AGENDA

Rogue Valley Metropolitan Planning Organization

Technical Advisory Committee

Date: *Wednesday, February 12, 2014*

Time: *1:30 p.m.*

Location: *Jefferson Conference Room, RVCOG 155 N. 1st Street, Central Point*

Transit: served by RVTD Route #40

Phone: *Sue Casavan, RVCOG, 541-423-1360*

RVMPO website : www.rvmpo.org

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1. **Call to Order/Introductions/Review Agenda** ..... **Mike Kuntz, Chair**

2. **Review/Approve Summary Minutes** (Attachment 1) ..... **Chair**

3. **Public Comment** (Items not on the Agenda) ..... **Chair**

Action Items:

4. **Elect Chair and Vice Chair** ..... **Mike Kuntz, Chair**

Background: TAC Bylaws call for the committee's election of chair and vice chair during the first meeting in February. Newly elected officers will serve for one year beginning at the close of today's meeting.

Action Requested: Elect chair and vice chair.

5. **Proposed MPO Dues / Review Draft Work Plan 2014-2015** ..... **Jonathan David**

Background: The Policy Committee sets member dues annually as part of the adoption process for the Unified Planning Work Program (UPWP). Staff is seeking a recommendation on proposed dues for FY2015 and suggestions for changes to a draft Work Program. Formal TAC recommendation on the dues is requested. A recommendation on the draft UPWP adoption will be sought in April.

Attachments: #2 - Memo, FY 2015 RVMPO Dues and UPWP Discussion

Action Requested: Recommendation on member dues to the Policy Committee and comments on UPWP

6. Disposition of FY2014 CMAQ Fund Balance ..... **Jonathan David**

Background: At the January 28th Policy Committee meeting, a member asked if projects were going to be solicited for the 2014 CMAQ balance of $189,622. At this time, the funds are being rolled into the 2016-18 CMAQ totals.

Attachments: None

Action Requested: Recommendation on how to proceed with 2014 CMAQ Fund balance.

7. Discretionary Funds Applications – Review Staff Evaluation.....**Dan Moore, Andrea Napoli**

Background: Staff completed the evaluation of projects for discretionary funds. Staff will present the results and address any questions that the TAC may have concerning the evaluation.

Attachments: #3 - Memo- Evaluating Applications for RVMPO Discretionary Funds, Evaluations

Action Requested: Reach consensus about project evaluation

8. MPO Planning Update .....**Jonathan David**

9. Public Comment.....**Chair**

10. Other Business / Local Business .....**Chair**

Opportunity for RVMPO member jurisdictions to talk about transportation planning projects.

11. Adjournment .....**Chair**

- The next regularly scheduled MPO TAC Committee meeting: Wednesday, March 12, 2014, at 1:30 p.m. in the Jefferson Conference Room, RVCOG, Central Point.
- The next MPO Policy Committee meeting is scheduled for Tuesday, February 25, 2014, at 2:00 p.m. in the Jefferson Conference Room, RVCOG, Central Point.
- The next MPO PAC meeting is scheduled for Tuesday, March 18, 2014 at 5:30 p.m. in the Jefferson Conference Room, RVCOG, Central Point.

IN COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT, IF YOU NEED SPECIAL ASSISTANCE TO PARTICIPATE IN THIS MEETING, PLEASE CONTACT SUE CASAVAN, 541-423-1360. REASONABLE ADVANCE NOTICE OF THE NEED FOR ACCOMMODATION PRIOR TO THE MEETING (48 HOURS ADVANCE NOTICE IS PREFERABLE) WILL ENABLE US TO MAKE REASONABLE ARRANGEMENTS TO ENSURE ACCESSIBILITY TO THIS MEETING.

SUMMARY MINUTES

Rogue Valley Metropolitan Planning Organization
Technical Advisory Committee

January 8, 2014

The following people were in attendance:

RVMPO Technical Advisory Committee

Voting Members in Attendance:

Alex Georgevitch	City of Medford
Ian Horlacher	ODOT
John Adam	City of Medford
Jon Sullivan	RVTD
Josh LeBombard	DLCD
Karl Johnson	City of Ashland
Kelli Sparkman	ODOT
Kelly Madding	Jackson County
Kevin Caldwell	City of Phoenix
Matt Samitore	City of Central Point
Mike Faught (for Maria Harris)	City of Ashland
Mike Kuntz	Jackson County
Paige Townsend	RVTD
Robert Miller	City of Eagle Point
Tom Humphrey	City of Central Point
Zach Moody	City of Talent

Voting Members Absent:

Amy Stevenson	City of Jacksonville
Wayne Kauzlarich	ODEQ
Dale Schulze	City of Phoenix
Jeff Alvis	City of Jacksonville
Maria Harris	City of Ashland
Mike Upston	City of Eagle Point

Others Present:
Scott Fleury, Mike Montero, Jenna Stanke, Jon Vial

RVCOG Staff
Andrea Napoli, Sue Casavan, Bunny Lincoln

1. Call to Order / Introductions

Mike Kuntz called the meeting to order at 1:35 p.m. Committee began with introductions. Bunny Lincoln has joined RVCOG as a contract employee hired to transcribe meeting minutes for

both the RVMPO and MRMPO.

2. Review / Approve Minutes

Kuntz asked committee members if there were any additions or corrections to the September meeting minutes.

On a motion by Alex Georgevitch and seconded by Tom Humphrey, the minutes were approved as presented. Unanimously approved.

3. Public Comment

No public comment was forthcoming.

4. Annual Listing of Obligated Projects 2013

Andrea Napoli presented the draft application documents with the updated information. Federal funding sources include:

- Surface Transportation Program (STP)
- Congestion Mitigation & Air Quality (CMAQ)

Alex Georgevich questioned whether the Lozier Lane improvements were a Medford or Jackson County project. A brief discussion followed, with the eventual resolution that Andrea Napoli would follow up on it, assuring that the information was correct.

Jenna Stanke noted that two project increases were omitted from the list:

- Walker Avenue – Ashland
- Freeman Road – Central Point

Ms. Stanke and Napoli will collaborate to collaborate to rectify this situation prior to the January 15th deadline for completing any listing modifications. The Policy Committee will handle this matter at their March meeting.

5. Discretionary Funding Application Review, 2014-16

Andrea Napoli gave an overview of the application process. Any changes to the fourteen submitted applications must be provided to RVCOG by Friday, January 10th.

Available federal funds include:

- Surface Transportation Program (STP)
- Congestion Mitigation & Air Quality (CMAQ)

Addition costs may be funded through local, and other, sources.

1-2. **Ashland** - Mike Faught introduced Scott Fleury, Ashland Engineering Manager, who presented details of the City's **chip sealing** and **East Nevada Street extension** projects. Project discussion items included:

- Revisions to show the percentages of federal Vs local funding
- Chip sealing qualifies for CMAQ funding

- An explanation of "fog" sealing, parameters for chip sealing longevity (good base) and double chip sealing
- Whether abutting residents might participate in rights of way improvement cost sharing
- Whether federal requirements will be met (verification on this item will be forthcoming)

3. **Central Point** - Tom Humphrey outlined project specifics for improvements, including traffic circle construction, to **Hamrick & Beebe Roads**. 17% of the project costs will be contributed by the City. Discussion items included:

- Traffic Impact Study being conducted by Jackson County
- Importance of the route for long haul, heavy truck traffic, and the fact that the trucking industry does not like traffic circles
- JACO concerns regarding design standards and the importance of a thorough Operational Analysis for the project
- Interest in Central Point's position regarding potentially necessary improvements to Vilas-Table Rock as a result of possible traffic pattern changes to Hamrick, Table Rock and Vilas Roads and their willingness to participate in any future, warranted off-site traffic mitigation
- Potential maintenance challenges associated with roundabout traffic pattern changes and availability of alternative routes

4. **Eagle Point** - Robert Miller presented the City's plans for improving the **East Main – Stevens Road** connection running from downtown, east toward the National Cemetery. Highlighted facts and discussion included:

- The route is the main access to the newly constructed Hillside Elementary School, and currently lacks shoulders, and bike/pedestrian access
- Funding participation is expected from adjoining owners as their approved developments are constructed
- Stevens Road is a direct connection to the National Cemetery, and is the location of the "Avenue of the Flags", a major tourist attraction
- Whether the project would be designed to meet ASHTO standards
- The roadways classification as a major collector
- Project phasing called out in the application viewed as beneficial and pro-active by TAC members

5. **Jackson County** - Jenna Stanke detailed the County's **Regional Active Transportation Plan.** Highlights included:

- The Plan would be on a regional/MPO scale
- Bear Creek Greenway and Trails improvements
- The Plan would create RTP supplement identifying regionally significant Bike/Pedestrian projects and potential corridors
- Plan's primary focus would be on 1) interconnected bike systems throughout region, including existing periphery areas (White City,

Eagle Point, Jacksonville), and 2) reasonable pedestrian connections to transit services

- STP funding source, plus TGM grant possibilities (TGM grant funding is limited)
- "Planning" projects do not qualify for CMAQ monies
- Plan goal would be to identify existing, regional bike/pedestrian barriers and identify various mitigation projects
- Cost would be approximately $200,000 (including consultant(s)), with a to be determined cost sharing by various jurisdictions

6. **Jackson County -** Mike Kunz provided information about current **Table Rock Road (classified as an arterial in Transportation System Plans of all affected jurisdictions)** traffic problems as related to exceedingly high volumes of truck traffic**,** proposed project improvements (from Lone Pine Creek to Biddle Road), and their inclusion in the Biddle Road/I-5 arterial system (a joint County, Medford and Central Point collaboration). Specifics presented included:

- Section design standards
- Specific improvement locations
- Consideration of RVTD area transit plans
- Equally shared funding (JACO, Central Point and Medford)

7. **Medford -** Alex Georgevitch highlighted the details of the **Barnett Road Adaptive Timing Project,** stipulating to the fact that it would benefit existing facilities by improving transportation mobility.

