



Working together to plan for the future

INTERAGENCY CONSULTATION COMMITTEE (ICC)

July 12, 2016 - **9:00 AM**

COMPASS, 700 NE 2nd Street, 2nd Floor Large Conference Room
Meridian, Idaho

** AGENDA **

I. CALL TO ORDER (9:00)

II. AGENDA ADDITIONS/CHANGES

III. OPEN DISCUSSION/ANNOUNCEMENTS

IV. CONSENT AGENDA

Page 2 *A. Approve May 26, 2016, Meeting Minutes

V. ACTION ITEMS

9:05 *A. Approve the Regional Emissions Analysis Modeling
Page 5 Assumptions for the Draft FY2017-2021 Regional
Transportation Improvement Program

MaryAnn
Waldinger

9:25 *B. Approve the Project List for the Draft FY2017-2021 Regional
Page 7 Transportation Improvement Program

MaryAnn
Waldinger

VI. INFORMATION/DISCUSSION ITEMS

10:00 *A. Project Level Hot Spot Emission Analysis Modeling
Page 20 Assumptions for Carbon Monoxide (CO)

10:10 B. Agency Updates

*ICC members are welcome to provide updates and share
information on items pertaining to air quality.*

VII. OTHER

A. Next Meeting: TBD

VIII. ADJOURNMENT (10:30)

*Enclosures will be sent 14-days in advance of the meeting. Times are approximate. Agenda is subject to change.

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**INTERAGENCY CONSULTATION COMMITTEE
MAY 26, 2016
COMMUNITY PLANNING ASSOCIATION**

*** * MEETING MINUTES * ***

ATTENDEES: Beth Baird, City of Boise
David Coladner, Idaho Transportation Department
Jen Cole, Idaho Department of Environmental Quality, **Chair**
Scott Frey, Federal Highway Administration, Ex-officio
Ryan Head, Ada County Highway District
Rhonda Jalbert, Valley Regional Transit
Brian Shea, Idaho Transportation Department
Greg Vitley, Idaho Transportation Department–District 3
MaryAnn Waldinger, COMPASS

OTHERS PRESENT: Nancy Brecks, COMPASS
Tina Fuller, COMPASS

CALL TO ORDER:

Chair Jen Cole called the meeting to order at 9:09 a.m.

AGENDA ADDITIONS/CHANGES

None.

OPEN DISCUSSION/ANNOUNCEMENTS/INTRODUCTIONS

None.

CONSENT AGENDA

A. Approve June 16, 2015, Meeting Minutes

Ryan Head moved and Greg Vitley seconded approval of the Consent Agenda as presented. Motion passed unanimously.

INFORMATION/DISCUSSION ITEMS

A. Review the Regional Emissions Analysis Model Assumptions for the Draft FY2017-2021 Regional Transportation Improvement Program (TIP)

Mary Ann Waldinger reviewed the regional emissions analysis model assumptions for use in the air quality conformity demonstration of the draft FY2017-2021 TIP. The assumptions reflect updates for MOVES2014 and are based on the completion of the 2014 National Emissions Inventory project. ICC is required to approve the assumptions and emissions estimation methodologies used in regional emissions analyses. Staff will seek ICC approval in July 2016.

Mary Ann noted budget tests will be performed for the years 2017, 2021, 2030 and 2040.

After discussion of performing a budget test for 2021 or 2023, the committee agreed to stay with 2021, 2023 will be interpolated.

After discussion of fuel-related inputs, the committee agreed to break out fuel supply and note that compressed natural gas buses have been accounted for.

B. Review the Project List for the Draft FY2017-2021 Transportation Improvement Program (TIP)

Mary Ann Waldinger reviewed the project list for use in the air quality conformity demonstration of the draft FY2017-2021 TIP.

Mary Ann reviewed six projects listed as funded in CIM 2040, however, no longer included in ACHD's draft 2016 Capital Improvement Program, and requested direction from the committee whether or not these can be removed from the regional conformity analyses for the draft FY2017-2021 TIP.

