthew Spears

Center Director, Heavy-Duty Diesel Standards U.S. Environmental Protection Agency

2000 Traverwood Dr.

Ann Arbor, MI 48105

spears.matthew@epa.gov

w. 734-214-4921

m. 734-276-7079

To: Aiko Matsunaga[amatsuna@arb.ca.gov]; Alberto Ayala (aayala@arb.ca.gov)[aayala@arb.ca.gov]; ANTHONY.BECK@sgs.com[ANTHONY.BECK@sgs.com]; Atul Shah (ashah@sensors-inc.com)[ashah@sensors-inc.com]; Benjamin C. Shade - AVL Test Systems, Inc. (benjamin.shade@avl.com)[benjamin.shade@avl.com]; Berghof, Frank AVL/AT [Frank.Berghof@avl.com][Frank.Berghof@avl.com]; Bertrand Lanher (blanher@sensors-inc.com)[blanher@sensors-inc.com]; Bill Martin - SGS - Transportation Division (William.Martin@sgs.com)[William.Martin@sgs.com]; Bill Silvis (bill.silvis@avl.com)[bill.silvis@avl.com]; Bishnu, Dipak (dbishnu@arb.ca.gov)[dbishnu@arb.ca.gov]; bmarshik@servomex.com[bmarshik@servomex.com]; Giannelli, Bob[Giannelli.Bob@epa.gov]; bradley.bane@ge.com[bradley.bane@ge.com]; Brian Dueber (bdueber@mtlcorp.com)[bdueber@mtlcorp.com]; Brian Mace (brian.mace@horiba.com)[brian.mace@horiba.com]; Olson, Brian[olson.brian@epa.gov]; Carl D. Ensfield (censfield@sensors-inc.com)[censfield@sensors-inc.com]; Ryan, Carl[ryan.carl@epa.gov]; Charmley, William[charmley.william@epa.gov]; Chris Sharp (chris.sharp@swri.org)[chris.sharp@swri.org]; Dan Carder (daniel.carder@mail.wvu.edu)[daniel.carder@mail.wvu.edu]; Dan Sales (dsales@gasanalyzers.com)[dsales@gasanalyzers.com]; daniel.hawelti@arb.ca.gov[daniel.hawelti@arb.ca.gov]; David Dikken (ddikken@mtlcorp.com)[ddikken@mtlcorp.com]; david.horstman@intertek.com[david.horstman@intertek.com]; Don Chernich[dchernic@arb.ca.gov]; Doug Sobotka - Excel Engineering (Doug.Sobotka@ExcelEngineering.org)[Doug.Sobotka@ExcelEngineering.org]; Hamady, Fakhri[hamady.fakhri@epa.gov]; Dustin Osborne (dustin.osborne@swri.org)[dustin.osborne@swri.org]; Dylan Mann[dmann@peaker.com]; Gil LaDuke (ghladuke@gw.dec.state.ny.us)[ghladuke@gw.dec.state.ny.us]; 'Glenn, Doug (GE Infra, Transportation)'[doug.glenn@ge.com]; Glinsky, Gerard (Aurora)[Gerard.Glinsky@sgs.com]; Granville Hayworth - ArvinSango (granville.hayworth@arvinsango.com)[granville.hayworth@arvinsango.com]; Gurdas Singh Sandhu (gssandhu@ncsu.edu)[gssandhu@ncsu.edu]; Harlan Quan[hquan@arb.ca.gov]; htle@arb.ca.gov[htle@arb.ca.gov]; lKhalek@swri.edu[lKhalek@swri.edu]; jlourenc@arb.ca.gov[jlourenc@arb.ca.gov]; Jackson, Cleophas[jackson.cleophas@epa.gov]; Sanchez, James[sanchez.james@epa.gov]; Gumbs, Jason[Gumbs.Jason@epa.gov]; Jeff R. Wasil (jeff.wasil@brp.com)[jeff.wasil@brp.com]; jlowry@arb.ca.gov[jlowry@arb.ca.gov]; Joe Sweeney (jsweeney@acscm.com)[jsweeney@acscm.com]; John Harrod (jdharrod@netzero.com)[jdharrod@netzero.com]; McDonald, Joseph[McDonald.Joseph@epa.gov]; Joseph McManus[joe.mcmanus@ricardo.com]; Joshua Israel[joshua.israel@mail.wvu.edu]; Keith Vertin (Keith.vertin@sgs.com)[Keith.vertin@sgs.com]; 'Kelly, Brian E (GE Infra, Transportation)'[Brian.Kelly1@ge.com]; Kent Johnson (kjohnson@cert.ucr.edu)[kjohnson@cert.ucr.edu]; KUMAR, Anuj [anuj.kumar@airliquide.com][anuj.kumar@airliquide.com]; Laroo, Chris[laroo.chris@epa.gov]; Loren Mathews (lmathews@gasanalyzers.com)[lmathews@gasanalyzers.com]; Maldonado, Hector (hmaldona@arb.ca.gov)[hmaldona@arb.ca.gov]; Mang Zhang (mzhang@arb.ca.gov)[mzhang@arb.ca.gov]; Peralta, Maria[Peralta.Maria@epa.gov]; Mark Fuentes (mfuentes@arb.ca.gov)[mfuentes@arb.ca.gov]; Spears, Matthew[spears.matthew@epa.gov]; Matt Swanson - CAI, Inc. (mswanson@gasanalyzers.com)[mswanson@gasanalyzers.com]; Matt Thiel (mthiel@acscm.com)[mthiel@acscm.com]; Mayotte, Steve[mayotte.steve@epa.gov]; mcarter@arb.ca.gov[mcarter@arb.ca.gov]; Michael L. Traver (michael.traver@aramcoservices.com)[michael.traver@aramcoservices.com]; Mike Akard (mike.akard@horiba.com)[mike.akard@horiba.com]; Mike May[mike.may@ricardo.com]; Misra, Chandan@ARB <chandan.misra@arb.ca.gov>[chandan.misra@arb.ca.gov]; mjsmith@swri.edu[mjsmith@swri.edu]; Mohan Krishnamurthy (mkrishna@arb.ca.gov)[mkrishna@arb.ca.gov]; Mridul Gautam (mgautam@wvu.edu)[mgautam@wvu.edu]; Munday, Dave (dave.munday@horiba.com)[dave.munday@horiba.com]; Nelson, Brian[nelson.brian@epa.gov]; Ng, Henry K[hkng@Central.UH.EDU]; NICHOLAS.BELLOVARY@sgs.com[NICHOLAS.BELLOVARY@sgs.com]; Oliver Chang (ochang@arb.ca.gov)[ochang@arb.ca.gov]; Paul Rieger (prieger@arb.ca.gov)[prieger@arb.ca.gov]; Pournazeri, Sam@ARB <sam.pournazeri@arb.ca.gov>[sam.pournazeri@arb.ca.gov];