8. **Medford - Columbus Avenue Extension.** Alex Georgevitch provided logistical and cross section details of the proposed 800' extension of Columbus Avenue to Rossanley Drive. The project will include bike/pedestrian facilities.

9. **Medford - Foothill Road (Hillcrest to Mc Andrews).** Alex Georgevitch explained the current/future importance of Foothills Road as a local and regional north south major arterial. While predominantly serving vehicular traffic, Foothills also supports a significant amount of truck traffic. The proposed project is reliant on favorable financing, and will be "pulled" if it does not pencil out at this time. Specific, modified design standards, intersection illumination and signalization were discussed, as well a willingness of adjoining property owners to work with the prevailing jurisdictions on pre-determined right of way reservations related to potential future development and limited access solutions. Mike Kuntz reiterated the regional significance of the route, and the need for a Master System Plan.

A brief follow up discussion further the importance of the Lone Pine/Cedar Links segment of Foothills, as it relates to design/construction costs and the massive Pacific Power substation(s) in the area.

With I-5 viaduct improvements looming on the horizon, ODOT views Foothills as a vital transportation connection in the region. After the proposed Table Rock Road upgrades, ODOT considers Foothills as the next highest priority for implementation.

10. **Medford - Springbrook (Cedar Links to Pheasant).** Alex Georgevitch presented the application as an extension of the recently completed Springbrook/Delta Waters intersection project. Highlights include:

- Continuation of a recent CMAQ funded improvement
- A roundabout at Cedar Links (deemed a preferable option in a Kittleson Traffic Engineering report) Vs a conventional traffic signal
- Local implementation of "Safe Route to Schools" program
- Completion of a majorly significant bike/pedestrian connection through the Medford
- Funding is the highest priority due to the transportation "fill in" project component
- Roundabout is viewed as an excellent improvement for public health and safety

Medford's presentation was concluded with the statement that their project priorities were:

1. Springbrook Avenue
2. Foothills Road (If appropriate funding cannot be secured, the application will be pulled. More information on this matter will be presented at the next TAC meeting.)
3. Columbus Avenue (Will move to #2 priority if Foothills is dropped.)

11. **RVCOG** - Andrea Napoli articulated RVCOG's desire to purchase a **hybrid vehicle** to allow employees to travel on COG business without having to use their personal cars. The acquisition would have financial benefits for the COG, and be funded on a 50/50 basis, by the RVMPO/MRMPO, utilizing CMAQ funds.

12. **RVTD - Clean Fuel Fleet.** Paige Townsend articulated RVTD's desire to purchase six (6) fleet cars, four (4) cng dedicated to be used transport bus drivers from the main RVTD facility to the transfer station on Front Street on Medford and two (2) dual fuel designated for use on longer trips. One (1) would be subject to higher usage by the RVTD Field Supervisor in performance of his/her duties as a "quick responder", handling ongoing system oversight and emergency issues. RVTD would provide a 10.27% funding match.

13. **RVTD - Valley Feeder Pilot Project.** Paige Townsend explained that this three (3) year pilot project would provide demand response, non-traditional, reservation based RVTD service to rural areas not located in close proximity to conventional transit stops. Vehicles utilized (20) would be those currently used in the existing ADA transportation program, thereby filling spaces that often remain empty during the day.

6. MPO Planning Update

Andrea Napoli stipulated that RVCOG website changes are imminent. Mike Faught asked if the upgrades would go to the Policy Committee prior to going live. Ms. Napoli responded that the Committee would review the proposed changes at their March meeting.

7. Public Comment
None received.

8. Other Business / Local Business
None offered.

9. Adjournment
The meeting was adjourned at 3:50 p.m.

Rogue Valley
Metropolitan Planning Organization

Regional Transportation Planning

Ashland • Central Point • Eagle Point • Jacksonville • Medford • Phoenix •Talent • White City
Jackson County • Rogue Valley Transportation District • Oregon Department of Transportation

DATE: February 6, 2014
TO: Technical Advisory Committee
FROM: Jonathan David, Planning Program Manager
SUBJECT: FY 2015 RVMPO Dues Recommendation and UPWP Discussion

This memo addresses two related items for the coming fiscal year: setting RVMPO member dues and providing input on the draft Unified Planning Work Program (UPWP). Staff is seeking a final recommendation on the dues for the coming year. Remaining UPWP information is provided for discussion and future comment.

RVMPO Member Dues
Staff proposes maintaining the dues formula and rate that was approved by the Policy Committee in February 2013. The rate, $0.16 per capita, would generate a total of $27,321 for the 2015 fiscal year.

Table 1, below, summarizes population and proposed dues for each jurisdiction. Population estimates are certified July 1, 2013 from Portland State University.

Table 1

RVMPO Proposed 2014-15 Dues			
Member Jurisdictions	**Population**	**Dues Rate per Capita**	**Proposed FY2014 Dues**
Ashland	20,295	$0.16	$3,247
Central Point	17,315	$0.16	$2,770
Eagle Point	8,575	$0.16	$1,372
Jacksonville	2,840	$0.16	$454
Medford	75,920	$0.16	$12,147
Phoenix	4,570	$0.16	$731
Talent	6,170	$0.16	$987
White City*	8,252	$0.16	$1,320
Jackson County**	26,820	$0.16	$4,291
Total	**170,758**		**$27,321**

All population estimates are Portland State University certified (July, 2013)
*White City estimated population is 4% of total county population
** Jackson County estimated population w/in RVMPO boundary & excluding cities is 13 percent of total population
Total Jackson County estimated population: 206,310

Dues provide funding for general operations, primarily activities that require local funds including lobbying and local match obligations. Dues pay for Policy Committee participation in advocacy activities

for which federal funds cannot be used, including the Oregon MPO Consortium, the Association of Metropolitan Planning Organizations and the West Coast Corridor Coalition. Dues can also be used to supplement the MPO's planning budget.

Table 2 summarizes anticipated use of FY2015 member dues, which includes estimated dues carryover from Fiscal Years; 2011, 2012, 2013 and 2014.

Table 2

Policy Committee Dues, Travel; state, regional, national	$11,250.00
UPWP Work Activities Support	$14,820.00
RVCOG CMAQ-Funded Hybrid Matching Funds	$1,251.00
2011, 12, 13 & 14 Dues Carryover MOVES Modeling Support*	$25,000.00
*Includes $10,000 Estimated 2014 Dues Carryover	$52,321.00

MPO dues in the amount of $25,000 is proposed to be used to retain a consultant to perform needed MOVES air quality emissions modeling for regionally-significant, Transportation Improvement Program (TIP) and Regional Transportation Plan (RTP) amendments and for development of the CO and PM_{10} Limited Maintenance Plans (LMPs).

Draft UPWP

Tables on the next two pages summarize spending proposed in the draft 2015 UPWP (Table 3), and the status and changes in program activity (Table 4).

The draft UPWP will be submitted for review by federal and state planning partners (Federal Highway Administration, Federal Transit Administration and ODOT). Staff is asking jurisdictions, to suggest changes to the draft UPWP, which could be incorporated into a final draft for public hearing in April. The Policy Committee will be asked to adopt the work plan at that time.