After discussion, the committee agreed to keep the projects in the 2040 roadway network, which reflects the current, adopted long-range transportation plan, CIM 2040.

Mary Ann provided a list of changes requested by ACHD to the draft project list reflecting changes of network year, change in required lanes or width, and a correction to termini.

A final project list will be provided two weeks prior to the July 2016 ICC meeting.

C. Update on Project-Level Conformity for Two Projects

Mary Ann Waldinger provided an update on project-level conformity assumptions for the State Highway 44 environmental assessment update, and the Linder Road and Deer Flat Road intersection project.

AECOM is updating the State Highway 44 Corridor Study Concept Report, which requires an update to the air quality analysis for ITD. HDR is completing the design and project-level hot spot analysis for improvements to the Linder and Deer Flat Road intersection for ACHD.

Scott Frey noted that the State Highway 44 Corridor Study Concept Report name is misleading, it is not a "corridor study," but is a preliminary engineering NEPA document development, which is why the air quality analysis is needed.

Chair Cole asked Greg Vitley to provide a presentation within the next year to ICC on how NEPA relates to transportation and the ICC.

D. Agency Updates

Chair Cole provided an update on the progress of the development of the theoretical hot spot analysis tool.

OTHER

Next Meeting: July 12, 2016

ADJOURNMENT

Meeting adjourned at 10:13 a.m.

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INTERAGENCY CONSULTATION COMMITTEE ITEM V-A

Date: July 12, 2016

Topic: Approve the Regional Emissions Analysis Modeling Assumptions for the Draft FY2017-2021 Regional Transportation Improvement Program (TIP)

Request/Recommendation:

COMPASS staff seeks approval of the Regional Emissions Analysis Modeling Assumptions for use in the air quality conformity demonstration of the Draft FY2017-2021 TIP.

Background/Summary:

The Interagency Consultation Committee is required to review and approve the assumptions and emissions estimation methodologies used in regional emissions analyses. The assumptions provided in Attachment 1 reflect updates for MOVES2014 and are based on the completion of the 2014 National Emissions Inventory project. These analyses are conducted for transportation conformity purposes per state and federal regulations. Any northern Ada County Transportation Improvement Program or long-range transportation plan must demonstrate conformity to the motor vehicle emissions budgets for particulate matter 10 microns or less in diameter (PM₁₀), nitrogen oxides (NO_x), and volatile organic compounds (VOCs) established in the *Northern Ada County PM10 State Implementation Plan, Maintenance Plan: Ten-Year Update*. A regional emissions analysis is not federally required for carbon monoxide (CO). However, *Northern Ada County Air Quality Maintenance Area Second 10-Year Carbon Monoxide Limited Maintenance Plan* requires COMPASS conduct a build/no build emissions analysis for local planning purposes.

Budget tests will be performed for:

- 2017: Base year of the draft FY2017-FY2021 TIP
- 2021: Last year of the TIP
- 2030: Intermediate analysis year, as there can be no more than 10 years between analysis years
- 2040: Horizon year for the regional long-range transportation plan (*Communities in Motion 2040*)

More Information

- 1) Attachment 1
- 2) For detailed information contact: MaryAnn Waldinger, Principal Planner
mwaldinger@compassidaho.org

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Regional Emission Analysis Modeling Assumptions