Richard.frazee@avl.com[Richard.frazee@avl.com]; rick.rooney@horiba.com[rick.rooney@horiba.com]; Rob Wilson[rwilson@sensors-inc.com]; Robert C. Anderson (robert.anderson@tsi.com)[robert.anderson@tsi.com]; robert.jimenez@airgas.com[robert.jimenez@airgas.com]; Ron Tandy - Horiba[Ron.tandy@horiba.com]; russell.graze@yahoo.com[russell.graze@yahoo.com]; seungju.yoon@arb.ca.gov[seungju.yoon@arb.ca.gov]; sfritz@swri.org[sfritz@swri.org]; Sonny Moore (smoore@mtlcorp.com)[smoore@mtlcorp.com]; sshakenis@wabtec.com[sshakenis@wabtec.com]; Steve Mitchell (steven.j.mitchell@emdiesels.com)[steven.j.mitchell@emdiesels.com]; Sun, Ruonan[sun.ruonan@epa.gov]; Sylvie Bosch-Charpenay (sylvie_bosch-charpenay@mksinst.com)[sylvie_bosch-charpenay@mksinst.com]; Thomas Lanni (thomaslanni@gmail.com)[thomaslanni@gmail.com]; Tim Johnson (tim.johnson@tsi.com)[tim.johnson@tsi.com]; Todd Carpenter[Todd.Carpenter@avl.com]; Valerie Bossoutrot Ph. D. (valerie.bossoutrot@airliquide.com)[valerie.bossoutrot@airliquide.com]; Virendra Kumar (vkumar@eswgroup.com)[vkumar@eswgroup.com]; Wayne Sobieralski[wsobiera@arb.ca.gov]; William Robertson (wroberts@arb.ca.gov)[wroberts@arb.ca.gov]; Williamson, James AVLNA[James.Williamson@avl.com]
Cc: shirish.a.shimpi@cummins.com[shirish.a.shimpi@cummins.com]
From: Andjelka Vujovic
Sent: Wed 3/29/2017 3:28:26 PM
Subject: EMA - EMTC, CARB, EPA & Others - March 8-9, 2017, EMTC Meeting Minutes and Attachments
2017-02-24_CH_NMNEHC-Measurement-FTIR (004).pdf
Attendance List for March 2017 EMTC.pdf
2017-03-08 to 09 EMTC Meeting - Agenda.pdf
2017-03-08 to 03-09 EMTC_meeting minutes - draft-3.pdf

TO: Engine Emissions Measurement & Testing Committee

(EMA Members, CARB, EPA & Others)
CC: Timothy A. French
FROM: Shirish Shimpi
DATE: March 29, 2017
RE: **March 8-9, 2017, EMTC Meeting Minutes and Attachments**

Attached are the March 8-9, 2017, EMTC meeting minutes and attachments. The next EMTC meeting will be held on May 17, 2017, at SwRI in San Antonio, Texas. A meeting notice will be distributed shortly.