Table 3: Summary FY2015 Draft UPWP Activities

RVMPO FY 2015 UPWP BUDGET						
Transportation Planning Funds by Source and Activity						
	FHWA MPO Planning Funds (1)	FTA 5303 (2)	MPO Dues (3)	TGM (4)	In-Kind Match (2)	Total Budget (5)
Work Tasks						
1. Program Management						
1.1 Office & Personnel Mgmt: Fiscal & Grant Admin.	$120,000	$10,988	$12,500	$0	$2,747	$146,235
1.2 UPWP Development & UPWP Progress	$12,000	$1,000	$250	$0	$250	$13,500
1.3 Public Education and Involvement Program	$19,000	$1,000	$250	$0	$250	$20,500
1.4 Interagency & Jurisdictional Coordination	$18,000	$3,000	$750	$0	$750	$22,500
1.5 Grant Writing	$3,000	$0	$0	$0	$0	$3,000
Totals	$172,000	$15,988	$13,750	$0	$3,997	$205,735
2. Short Range Planning						
2.1 TIP Activities	$15,000	$8,000	$1,500	$0	$2,000	$26,500
2.2 Air Quality Conformity	$23,000	$6,000	$12,500	$0	$1,500	$43,000
2.3 Local Jurisdiction Technical Assistance	$3,000	$2,000	$0	$0	$500	$5,500
2.4 STP & CMAQ Project Funds Management	$10,000	$5,000	$750	$0	$1,250	$17,000
Totals	$51,000	$21,000	$14,750	$0	$5,250	$92,000
3. Long Range Planning						
3.1 ITS Operations & Implementation Plan Coordination	$3,000	$1,000	$250	$0	$250	$4,500
3.2 RTP Implementation/Safety, Regional Problem Solving Integration	$8,000	$7,000	$500	$0	$1,750	$17,250
3.3 2017 - 2042 RTP Development	$15,000	$7,000	$1,000	$0	$1,750	$24,750
3.4 RVMPO Freight Plan Update	$7,500	$7,000	$1,000	$0	$1,750	$17,250
3.5 PM10 & CO Limited Maintenance Plans	$12,649	$7,000	$12,500	$0	$1,750	$33,899
3.6 Alternative Measures Benchmark Analysis	$0	$0	$0	$68,000	$9,300	$77,300
Totals	$46,149	$29,000	$15,250	$68,000	$16,550	$174,949
4. Data Development						
4.1 Research & Analysis Program	$21,000	$16,534	$4,224	$0	$4,134	$45,892
4.2 Data collection/analysis for Title 6 & EJ	$3,000	$1,000	$4,347	$0	$250	$8,597
Totals	$24,000	$17,534	$8,571	$0	$4,384	$54,489
5. Transit						
5.1 Transit Planning Coordination	$0	$35,340	$0	$0	$8,835	$44,175
Totals	$0	$35,340	$0	$0	$8,835	$44,175
Totals	**$293,149**	**$118,862**	**$52,321**	**$68,000**	**$39,016**	**$571,348**

(1) FHWA MPO Planning funds are allocated to the RVMPO by formula and consist of 89.73% federal funds and 10.27% state match. Federal Share: $263,043; Oregon Match: $30,106; Total $293,149 for FY 2014.

(2) Section 5303 funds are provided for transit-related metropolitan planning activities. Total 2015 allocation consists of 80% federal ($66,818) and a required 20% local share ($16,704) provided by RVMPO member in-kind contributions (meetings & technical document reviews). Task 5 includes $35,340 in carryover from FY2012 and FY2013.

(3) MPO annual dues are paid by MPO member jurisdictions: Ashland, Talent, Jacksonville, Eagle Point, Medford, Central Point, Phoenix, Jackson County. Includes $25,000 estimated carryover.

4) RVCOG received TGM grant funds to do Alternative Measures Benchmark Analysis.

5) RVCOG acting on behalf of the the RVMPO will apply for and otherwise obtain these funds. RVCOG will carry out the tasks described in this UPWP.

Note: ***The revenues contained in the UPWP represent the best estimates of expected funding and planning priorities at this time. These priorities and funding levels may change over time. Actual ODOT funding commitments are finalized through specific IGAs. The identified dollar amounts may include subcontracted activities.***

Table 4: 2014 UPWP status, 2015 Proposed Program Activity

	Total Budget	Activity in 2013-14	Proposed 2015 Budget	Proposed for 2014-15
Work Tasks				
1. Program Management				
1.1 Office & Personnel Mgmt: Fiscal & Grant Admin.	$201,985	Continued tasks from 2013; maintained committee and records. Created Citizen's Guide brochures.Public involvement included additional tasks for the 2015-2018 MTIP, Continued website updates.	$205,735	Generally, continue tasks from 2014; maintain committee and records. Publish updated Citizen's Guide. Continue website updates. Anticipate MAP-21 rulemaking; track & implement required federal changes
1.2 UPWP Development & UPWP Progress				
1.3 Public Education and Involvement Program				
1.4 Interagency & Jurisdictional Coordination				
2. Short Range Planning				
2.1 TIP Activities	$97,500	Developed 2018 MTIP, including updating project funding criteria/process, soliciting, evaluating, selecting projects for STP and CMAQ. Maintained current MTIP and fund balances/project tracking. Published Annual Listing of Obligated Projects FFY2013. Coordinated with Sierra Research (consulting firm) to implement EPA's MOVES software for air quality conformity. Assist jurisdictions as requested on planning.	$92,000	Maintain current MTIP and fund balances/project tracking. Publish Annual Listing of Obligated Projects FFY2014. Coordinate with Sierra Research and agencies to implement EPA's MOVES software for air quality conformity. Assist jurisdictions as requested on planning.
2.2 Air Quality Conformity				
2.3 Local Planning Technical Assistance to Jurisdictions				
2.4 STP & CMAQ Project Funds Management				
3. Long Range Planning				
3.1 ITS Operations & Implementation Plan Coordination	$36,399	Working on ITS Plan update. RTP 2038 maintained plan.Developing a plan for updating Safety Profile. Addressing Oregon planning requirements (RTSP, Alternative Measures, Greenhouse Gas reduction).	$174,949	Update and maintain ITS Plan; RTP 2038 implementation of performance measures; maintain plan. Develop timeline and workplan for the 2017-42 RTP; Maintain Safety Profile, RVMPO Freight Plan update; Develolp CO & PM10 Limited Maintenance Plans (LMPs); Conduct Alternative Measures benchmark analysis.
3.2 RTP Implementation, Safety, RPS Integration				
3.3 2017-2042 RTP Development				
3.4 RVMPO Freight Plan Update				
3.5 PM10 & CO Limited Maintenance Plans				
3.6 Alternative Measures Benchmark Analysis				
4. Data Development/Maintenance				
4.1 Research & Analysis Program	$51,807	Research & Analysis: Continued coodination with TPAU for development and improvement of travel demand model, focusing on transit forecasting, land use, and traffic count data management. Develope (w/ODOT) strategic plan for RVMPO modeling improvements for 2017 re-calibration. Review process for local land use data for model. Begin scoping model update needs for next RTP update. Develop reports with Oregon Household Survey data. Continue model training by ODOT as available. Continue examining scenario planning options and other requirements for greenhouse gas reductions. Continue GIS activities, updates. EJ Plan - Update including developing process to shift from Census to Survey data.	$54,489	Research & Analysis Continue support for development, improvement of travel demand model, focusing on transit forecasting, land use, and traffic count data management. Coordinate with TPAU on the strategic plan for RVMPO modeling improvements for 2017 re-calibration. Review process for local land use data for model. Begin scoping model update needs for next RTP update. Develop reports with Oregon Household Survey data. Continue model training by ODOT as available. Continue examining scenario planning options and other requirements for greenhouse gas reductions. Continue GIS activities.
4.2 Data collection/analysis for Title 6 & EJ				
5. Transit				
5.1 Hwy 99 Transit Service Conceptual Development (RVTD Project)	$44,175	For RVTD identified use (funded with MPO FTA carryover (FY2012, 2013)	$44,175	For transit planning coordination
Totals				
2013-14 Total (excluding Task 5)	**$387,691**	**2014-15 Proposed Total**	**$571,348**	

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DATE: **February 6, 2014**
TO: **Technical Advisory Committee**
FROM: **Dan Moore and Andrea Napoli**
SUBJECT: **Evaluating Applications for RVMPO Discretionary Funds**

This memo presents the staff evaluation of applications for RVMPO discretionary funds. Staff seeks the TAC's input on the project evaluations, as some criteria are subjective and open to staff interpretation. The goal of this agenda item is to gain general TAC consensus on the project scoring. Results of the staff review and scoring appears on the attached Table 2. The projects and the amounts requested are listed in Table 1.

Table 1: Applications for Discretionary Funds

Project Number	Agency	Project Description	Total STP Funds Available 2016-18	Total CMAQ Funds Available 2014	Total CMAQ Funds Available 2016-18	Total Federal Funds Available 2016-18*
			$2,824,560	$189,662	$7,741,735	$10,755,957
			Total STP Fund Request	Total CMAQ Fund Request	Total CMAQ Fund Request	Total Federal Funds Request (STP & CMAQ)
1	Ashland	Chip Seal	$ -	$ -	$ 543,152	$ 543,152
2	Ashland	E. Nevada Street Extension	$ 1,961,600	$ -	$ -	$ 1,961,600
3	Central Point	Beebe/Hamrick Traffic Circle	$ -	$ -	$ 1,346,701	$ 1,346,701
4	Eagle Point	E. Main St./Stevens Rd.	$ 1,117,000	$ -	$ 1,878,000	$ 2,995,000
5	Jackson County	Regional Active Transportation Plan	$ 179,460	$ -	$ -	$ 179,460
6	Jackson County	Table Rock Rd	$ -	$ -	$ 3,598,900	$ 3,598,900
7	Medford	Barnett Road Adaptive Timing	$ -	$ -	$ 275,000	$ 275,000
8	Medford	Columbus Ave Extension	$ -	$ -	$ 1,000,000	$ 1,000,000
9	Medford	Foothill Rd. - Hillcrest to McAndrews	$ -	$ -	$ 3,000,000	$ 3,000,000
10	Medford	Springbrook - Cedar Links to Pheasant	$ -	$ -	$ 1,000,000	$ 1,000,000
11	RVCOG	Hybrid Vehicle	$ -	$ 10,929	$ -	$ 10,929
12	RVTD	Clean Fuel Fleet	$ -	$ -	$ 161,514	$ 161,514
13	RVTD	Valley Feeder Pilot Project	$ -	$ -	$ 100,000	$ 100,000
		Total Funding Requests	**$ 3,258,060**	**$ 10,929**	**$ 12,903,267**	**$ 16,172,256**
		Funding Shortfall	($433,500)	$178,733	($5,161,532)	($5,416,299)
		***includes current CMAQ balance**				

Applicant Supplied Data

Staff relied on data supplied by each applicant to perform the evaluation. In cases where information was not supplied or was not clear, staff made assumptions based on the project description.