<p><u>Designated mobile source model: MOVES2014x where "x" denotes model version.</u></p>
<p><u>Source type population and fleet age distribution:</u> DEQ decoded individual Idaho Department of Motor Vehicles (DMV) registration records of vehicles registered in the Treasure Valley using the Data One, Inc. and CVINA vehicle identification number (VIN) decoding system. The decoded VINs provide information regarding the vehicle make, model, type, age, and fuel types. This information was then used to develop source-related MOVES input.</p>
<p><u>Inspection Maintenance Program – June 1, 2010 - future</u> Ada County: 1) Two speed test (idle and 2500 RPM) for pre 1996 vehicles only. 2) Exhaust OBD check for 1996 and newer vehicles. 3) Evaporative system OBD check for 1996 and newer vehicles. 4) Compliance Factor – This factor is calculated annually from the previous year's IM program statistics. 5) Four-year grace period for new vehicles 6) Biennial testing – effective January 1, 2010. Canyon County: 1) Two speed test (idle and 2500 RPM) for pre 1996 vehicles only. 2) Evaporative gas cap check for 1996 and newer vehicles. 3) Exhaust OBD check for 1996 and newer vehicles. 4) Evaporative system OBD check for 1996 and newer vehicles. 5) Compliance Factor – This factor is calculated annually from the previous year's IM program statistics. 6) Five-year grace period for new vehicles 7) Biennial testing – effective January 1, 2010.</p>
<p><u>Meteorology</u> The meteorology input compiles the average hourly temperature and relative humidity data for each county. Base- and future-year inventories were modeled using average hourly temperature and relative humidity data by county for each month from a representative weather station for each county. Ada County is represented by the National Weather Service station at the Boise Air Terminal and Canyon County is represented by the data set from the Caldwell Industrial Airport.</p>
<p><u>Fuel-Related Inputs</u> Alternative Vehicle Fuels and Technology (AVFT): Ada and Canyon Counties were modeled using a custom AVFT input file derived from VIN-decoded registration data, the Idaho Department of Education school bus database, and telephone surveys of local garbage collection and public transportation providers. Fuel Supply, and Fuel Formulation: National default fuel supply inputs were used for all source types. Fuel Usage Fractions: Assume that all E-85 capable vehicles are using conventional (E10) gasoline</p>
<p><u>Average Speed Distribution</u> The average speed distribution allocates the different source types (vehicles) for each roadway type to 16 speed bins ranging from 0 to >75 miles per hour. Average speed distributions were developed from the regional travel demand model average daily estimates or forecasts for each roadway segment and hourly traffic count statistics developed from detailed automatic traffic recorder (ATR) traffic count data provided by Idaho Transportation Department (ITD). The hourly ATR-based traffic count profiles for each roadway type were used to estimate hourly volume on each segment and the modified Bureau of Public Roadways volume/capacity curve was used to develop the average speed distribution database for each hour. $\text{Hourly Vehicle Speed} = \text{Free Flow Speed} * \left(1 + A * \left(\frac{\text{Volume}}{\text{Capacity}} \right)^B \right)$ Where A and B are local coefficients used in the regional travel demand model as provided by COMPASS. Base- and future-year average speed distributions were developed for all four MOVES road types using travel demand model base and future-year outputs developed by COMPASS for the Treasure Valley and detailed ATR data provided by ITD.</p>

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INTERAGENCY CONSULTATION COMMITTEE ITEM V-B

DATE: July 12, 2016

Topic: Approve the Project List for the Draft FY2017-2021 Regional Transportation Improvement Program (TIP)

Request/Recommendation:

COMPASS staff seeks approval of the project list for use in the air quality conformity demonstration of the draft FY2017-2021 Regional TIP.

Background/Summary:

The Interagency Consultation Committee (ICC) is required to review and approve the assumptions and emissions estimation methodologies used in regional emissions analyses per 40CFR93 and IDAPA 58.01.01.563. The TIP, inclusive of northern Ada County and the long-range transportation plan, must demonstrate conformity to the motor vehicle emissions budgets established in the *Northern Ada County PM₁₀ State Implementation Plan, Maintenance Plan: Ten-Year Update*.

COMPASS staff prepared the list of projects to make up the “build” travel demand model networks for use in the draft FY2017-2021 TIP conformity demonstration for northern Ada County (attachment 1). The model networks are based on the most up to date information available, and include programmed and planned funded projects listed in the following reports:

- Ada County Highway District’s draft 2016 Capital Improvement Plan (CIP), as of June 15, 2016
 - *Highlighted and italicized* projects reflect changes requested by ACHD and were presented to ICC at the May 26th meeting.
- ACHD’s FY2016-2020 Integrated Five-Year Work Program
- Draft FY2017-FY2021 Idaho Transportation Investment Program
- Draft FY2017-FY2021 Regional Transportation Improvement Program
- [CIM 2040 \(table 6.3, pages 103 to 107\)](#) adopted July 2014

Note: A regional emissions analysis is not federally required for carbon monoxide (CO). However, *Northern Ada County Air Quality Maintenance Area Second 10-Year Carbon Monoxide Limited Maintenance Plan* requires COMPASS to conduct a build/no build emissions analysis for local planning purposes. The same “build” networks are used to estimate the motor vehicle emission estimates for the budget and CO-build analyses.