If you have any questions, please do not hesitate to contact me.

Shirish A. Shimpi, Ph. D.
Director
Emissions Development
Cummins Inc.
Mail Code 50180

1900 McKinley Ave
Columbus, Indiana 47201

Ex. 6 - Personal Privacy

Andjelka Vujovic

Truck & Engine Manufacturers Association

333 West Wacker Drive ▪ Suite 810
Chicago, Illinois ▪ 60606

Ex. 6 - Personal Privacy

avujovic@emamail.org

Please consider the environment before printing this email.

-

Confidentiality Notice: This communication is confidential and may contain privileged information. If you have received it in error, please notify the sender by reply e-mail and immediately delete it and any attachments without copying or further transmitting the same.

To: Brian C Mormino[brian.c.mormino@cummins.com]; Jon A Dickson[jon.a.dickson@cummins.com]; Spears, Matthew[spears.matthew@epa.gov]; Charmley, William[charmley.william@epa.gov]; Sanchez, James[sanchez.james@epa.gov]; Gary C Salemme[gary.c.salemme@cummins.com]; tom.sloane@paccar.com[tom.sloane@paccar.com]; Cortney.Guzlas@Navistar.com[Cortney.Guzlas@Navistar.com]; Zhang, Houshun[Zhang.Houshun@epa.gov]; Matthew.Hunkler@Navistar.com[Matthew.Hunkler@Navistar.com]; Manik Narula[manik.narula@cummins.com]; erin.luke@paccar.com[erin.luke@paccar.com]; debbie.gordon@allisontransmission.com[debbie.gordon@allisontransmission.com]; MihaiDorobantu@eaton.com[MihaiDorobantu@eaton.com]; Jeffrey.shultz@allisontransmission.com[Jeffrey.shultz@allisontransmission.com]; david.gardner@navistar.com[david.gardner@navistar.com]; David.Majors@Navistar.com[David.Majors@Navistar.com]; MatthewRBusdiecker@eaton.com[MatthewRBusdiecker@eaton.com]; ErikDykes@eaton.com[ErikDykes@eaton.com]; dan.kieffer@paccar.com[dan.kieffer@paccar.com]; Anthony Greszler (anthony.greszler@volvo.com)[anthony.greszler@volvo.com]; He Yuesheng[yuesheng.he@volvo.com]; Ricart-Ugaz, Laura M[Laura.Ricart@Navistar.com]; Marley Jeffrey[jeff.marley@volvo.com]; Mark Malowicki[Mark.Malowicki@PACCAR.com]; Costi Nedelcu[Costi.Nedelcu@PACCAR.com]; Miller Marc[marc.miller@volvo.com]; donald.keski-hynnila@daimler.com[donald.keski-hynnila@daimler.com]; aaron.neuman@daimler.com[aaron.neuman@daimler.com]; gerald.freitag@daimler.com[gerald.freitag@daimler.com]; steve.berry@volvo.com[steve.berry@volvo.com]; tblubaugh@emamail.org[tblubaugh@emamail.org]; david.kayes@daimler.com[david.kayes@daimler.com]; Mark.Siddall@HMMUSA.COM[Mark.Siddall@HMMUSA.COM]; LIN_GEORGE@cat.com[LIN_GEORGE@cat.com]; inderpal.singh@daimler.com[inderpal.singh@daimler.com]; Kaslavage Charles[charles.kaslavage@volvo.com]; scott.mundy@allisontransmission.com[scott.mundy@allisontransmission.com]; Thomas Manley[Thomas.Manley@HMMUSA.COM]
From: Jackie M Yeager
Sent: Thur 4/28/2016 5:24:25 PM
Subject: RE: Phase 2 Collaboration meeting agenda
Cummins ISX Cycle Average Map 4-28-16.pdf

All – here are the ISX slides that Cummins will present on today's call.

Regards,

Jackie Yeager
GHG/Fuel Efficiency Policy Director

Environmental Strategy and Compliance
Cummins Inc.