Attachment #3
(Agenda Item 7)

Table: RVMPO Project Evaluation, 2016 - 2018, Staff Draft

App #	Agency	Project Name/Description	Total Cost	Amount Requested	Functional Class	Mobility: Safety	Mobility: Congest Reduct	Mobility: Connec-tivity	Mobility: # Served (1)	Community Vitality/Livability: EJ Pop (2)	Community Vitality/Livability: Housing @Transit Routes (3)	Community Vitality/Livability: Mixed Use	Community Vitality/Livability: Freight (4)	Transporation Options: SOV Reduct	Transporation Options: Encourage Alt. Mode	Transporation Options: Bike	Transporation Options: Ped	Resource Conservation: Mitigate Enviro Impacts	Resource Conservation: AQ Benefit (5)	Resource Conservation: GHG Reduct (6)	Resource Conservation: New Tech	Resource Conservation: Increase Facility Lifespan	Resource Conservation: VMT Reduction: Miles/Yr (7)	Resource Conservation: VMT Reduction: Grant $/Mile	Resource Conservation: Efficiency	Resource Conservation: Lifespan (years) (8)	Resource Conservation: Leverage (Federal Share)	CMAQ $ Total*	CMAQ Qualification: CO (Medford UGB): kg Reduct/yr	CO: $/kg	CO: kg Reduct X Lifespan	CO: $/ Reduct Lifespan	CMAQ Qualification: PM10 (RVMPO area): kg Reduct/yr	PM10: $/kg	PM10: kg Reduct X Lifespan	PM10: $/Reduct Lifespan	CMAQ Program Priority: Diesel Retrofit	CMAQ Program Priority: Congestion Reduction
1	Ashland	Chip Seal	$605,319	$543,152	residential	0	0	2	TBD	3	0	0	0	0	0	0	0	3	3	0	0	3	0	$ -	3	20	89.7%	$ 543,152	na	na	na	na	122,640	$ 4	2,452,800	$ 0.2	No	No
2	Ashland	E. Nevada Street Extension	$5,489,000	$1,961,600	collector	0	2	3	Pop: 1683 Emp: 232 (1)	3	0	0	0	2	3	3	3	1	2	2	0	0	1,684,110	$ 1.16	0	20	35.7%	$ -	na	na	na	na	1,072	$ 1,830	na	na	No	Yes
3	Central Point	Beebe/Hamrick Traffic Circle	$1,584,304	$1,346,701	collector	3	3	2	Pop: 1565 Emp: 527 (1)	1	2	3	0	1	1	1	1	0	2	2	0	2	0	$ -	3	20	85.0%	$ 1,346,701	na	na	na	na	1,877	$ 717	37,540	$ 36	No	Yes
4	Eagle Point	E. Main St./Stevens Rd. Improvements	$3,370,000	$2,995,000	arterial	3	2	3	Pop: 4771 Emp: 609 (1) 3,500 ADT	1	0	3	0	2	3	3	3	2	2	2	0	3	344,925	$ 8.68	2	20	88.9%	$ 1,878,000	na	na	na	na	533	$ 3,523	10,660	$ 176	No	Yes
5	Jackson County	Regional Active Transportation Plan	$200,000	$179,460	N/A	3	2	3	TBD	TBD	0	3	0	3	3	3	3	0	3	2	0	1	0	$ -	3	10	89.7%	$ -	na	na	na	na	na	na	na	na	na	na
6	Jackson County	Table Rock Rd	$7,995,000	$3,598,900	arterial	3	3	2	Pop: 2946 Emp: 3389 (1) 13,000 ADT	3	0	0	3	1	2	3	2	2	2	1	0	3	1,277,500	$ 2.82	0	20	45.0%	$ 3,598,900	na	na	na	na	533	$ 6,752	10,660	$ 338	No	Yes
7	Medford	Barnett Road Adaptive Timing	$375,000	$275,000	major arterial	2	3	0	40,300 ADT	3	0	0	2	0	0	0	0	0	2	1	3	2	0	$ -	3	20	73.3%	$ 275,000	26,750	$ 10	535,000	$ 1	1,390	$ 198	27,800	$ 10	No	Yes
8	Medford	Columbus Ave Extension	$5,520,000	$1,000,000	major arterial	0	2	2	Pop: 5226 Emp: 501 (1) 11,200 ADT	3	0	0	2	1	1	2	1	0	1	1	0	0	na - VMT gain	$ -	0	20	18.1%	$ 1,000,000	na - CO gain	na	na - CO gain	na	0.6	$ 1,000,000	12	$ 83,333	No	Yes
9	Medford	Foothill Rd. - Hillcrest to McAndrews	$13,000,000	$3,000,000	major arterial	2	3	2	Pop: 2091 Emp: 2808 (1) 16,000 ADT	3	0	3	2	1	2	3	2	2	1	2	0	3	1,103,760	$ 2.72	1	20	23.1%	$ 3,000,000	5,902	$ 508	118,046	$ 25	762	$ 3,939	15,232	$ 197	No	Yes
10	Medford	Springbrook - Cedar Links to Pheasant	$4,400,000	$1,000,000	major collector	3	2	3	Pop: 6692 Emp: 987 (1) 9,500 ADT	3	0	2	2	2	3	3	3	2	2	2	0	3	936,225	$ 1.07	2	20	22.7%	$ 1,000,000	7,536	$ 133	150,720	$ 7	646	$ 1,548	12,920	$ 77	No	Yes
11	RVCOG	Hybrid Vehicle	$12,180	$10,929	N/A	0	0	0	N/A	N/A	0	0	0	2	2	0	0	0	2	3	3	0	683,280	$ 0.02	0	12	89.7%	$ 10,929	1.1	$ 9,935	13	$ 828	0.03	$ 10,929	0.3	$ 10,929	No	No
12	RVTD	Clean Fuel Fleet	$180,000	$161,514	N/A	2	0	0	TBD	TBD	0	0	0	0	2	0	0	0	2	3	3	0	0	$ -	0	12	89.7%	$ 161,514	36	$ 4,487	432	$ 374	1.5	$ 107,676	18	$ 8,973	No	No
13	RVTD	Valley Feeder Pilot Project	$111,445	$100,000	N/A	2	0	3	TBD	TBD	2	0	0	2	3	0	0	0	2	2	3	0	3,111,990	$ 0.03	3	3	89.7%	$ 100,000	2,535	$ 39	7,605	$ 13	1,800	$ 56	5,400	$ 19	No	No

Reduce number & severity of crashes
Improve level of service; Reduce idle time
Improve existing network, fill service gap
Number value of population to benefit based on RVMPO TAZ data and/or applicant-supplied traffic flow
Targetted populations served (see note 4 below)
Support Alt. Meas. 2: Increase housing on transit routes
Support Alt Meas 5: Increase housing in downtowns, mixed use/pedestrian friendly activity centers, TODs
Improve freight movement, commercail traffic
Reduce reliance on motor vehicle or single-occupant vehicle
Support Alt. Meas. 1: Increase transit, bike, ped mode share
Support Alt.Meas. 3: Increase bike facilities on collectors, arterials
Support Alt. Meas. 4: Increase sidewalks on collectors, arterials in TOD areas
Efforts exceeding requirements to benefit natural environment
Benefits beyond those identified in CMAQ analysis
Reduce CO emissions (urban form, lower-carbon fuel, reduce gas vehicle use)
Introduce technology new to RVMPO area; Implement ITS Plan
Preserves function of existing transportation asset
Estimated annual VMT reduction
Grant dollars expended per mile reduced
Handle greater ADT w/out expansion or improve system efficiency/capacity at lower cost
Useful life of investment
Projects w/lower federal share may be viewed more favorably

Note: If benefit is less than 1 kg, the cost over the lifespan is equal to the $ amount requested

0 **No** identifiable link to criteria
1 **Low:** Does little to fulfill criteria
2 **Medium:** Contributes to criteria
3 **High:** Strongly supports criteria

1. RVMPO TAZ Data: Population, employment w/in 1/2-mile of improvement
2. Environmental Justice populations served based on *Environmental Justice & Title VI Plan* and Title VI & EJ Maps.
   Scoring based on project benefit to protected populations & mapped concentrations above RVMPO regional averages:
   1 = Minor population impact, one class served
   2 = Moderate population impact, two classes served
   3 = Significant population impact, three or more classes served
3. RVTD pop., employment from Land Use Conditions Summary, RVTD District Boundary Assessment, Spring 2011
4. Assumes one truck/day @ each station (21*365); Trucks stop for 10 hrs. rest
5. Air Quality --Benefit considers: Emission reductions beyond those identified in CMAQ analysis; Cost effectivenes of air quality improvement (based on VMT reduction and population served); and Overall results of CMAQ analysis
6. Greenhouse Gas Reduction -- Benefit considers: Support for efficient urban form (downtowns and activity centers, compact and mixed-use development, transportation options); Reduced combustion vehicle use; and Shift to lower-carbon fuel. Scoring as follows:
   1 = Addresses one of three category criteria
   2 = Addresses two of three category criteria
   3 = Addresses all three category criteria
7. VMT reduction per TPR allowance of 10% VMT reduction for adding sidewalks and bike lanes in TODs, downtowns and recognized activity centers; assumed 5% VMT reduction in all other locations.