More Information

- 1) Attachment 1
- 2) For detailed information contact: MaryAnn Waldinger, Principal Planner
mwaldinger@compassidaho.org

Ada County Project-Level Hot Spot Analysis Modeling Assumptions for Carbon Monoxide (CO)

Table 1. Mobile source modeling assumptions for project-level hot spot analyses in Ada.

<p><u>Model Designated for On-Road Emissions Modeling:</u> MOVES2014x where “x” denotes model version.</p>
<p><u>Source (vehicle) type age distribution</u> DEQ decoded individual Idaho Department of Motor Vehicles (DMV) registration records of vehicles registered in the Treasure Valley using the Data One, Inc. and CVINA vehicle identification number (VIN) decoding systems. The decoded VINs provide information regarding the vehicle make, model, type, age, and fuel types. This information was then used to develop source-related MOVES inputs.</p>
<p><u>Inspection Maintenance Program – June 1, 2010 - future</u> Ada County:</p> <ol style="list-style-type: none"> 1) Two speed test (idle and 2500 RPM) for pre 1996 vehicles only. 2) Exhaust OBD check for 1996 and newer vehicles. 3) Evaporative system OBD check for 1996 and newer vehicles. 4) Compliance Factor – This factor is calculated annually from the previous year’s IM program statistics. 5) Four-year grace period for new vehicles 6) Biennial testing – effective January 1, 2010.
<p><u>Meteorology</u> The meteorology input compiles the average hourly temperature and relative humidity data for each county. Base- and future-year inventories were modeled using average hourly temperature and relative humidity data by county for each month from a representative weather station for each county. Ada County is represented by calendar year 2014 data obtained from the National Weather Service station at the Boise Air Terminal.</p>
<p><u>Fuel-Related Inputs</u> Alternative Vehicle Fuels and Technology (AVFT): Ada and Canyon Counties were modeled using a custom AVFT input file derived from VIN-decoded registration data. Fuel Supply, and Fuel Formulation: National default fuel supply inputs were used for all source types. Fuel Usage Fractions: Assume that all E-85 capable vehicles are using conventional (E10) gasoline</p>
<p><u>Link Source Type</u> The link source type input specifies the fraction of the link traffic volume that is represented by each source type on each link being modeled. Calendar year 2013 and 2014 automatic traffic recorder (ATR) data for Ada and Canyon Counties was used in conjunction with ATR-based vehicle length definitions and Travel Demand Model activity estimates to develop a link source type MOVES input for each of the following road types in Ada and Canyon counties:</p> <ul style="list-style-type: none"> • Urban Restricted • Urban Unrestricted • Rural Restricted • Rural Unrestricted

Table 2. Dispersion modeling assumptions for project-level hot spot analyses in Ada.

<p><u>Model Designated for Dispersion Modeling:</u> AERMOD</p>
<p><u>Background Concentration</u> Background concentrations will be selected using the NW-AIRQUEST Consortium tool hosted by Washington State University Laboratory for Atmospheric Research. This tool is located on the AIRPACT Regional Modeling Website http://lar.wsu.edu/nw-airquest/lookup.html.</p> <p>Since background concentrations selected via the NW-AIRQUEST tool are based on 2009-2011 monitoring data, they will be adjusted by applying a ratio of current monitoring data to monitoring data taken during 2009-2011 at the closest monitoring station to the transportation project area for which the hot spot analysis is being conducted.</p>
<p><u>Meteorology</u> Meteorology for dispersion modeling will be obtained from the National Weather Service meteorological monitoring station at the Boise airport (KBOI).</p>