Ex. 6 - Personal Privacy

From: Jackie M Yeager

Sent: Wednesday, April 27, 2016 2:20 PM
To: Brian C Mormino <brian.c.mormino@cummins.com>; Jon A Dickson <jon.a.dickson@cummins.com>; 'spears.matthew@epa.gov' <spears.matthew@epa.gov>; 'charmley.william@epa.gov' <charmley.william@epa.gov>; 'Sanchez.james@Epa.gov' <Sanchez.james@Epa.gov>; Gary C Salemme <gary.c.salemme@cummins.com>; 'tom.sloane@paccar.com' <tom.sloane@paccar.com>; 'Cortney.Guzlas@Navistar.com' <Cortney.Guzlas@Navistar.com>; 'Zhang.Houshun@epa.gov' <Zhang.Houshun@epa.gov>; 'Matthew.Hunkler@Navistar.com' <Matthew.Hunkler@Navistar.com>; Manik Narula <manik.narula@cummins.com>; 'erin.luke@paccar.com' <erin.luke@paccar.com>; 'debbie.gordon@allisontransmission.com' <debbie.gordon@allisontransmission.com>; 'MihaiDorobantu@eaton.com' <MihaiDorobantu@eaton.com>; 'Jeffrey.shultz@allisontransmission.com' <Jeffrey.shultz@allisontransmission.com>; 'david.gardner@navistar.com' <david.gardner@navistar.com>; 'David.Majors@Navistar.com' <David.Majors@Navistar.com>; 'MatthewRBusdiecker@eaton.com' <MatthewRBusdiecker@eaton.com>; 'ErikDykes@eaton.com' <ErikDykes@eaton.com>; 'dan.kieffer@paccar.com' <dan.kieffer@paccar.com>; Anthony Greszler (anthony.greszler@volvo.com) <anthony.greszler@volvo.com>; 'He Yuesheng' <yuesheng.he@volvo.com>; 'Ricart-Ugaz, Laura M' <Laura.Ricart@Navistar.com>; 'Marley Jeffrey' <jeff.marley@volvo.com>; 'Mark Malowicki' <Mark.Malowicki@PACCAR.com>; 'Costi Nedelcu' <Costi.Nedelcu@PACCAR.com>; 'Miller Marc' <marc.miller@volvo.com>; 'donald.keski-hynnila@daimler.com' <donald.keski-hynnila@daimler.com>; 'aaron.neuman@daimler.com' <aaron.neuman@daimler.com>; 'gerald.freitag@daimler.com' <gerald.freitag@daimler.com>; 'steve.berry@volvo.com' <steve.berry@volvo.com>; 'tblubaugh@emamail.org' <tblubaugh@emamail.org>; 'david.kayes@daimler.com' <david.kayes@daimler.com>; 'Mark.Siddall@HMMUSA.COM' <Mark.Siddall@HMMUSA.COM>; 'LIN_GEORGE@cat.com' <LIN_GEORGE@cat.com>; 'inderpal.singh@daimler.com' <inderpal.singh@daimler.com>; 'Kaslavage Charles' <charles.kaslavage@volvo.com>; 'scott.mundy@allisontransmission.com' <scott.mundy@allisontransmission.com>; 'Thomas Manley' <Thomas.Manley@HMMUSA.COM>
Subject: Phase 2 Collaboration meeting agenda

Reminder of Thursday's call at 3:00 pm Eastern. (This call has been rescheduled from last week.)

Proposed agenda:

1. ISB and N13 testing at SwRI – Houshun

2. ISX test results – Jackie

3. Road grade evaluation – TBD

4. Other topics?

5. Plan next call – All

Call-in and Skype information:

New non-Cummins attendees will need to install the Skype for Business web app plug-in. See the attached instructions.

For non-Cummins participants:

.....

→ Join Skype Meeting

This is an online meeting for Skype for Business, the professional meetings and communications app formerly known as Lync.

For Cummins participants:

.....

→ Join Skype Meeting

This is an online meeting for Skype for Business, the professional meetings and communications app formerly known as Lync.

Join by phone

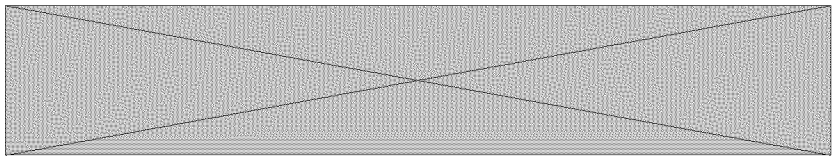
(USA) - (636)651-3189 - Caller Paid (Region)

(USA) - (877)810-9439 - Toll Free (Region)

Find a local number

Conference ID: 9089051

Forgot your dial-in PIN? | Help



Audio for this Skype for Business meeting is available using a computer or the phone dial-in bridge. Cummins Skype Advanced users should select "Use Skype for Business (full audio and video experience)" when using their PCs to connect to the meeting audio. Cummins Skype Standard users should select "Don't Join Audio" and dial into the phone bridge.

Regards,

Jackie Yeager
GHG/Fuel Efficiency Policy Director

Environmental Strategy and Compliance
Cummins Inc.
Phone 812-377-8774
jackie.m.yeager@cummins.com