Attachment #3
(Agenda Item 7)

RVMPO Evaluation Measures

Goals and Project Funding Criteria-Table

	RVMPO Goal	2034 RTP Goal	SAFETEA-LU / MAP-21 MPO Requirements	Evaluation Criteria	How Measured
1: Mobility		Plan for, develop and maintain a balanced multi-modal transportation system to address existing and future needs.	Enhance the integration and connectivity of the transportation system, across and between modes for people and freight.	1. Safety or security issue addressed; Accident/injury reduction	Describe safety problem, and how project would reduce number and severity of crashes. (If project demonstrates air quality benefit it will be evaluated for CMAQ.)
				2. Congestion relief/reduce delay	Level of Service improvement; idle time reduced. HDV may be calculated separately. (To qualify for CMAQ project must provide cost-effective congestion mitigation that provides an air quality benefit. If project adds capacity, it will not be considered for CMAQ.).
				3. Promote connectivity (more direct travel, network infill)	Describe connectivity feature. If project reduces VMT it could help the region meet greenhouse emission requirements.
		Optimize safety and security of the transportation system.	Increase accessibility and mobility.	4. Population # served (ADT; pop/jobs w/in ½-mi)	Provide traffic count; estimate # jobs and population that will be served by this project. Objective is to show the number of people who will be served by the project. Staff will estimate population & employment using RVMPO model data. Numbers generated will be used to estimate VMT reduction and air quality benefit.
			Increase safety of the transportation system.		
			Increase security of the transportation system.		
2: Community Vitality & Livability	Continue to work toward more fully integrating transportation and land use planning.	Use transportation investments to foster compact, livable communities. Develop a plan that builds on the character of the community, is sensitive to the environment and enhances quality of life.	Protect and enhance the environment, promote energy conservation, improve quality of life, and promote consistency between transportation improvements and planned growth and economic development.	1. Benefit/impact on senior, disabled, low-income, or minority populations	Does the project impact protected populations based on RVMPO Environmental Justice Plan
				2. Support Alternative Measure 2: increase housing on transit route	Does the project promote or support an increase in housing along transit routes. (If VMT reduction can be directly linked)
				3. Support Alternative Measure 5: Increase % housing in downtowns, mixed use/ pedestrian friendly areas Support Alternative Measure 6: Increase % employment in downtowns, mixed use/ pedestrian friendly areas	Is the project located in a downtown, activity center, designated TOD or other mixed-use (residential/employment) area? Does the project support, or is it part of, a high-density (at least 10-unites/acre for housing) area? Describe the relationship
		Use transportation investments to foster economic opportunities.	Support economic vitality especially by enabling global competitiveness, productivity and efficiency.	4. Benefit to freight movement, commercial traffic	Describe the benefit to movement of commercial vehicles. (If project reduces truck VMT or emissions – esp. pre 1986 trucks – project will be evaluated for CMAQ).
3: Transportation Options	Increase integration and availability of transportation options.	Use incentives and other strategies to reduce reliance on single-occupant vehicles.		1. Encourage/support SOV reduction; Reduce auto dependence.	Does the project reduce SOV use; what elements of project contribute?
				2. Support Alternative Measure 1: increase transit, bike, ped mode share	Describe how the project will increase use of alternative modes
				3. Support Alternative Measure 3: increase bike facilities on collectors, arterials	Provide total length of qualifying bicycle lane.
				4. Support Alternative Measure 4: increase sidewalks on collectors, arterials in TOD areas	Provide total length of qualifying sidewalks
4: Resource Conservation	Incorporate environmental and energy conservation into the RVMPO planning process.	Maximize efficient use of transportation infrastructure for all users and modes.	Promote efficient system management and operation.	1. Address/mitigate environmental impacts	Describe project's benefit to natural environment. Does project include conservation features (ex. permeable surface)
				2. Air quality benefit, long term including NOX and VOC.	If there are air quality benefit in addition to responses provided to RED-TEXT criteria, describe. Emission reductions and cost/benefit analysis will be done based on responses provided to items in red. Numbers supplied or staff-generated for Mobility item 4 will be used in this analysis.
				3. Reduce greenhouse gas emissions $(CO)_1$	Does the project reduce reliance on travel by combustion vehicles, or shift to lower-carbon fuel? (It's anticipated that projects contributing to the Alternative Measures will reduce GHG emissions.)
		Encourage use of cost-effective emerging technologies to achieve regional transportation goals.	Emphasize the preservation of the existing transportation system.	4. Use emerging/new technology	Describe technology to be incorporated into project.
				5. Preserves existing transportation asset	How does the project extend the life of facility without the construction of new facilities? Does the project refurbish existing facility? (If facility is transit, bike or pedestrian it will be considered for CMAQ evaluation.)
				6. Reduce VMT	Reduction formula based on project type.
				7. Improve system efficiency	Describe efficiency: Facility able to handle greater ADT without expansion; Improve other transportation function with smaller investment; reduced operational costs; other?
				8. LIfespan	Useful life of investment. For roadway projects, uniform lifespan applies as determined by predominate material used: concrete = 30 yrs; asphalt = 20 yrs; bike lanes = 20 yrs.
				9. Other public, private funding sources (leverage)	List overmatch, other funds

Items in red will be part of CMAQ funding evaluation unless specifically disqualified (adds capacity, maintains existing facility/service)

(1) Greenhouse gas emissions can be reduced by reducing congestion, increasing operational efficiency, supporting alternative modes reducing use of combustion vehicles, and shifting to lower-carbon fuels (http://www.deq.state.or.us/aq/committees/lowcarbon.htm).

Updated: Dec. 13, 2013

RVMPO Discretionary Funding Requests
By FYY

Attachment #3
(Agenda Item 7)

Project #	Agency	Project Name	Total Cost	Federal Funding Request							Local Funds	Other Funds
				FFY 2014 Fund Balance	FFY 2016		FFY 2017		FFY 2018			
				CMAQ	STP	CMAQ	STP	CMAQ	STP	CMAQ		
1	Ashland	Chip Seal	$ 605,319	$ -	$ -	$ -	$ -	$ -	$ -	$ 543,152	$ 62,167	$ -
2	Ashland	E. Nevada Street Extension	$ 5,489,000	$ -	$ 1,961,600	$ -	$ -	$ -	$ -	$ -	$ 3,527,400	$ -
3	Central Point	Beebe/Hamrick Traffic Circle	$ 1,584,304	$ -	$ -	$ 1,346,701	$ -	$ -	$ -	$ -	$ 237,603	$ -
4	Eagle Point	E. Main St./Stevens Rd. Improvements	$ 3,370,000	$ -	$ 117,000	$ 197,000	$ 1,000,000	$ 1,681,000	$ -	$ -	$ 375,000	$ -
5	Jackson County	Regional Active Transportation Plan	$ 200,000	$ -	$ 179,460	$ -	$ -	$ -	$ -	$ -	$ 20,540	$ -
6	Jackson County	Table Rock Rd	$ 7,995,000	$ -	$ -	$ 589,526	$ -	$ -	$ -	$ 3,009,374	$ 821,100	$ 3,575,000
7	Medford	Barnett Road Adaptive Timing	$ 375,000	$ -	$ -	$ 275,000	$ -	$ -	$ -	$ -	$ 100,000	$ -
8	Medford	Columbus Ave Extension	$ 5,520,000	$ -	$ -	$ 1,000,000	$ -	$ -	$ -	$ -	$ 4,520,000	$ -
9	Medford	Foothill Rd. - Hillcrest to McAndrews	$13,000,000	$ -	$ -	$ 700,000	$ -	$ 2,300,000	$ -	$ -	$ 10,000,000	$ -
10	Medford	Springbrook - Cedar Links to Pheasant	$ 4,400,000	$ -	$ -	$ 1,000,000	$ -	$ -	$ -	$ -	$ 3,400,000	$ -
11	RVCOG	Hybrid Vehicle	$ 12,180	$ 10,929	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,251	$ -
12	RVTD	Clean Fuel Fleet	$ 180,000	$ -	$ -	$ 161,514	$ -	$ -	$ -	$ -	$ 18,486	$ -
13	RVTD	Valley Feeder Pilot Project	$ 111,445	$ -	$ -	$ 100,000	$ -	$ -	$ -	$ -	$ 11,445	$ -
		Total Funding Requests		$ 10,929	$ 2,258,060	$ 5,369,741	$ 1,000,000	$ 3,981,000	$ -	$ 3,552,526		
		Funding Available		$ 189,622	$ 928,460	$ 2,544,785	$ 941,460	$ 2,580,412	$ 954,640	$ 2,616,538		
		Funding Shortfall		$178,693	($1,329,600)	($2,824,956)	($58,540)	($1,400,588)	$954,640	($935,988)		

RVMPO Discretionary Funding Requests
Total All Years

Project Number	Agency	Project Description	Total STP Funds Available 2016-18	Total CMAQ Funds Available 2014	Total CMAQ Funds Available 2016-18	Total Federal Funds Available 2016-18*
			$2,824,560	$189,662	$7,741,735	$10,755,957
			Total STP Fund Request	Total CMAQ Fund Request	Total CMAQ Fund Request	Total Federal Funds Request (STP & CMAQ)
1	Ashland	Chip Seal	$ -	$ -	$ 543,152	$ 543,152
2	Ashland	E. Nevada Street Extension	$ 1,961,600	$ -	$ -	$ 1,961,600
3	Central Point	Beebe/Hamrick Traffic Circle	$ -	$ -	$ 1,346,701	$ 1,346,701
4	Eagle Point	E. Main St./Stevens Rd. Improvements	$ 1,117,000	$ -	$ 1,878,000	$ 2,995,000
5	Jackson County	Regional Active Transportation Plan	$ 179,460	$ -	$ -	$ 179,460
6	Jackson County	Table Rock Rd	$ -	$ -	$ 3,598,900	$ 3,598,900
7	Medford	Barnett Road Adaptive Timing	$ -	$ -	$ 275,000	$ 275,000
8	Medford	Columbus Ave Extension	$ -	$ -	$ 1,000,000	$ 1,000,000
9	Medford	Foothill Rd. - Hillcrest to McAndrews	$ -	$ -	$ 3,000,000	$ 3,000,000
10	Medford	Springbrook - Cedar Links to Pheasant	$ -	$ -	$ 1,000,000	$ 1,000,000
11	RVCOG	Hybrid Vehicle	$ -	$ 10,929	$ -	$ 10,929
12	RVTD	Clean Fuel Fleet	$ -	$ -	$ 161,514	$ 161,514
13	RVTD	Valley Feeder Pilot Project	$ -	$ -	$ 100,000	$ 100,000
		Total Funding Requests	**$ 3,258,060**	**$ 10,929**	**$ 12,903,267**	**$ 16,172,256**
		Funding Shortfall	($433,500)	$178,733	($5,161,532)	($5,416,299)

***includes current CMAQ balance**

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CMAQ Project Analysis

Project Name:	Chip Seal
Applicant:	City of Ashland
Date of Analysis:	January 29, 2014

Project Description

The project entails grading, prepping and chip sealing approximately 44,903 square yards of dirt road within the Ashland City limits on a number of sections of various residential roadways. The chip seal project proposed is a double shot chip seal with a fog seal. The base course will be 1/2" and the top course will be 3/8". The project will also involve geotechnical analysis of the road sections to determine if drainage is appropriate. In addition roads that serve truck traffic will include an additional 6" of base material added for structural support. Total lineal feet of project is approximately 27,793 feet.

Analysis

Implementation of this project will impact PM_{10} emissions based on paving of existing dirt roads. The analysis will examine reductions in PM_{10}. PM_{10} emission factors for paved roadways are derived from the RVMPO Air Quality Conformity Determination (AQCD) for the 2013 – 2038 RTP.

Assumptions used in this analysis:

1. Volume (ADT) = 123 (*based on median of available information provided by City of Ashland*)
2. Project Length (miles) = 5.26
3. VMT (ADT * Project Length) = (123*5.26) = 646.98
4. Paved Road PM_{10} Production Rate = 0.001544 kg/mile (RVMPO AQCD, Lo ADT)
5. Unpaved Road PM_{10} Production Rate = 0.52163 kg/mile (RVMPO AQCD)
6. Days of use = 365
7. 1000 kg = 1 metric ton

PM_{10} Analysis

Daily Unpaved PM_{10} Production = (VMT*0.52163) = 337.48418 kg
Daily Paved PM_{10} Production = (VMT*0.001544) = .9963492 kg
PM_{10} Daily Reduction = (337.48418 kg –.9963492 kg) = 336 kg/day
PM_{10} Annual Reduction = (336 kg*365 days) = 122,640 kg

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CMAQ Project Analysis

Project Name:	E. Nevada Street Extension
Applicant:	City of Ashland
Date of Analysis:	January 31, 2014

Project Description
The E. Nevada St. extension project involves construction of a new 0.12 mile paved roadway, including a bridge, which links the existing terminus of E. Nevada St. and N. Mountain Ave., providing balance and mobility to the transportation system. Nevada St. is classified as an avenue in the City's Transportation System Plan. The project provides an additional route for local and regional multimodal east-west travel. The new project will include bicycle lanes, sidewalks, parkrow, providing connectivity to the Bear Creek Greenway and allow for a future transit route.

Analysis
Implementation of this project will impact PM_{10} emissions based on assuming a trip distance reduction and a mode shift. The analysis will examine reductions in PM_{10}. PM10 emission factors for paved roadways are derived from the RVMPO Air Quality Conformity Determination (AQCD) for the 2013 – 2038 RTP.

Assumptions used in this analysis:
1. Volume (ADT) = 2,977 (based on 10/16/2013 TPAU analysis, predicted Peak Volume = 13% of ADT)
2. Trip Distance Reduction (miles) = 1.5 (estimated trip distance reduced: N. Mountain Avenue, E. Nevada Street to Siskiyou Boulevard)
3. Project Length (miles) = .12
4. Trip Length (miles) = 5.4 (average vehicle trip length in RVMPO)
5. Paved Road PM_{10} Production Rate = 0.00069 kg/mile (RVMPO AQCD, Hi ADT)
6. Days of use = 365

PM_{10} Analysis

Daily Paved Road PM_{10} Production = (Project Length*0.00069*ADT) = .2465 kg
VMT Reduction #1 = (ADT*Trip Distance Reduction) = (2,977 x 1.5) = 4,465.5
VMT Reduction #2 = (ADT*5% bike/ped mode shift reduction*Trip Length) = 148.85
Daily PM_{10} Reduction = ((VMT Reduction #1 + #2)*0.00069 kg) = 3.1839 kg
Daily Benefit Reduction Less Production = (3.1839 kg - .2465 kg) = 2.9374 kg
PM_{10} Annual Reduction = (2.9374 kg/day*365 days) = 1,072.15 kg

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CMAQ Project Analysis

Project Name:	Beebe/Hamrick Traffic Circle
Applicant:	City of Central Point
Date of Analysis:	January 31, 2014

Project Description
This project entails the construction of a new traffic circle and associated bike lanes and sidewalks at the intersection of Beebe and Hamrick Roads. The project will involve the acquisition of 4,000 s.f. of real property. The goals of the project are to create an acceptable level of service for the intersection and to accommodate the future development within the remaining UGB, while providing a safe and effective intersection for bicycles and pedestrians.

Analysis
Implementation of this project will impact PM_{10} and CO emissions based on assuming a delay reduction and a mode shift. However, the analysis will examine only reductions in PM_{10} as the project is not located within a CO maintenance area. PM10 emission factors for paved roadways are derived from the RVMPO Air Quality Conformity Determination (AQCD) for the 2013 – 2038 RTP.

Assumptions used in PM_{10} analysis:

1. Volume (ADT) = 1,380 (10% reduction (bike/ped shift in TOD) of 13,800 ADT)
2. Trip Length (miles) = 5.4 (average vehicle trip length in RVMPO)
3. Less VMT (ADT*Trip Length) = 7,452
4. Paved Road PM_{10} Production Rate = .00069 kg/mile (RVMPO AQCD, Hi ADT)
5. Days of use = 365

PM_{10} Analysis

Daily Paved PM_{10} Reduction = (Less VMT*0.00069 kg) = 5.1419 kg
PM_{10} Annual Reduction = (5.1419 kg*365 days) = 1,876.79 kg

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CMAQ Project Analysis

Project Name:	East Main Street/Stevens Road Improvements
Applicant:	City of Eagle Point
Date of Analysis:	January 31, 2014

Project Description
The proposed project will add 5-ft bike lanes and 6-ft sidewalks to both sides of East Main Street and Stevens Road, from Robert Trent Jones to the new Hillside Elementary School. The pavement will be widened to accommodate standard lanes and left turn movements into existing and future driveways/intersections on Stevens Road. Existing pavement will be overlaid to preserve the life, and lighting will be added for safety and to promote usage.

Analysis
Implementation of this project will impact PM_{10} emissions based on assuming a mode shift. The analysis will examine reductions in PM_{10}. PM10 emission factors for paved roadways are derived from the RVMPO Air Quality Conformity Determination (AQCD) for the 2013 – 2038 RTP.

Assumptions used in this analysis:
1. Volume (ADT) = 175 (based on 5% reduction of 3,500 ADT for Stevens/E. Main)
2. Trip Length (miles) = 5.4 (average trip length in RVMPO)
3. Less VMT (ADT * Trip Length) = 945
4. Paved Road PM_{10} Production Rate = 0.001544 kg/mile (RVMPO AQCD, Lo ADT)
5. Days of use = 365

PM_{10} Analysis

Daily Paved PM_{10} Reduction = (Less VMT*0.001544 kg) = 1.45908 kg

PM_{10} Annual Reduction = (1.45908 kg*365 days) = 532.6 kg

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CMAQ Project Analysis

Project Name:	Table Rock Road, I-5 to Biddle
Applicant:	Jackson County
Date of Analysis:	January 29, 2014

Project Description
This project consists of two sections. Section One will widen the existing two-lane roadway from Airport Road to Biddle Road (3000 feet) to include two travel lanes in each direction, a continuous center turn lane, bike lanes and sidewalks on each side of the roadway, curb, gutter and underground storm water system. This typical section will match the existing section to the north of the project area which was completed in 2005. Section Two will widen the existing two-lane roadway from the Interstate 5 overcrossing to Airport Road (2000 feet) to include a travel lane in each direction, a center turn lane, bike lanes and sidewalks on each side of the roadway, curb, gutter and underground storm water system. The project also includes a new traffic signal at Airport Road and a transit passenger facility on Biddle Road just west of Table Rock Road.

Analysis
Implementation of this project will impact PM_{10} and CO emissions based on assuming a mode shift. The analysis will examine reductions in PM_{10} and CO. PM10 emission factors for paved roadways and CO are derived from the RVMPO Air Quality Conformity Determination (AQCD) for the 2013 – 2038 RTP.

Assumptions used in this analysis:
1. Volume (ADT) = 650 (based on 5% reduction (bike/ped mode shift) of 13,000 ADT)
2. Trip Length (miles) = 5.4 (average vehicle trip length in RVMPO)
3. Less VMT (ADT*Trip Length) = 3,510
4. Paved Road PM_{10} Production Rate = 0.00069 kg/mile (RVMPO AQCD, Hi ADT)
5. CO Emission Factor = 4.4 grams (RVMPO AQCD)
6. Days of use = 365
7. 907134.7 = grams/ton

PM_{10} Analysis

Daily Paved PM_{10} Reduction = (Less VMT*0.00069 kg) = 2.4219 kg

PM_{10} Annual Reduction = (2.4219 kg*365 days) = 883.99 kg

CO Analysis

CO Annual Reduction = ((CO Emission Factor*Less VMT)*365)/907184.7 = 6.2138 tons

Tons → kg
1 English short ton = 0.907 metric ton
1 metric ton = 1000 kg

CO Annual Reduction = ((6.2138/0.907)*1000) = 6,850.93 kg

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CMAQ Project Analysis

Project Name:	Barnett Road Adaptive Timing
Applicant:	City of Medford
Date of Analysis:	January 31, 2014

Project Description
This project proposes to install adaptive timing hardware/software at up to eleven (11) signalized intersections from Riverside to North Phoenix Road.

Analysis
Implementation of this project will impact PM_{10} and CO emissions based on assuming delay reduction. The analysis will examine reductions in PM_{10} and CO using emission factors derived from the RVMPO Air Quality Conformity Determination (AQCD) for the 2013 – 2038 RTP.

Assumptions used in this analysis:
1. Volume (ADT) = 40,300
2. Project Area Length (miles) = 2.5
3. VMT (ADT * Project Area Length) = (40,300*2.5) = 100,750
4. CO Emission Factor = 4.4 grams/mile (RVMPO AQCD)
5. Est. Synchronization Benefit = 15% (CalTrans/Air Resources Board)
6. PM_{10} Tailpipe Emission Factor = 0.034 grams/mile (RVMPO AQCD)
7. Days of use = 365
8. 907134.7 = grams/ton

CO Analysis

CO Annual Production = ((CO Emission Factor*VMT)*365)/907184.7 = 178.3589 tons

Tons → kg
1 English short ton = 0.907 metric ton
1 metric ton = 1000 kg

CO Annual Reduction = ((178.3589 tons*15%)*1000kg) = 26,750 kg

PM_{10} Analysis

Daily Tailpipe PM_{10} Reduction = (VMT*0.034 gm) = 3,425.5 grams

PM_{10} Annual Reduction = (3,425.5 grams*365 days)/907134.7 = 1.39 tons*1000 kg) = 1,390 kg

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CMAQ Project Analysis

Project Name:	Columbus Avenue Extension
Applicant:	City of Medford
Date of Analysis:	February 4, 2014

Project Description
The project extends Columbus Avenue from McAndrews north to tie into Sage Road south of Highway 238. Columbus Road is a major arterial and will include center turn lanes, two travel lanes in each direction, bike lanes and sidewalks.

Analysis
Implementation of this project will impact PM_{10} and CO emissions based on assuming a mode shift and a trip distance reduction. The analysis will examine reductions in PM_{10} and CO. PM10 emission factors for paved roadways and CO are derived from the RVMPO Air Quality Conformity Determination (AQCD) for the 2013 – 2038 RTP.

Assumptions used in this analysis:
1. Volume (ADT) = 16,000
2. Volume (ADT) = 800 (based on 5% reduction (bike/ped mode shift) of 16,000 ADT)
3. Trip Length (miles) = 5.4 (average vehicle trip length in RVMPO)
4. Less VMT (ADT*Trip Length) = (800*5.4) = 4,320
5. VMT (new connection) = (16,000*0.64 mile (3,400 LF)) = 10,303
6. Paved Road PM_{10} Production Rate = 0.00069 kg/mile (RVMPO AQCD, Hi ADT)
7. PM_{10} tailpipe emissions factor = 0.034 grams/mile (RVMPO AQCD)
8. CO Emission Factor = 4.4 grams/mile (RVMPO AQCD)
9. Days of use = 365
10. 907134.7 = grams/ton

PM_{10} Analysis

Daily Paved PM_{10} Reduction (5% mode share shift) = (VMT*0.00069 kg) = 3 kg
PM_{10} Annual Mode Share Reduction = (3 kg*365 days) = 1,088 kg
Daily Paved PM_{10} Production (new connection) = VMT (16,000 ADT*0.64 mile) = 10,240 VMT*0.00069 = 7.0656 kg
PM_{10} Annual Increase (new connection) = (7.0656 kg*365 days) =2,578.94 kg
Annual Reduction = project will reduce 0.1 miles for people going to Highway 238.
Assumptions: 70% of the vehicles are heading north equates to (16,000 x 0.7 x 0.1 x 365) = 408,800 annual VMT = (VMT*0.00069) = 282 kg annual reduction
Truck Idle Time Reduction = annual truck VMT (81,760); 20% idle time reduction VMT (16,352); PM_{10} tailpipe emissions factor (0.034 grams/mile)
Annual PM_{10} Idle Time Reduction = 16,352*0.034 grams = 0.6 kg

PM_{10} Annual Emissions Benefits = (1,088+282+0.6)-2,578.94 = (1,208.34 kg) increase

CO Analysis

CO Annual Reduction (5% mode share shift) = ((CO Emission Factor*VMT)*365)/907184.7 = 7.65 tons

Tons → kg

1 English short ton = 0.907 metric ton

1 metric ton = 1000 kg

CO Annual Mode Share Shift Reduction = ((7.65/0.907)*1000) = **8,432 kg**

CO New Connection = ((CO Emission Factor*VMT)*365)/907184.7 = 18 tons ((18/0.907)*1000) = **20,110 kg (increase)**

CO trip reduction benefits: 2 tons; tons to kg = **2,186 kg**

CO idle time reduction = Annual savings = **72 kg**

CO Annual Emissions Benefits = (8,432+2,186+72) -20,110 = (9,420 kg) increase

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CMAQ Project Analysis

Project Name:	Foothill Road, Hillcrest to McAndrews
Applicant:	City of Medford
Date of Analysis:	February 3, 2014

Project Description
The project will widen Foothill Road between Hillcrest Road (major collector) and McAndrews Road (major arterial) to major arterial standards which include bike lanes, sidewalks, medians, and planter strips. The total project length is approximately 5,100 LF and will provide approximately 10,000 LF of bike lanes and 11,000 LF of sidewalks.

Analysis
Implementation of this project will impact PM_{10} and CO emissions based on assuming a mode shift. The analysis will examine reductions in PM_{10} and CO. PM10 emission factors for paved roadways and CO are derived from the RVMPO Air Quality Conformity Determination (AQCD) for the 2013 – 2038 RTP.

Assumptions used in this analysis:

1. Volume (ADT) = 560 (based on 5% reduction (bike/pedestrian shift) of 11,200 Foothill Road ADT)
2. Trip Length (miles) = 5.4 (average vehicle trip length in RVMPO)
3. Less VMT (ADT*Trip Length) = (560*5.4) = 3,024
4. Paved Road PM_{10} Production Rate = 0.00069 kg/mile (RVMPO AQCD, Hi ADT)
5. CO Emission Factor = 4.4 grams/mile (RVMPO AQCD)
6. Days of use = 365
7. 907134.7 = grams/ton

PM_{10} Analysis

Daily Paved PM_{10} Reduction = (Less VMT*0.00069 kg) = 2.08656 kg
PM_{10} Annual Reduction = (2.08656 kg*365 days) = 761.59 kg

CO Analysis

CO Annual Reduction = ((CO Emission Factor*Less VMT)*365)/907184.7 = 5.3534 tons

Tons → kg
1 English short ton = 0.907 metric ton
1 metric ton = 1000 kg

CO Annual Reduction = ((5.3534/0.907)*1000) = 5,902.32 kg

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CMAQ Project Analysis

Project Name:	Springbrook Road, Cedar Links to Pheasant
Applicant:	City of Medford
Date of Analysis:	February 3, 2014

Project Description
This project proposes to construct Springbrook Road from Cedar Links to Pheasant to a major collector standard which includes two (2) travel lanes, a center turn lane, bike lanes and sidewalks. A round-a-bout will also be pursued at the intersection of Cedar Links and Springbrook to help with congestion and air quality by reducing the number of vehicle stops.

Analysis
Implementation of this project will impact PM_{10} and CO emissions based on assuming a traffic delay reduction and a mode shift. The analysis will examine reductions in PM_{10} and CO. PM10 emission factors for paved roadways and CO are derived from the RVMPO Air Quality Conformity Determination (AQCD) for the 2013 – 2038 RTP.

Assumptions used in this analysis:
1. Volume (ADT) = 475 (based on 5% reduction (bike/pedestrian shift) of 9,500 Springbrook Road ADT)
2. Trip Length (miles) = 5.4 (average vehicle trip length in RVMPO)
3. Less VMT (ADT * Trip Length) = (475*5.4) = 2,565
4. Paved Road PM_{10} Production Rate = 0.00069 kg/mile (RVMPO AQCD, Hi ADT)
5. CO Emission Factor = 4.4 grams/mile (RVMPO AQCD)
6. Traffic Delay Reduction = 30% (per City of Medford)
7. Days of use = 365
8. 907134.7 = grams/ton

PM_{10} Analysis

Daily Paved PM_{10} Reduction = (Less VMT*0.00069 kg) = 1.76985 kg
PM_{10} Annual Reduction = (1.76985 kg*365 days) = 646 kg

CO Analysis

CO Annual Reduction = ((CO Emission Factor*VMT)*365)/907184.7 = 4.54 tons
Tons → kg
1 English short ton = 0.907 metric ton
1 metric ton = 1000 kg
Mode Shift CO Annual Reduction = ((4.54/0.907)*1000) = 5,005.5127 kg
Delay CO Annual Reduction = ADT*Project Length = VMT (9,500 ADT*.455 Miles) = 4,322 VMT = 7.6 tons = 8,436 kg * 30% = 2,530 kg
CO Annual Reduction (mode shift & traffic delay reduction) = 7,536 kg

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CMAQ Project Analysis

Project Name:	Hybrid Vehicle
Applicant:	RVCOG
Date of Analysis:	February 4, 2014

Project Description
The COG is proposing the purchase of one (1) new hybrid vehicle to serve as the single MPO vehicle for staff transportation. Currently the COG does not have a staff vehicle. On a regular basis staff is required to travel within the Rogue Valley MPO and the Middle Rogue MPO, Eugene, Salem, occasionally to Portland and to other MPO's. Current practice is to rent a gas vehicle or pay staff for the use of their personal vehicle on a per mile basis. By owning a hybrid staff vehicle, the COG would be reducing emissions and save money by not renting a vehicle or paying for mileage.

Analysis
Implementation of this project will impact PM_{10} and CO emissions by utilization of a hybrid vehicle as opposed to a gas vehicle. The analysis will examine reductions in PM_{10} and CO. PM10 emission factors for paved roadways and CO are derived from the RVMPO Air Quality Conformity Determination (AQCD) for the 2013 – 2038 RTP.

Assumptions used in this analysis:
1. Yearly Vehicle Estimated VMT = 1,872 (within RVMPO area)
2. Daily VMT = 5.12
3. PM_{10} Tailpipe Production Rate = 0.034 grams (RVMPO AQCD)
4. CO Emission Factor = 4.4 grams/mile (RVMPO AQCD)
5. Percent VMT within CO Area = 32% (600 VMT)
6. Days of use = 365
7. 907134.7 = grams/ton
8. Hybrid Vehicle CO reduction = 34% (DOE, Alternative Fuels Data Center)
9. Hybrid Vehicle PM10 reduction = 34%

PM_{10} Analysis

Daily PM_{10} Tailpipe Reduction = (VMT*0.034 grams) = 0.17 grams/1000 = 0.0002 kg
PM_{10} Annual Tailpipe Reduction = (0.0002kg*365 days) = 0.07 kg * 34% = 0.025 kg

CO Analysis

CO Annual Reduction = ((CO Emission Factor*VMT*32%)*365)/907184.7*34% = 0.001 tons

Tons → kg
1 English short ton = 0.907 metric ton
1 metric ton = 1000 kg

CO Annual Reduction = ((0.001/0.907)*1000) = 1.1 kg

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CMAQ Project Analysis

Project Name: Clean Fuel Fleet Car Replacement
Applicant: RVTD
Date of Analysis: February 5, 2014

Project Description
RVTD has a fleet of 6 staff vehicles that are eligible for replacement. The staff cars are used for driver transportation to and from Front Street Station, field supervision and for administrative staff travel. RVTD will replace 4 fleet cars with a CNG fuel source and 2 fleet cars with a dual CNG/gasoline fuel source. Replacement vehicles are estimated to cost $30,000 each.

Analysis
Implementation of this project will impact PM_{10} and CO emissions by utilization of cleaner vehicles. The analysis will examine reductions in PM_{10} and CO. PM10 emission factors for paved roadways and CO are derived from the RVMPO Air Quality Conformity Determination (AQCD) for the 2013 – 2038 RTP.

Assumptions used in this analysis:
1. Yearly Vehicle Estimated VMT = 60,670 (6 vehicles)
2. CNG Yearly Vehicle Estimated VMT = 40,446 (average Yearly VMT of 4 CNG vehicles)
3. Daily CNG VMT = 132 (40,446/306 days of use)
4. Hybrid Yearly Vehicle Estimated VMT =20,233 (average Yearly VMT of 2 Hybrid vehicles)
5. Daily Hybrid Vehicle VMT = 66 (20,233/306 days of use)
6. PM_{10} Tailpipe Production Rate = 0.034 grams (RVMPO AQCD)
7. CO Emission Factor = 4.4 gm (RVMPO AQCD)
8. Percent RVTD District within Medford UGB = 18% (RVTD 100,350 acres: Medford UGB 18, 070 acres)
9. Days of use = 306
10. 907134.7 = grams/ton
11. CNG Vehicle CO reduction = 75%[1]
12. CNG Vehicle PM10 reduction = 95%[2]
13. Hybrid Vehicle Emissions Reductions = 34%[**]

[1] *Source: TIAX Report – Full Fuel Cycle Assessment: Well-To-Wheels Energy Inputs, Emissions, and Water Impacts California Energy Commission. Source: U.S. Department of Energy – Argonne National Laboratory Report: A full Fuel-Cycle Analysis of Energy and Emissions Transportation Fuels Produced from Natural Gas 12/1999. ** USDOE*

[2] *Source: TIAX Report – Full Fuel Cycle Assessment: Well-To-Wheels Energy Inputs, Emissions, and Water Impacts California Energy Commission. Source: U.S. Department of Energy – Argonne National Laboratory Report: A full Fuel-Cycle Analysis of Energy and Emissions Transportation Fuels Produced from Natural Gas 12/1999.*

PM_{10} Analysis

CNG Daily PM_{10} Tailpipe Reduction = (VMT*0.034 grams*0.95) = grams/1000 = 0.0043 kg

CNG PM_{10} Tailpipe Annual Reduction = (0.0043 kg*306 days) = 1.3 kg

Hybrid Daily PM_{10} Tailpipe Reduction = (VMT*0.034 grams*0.34) = 0.76 grams/1000 = 0.0008 kg

Hybrid PM_{10} Tailpipe Annual Reduction = (0.0008 kg*306 days) = 0.24 kg

Total PM_{10} Tailpipe Annual Reduction = 1.5 kg

CO Analysis

CNG CO Annual Reduction = ((CO Emission Factor*VMT*75%)*306)/907184.7*18% = 0.026 tons

Tons → kg

1 English short ton = 0.907 metric ton

1 metric ton = 1000 kg

CNG CO Annual Reduction = ((0.026/0.907)*1000) = 29 kg

Hybrid CO Annual Reduction = ((CO Emission Factor*VMT*34%)*306)/907184.7*18% = 0.006 tons

Tons → kg

2 English short ton = 0.907 metric ton

1 metric ton = 1000 kg

Hybrid CO Annual Reduction = ((0.006/0.907)*1000) = 6.6 kg

Total CO Annual Reduction = 36 kg

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CMAQ Project Analysis

Project Name:	Valley Feeder Pilot Project
Applicant:	RVTD
Date of Analysis:	February 4, 2014

Project Description
RVTD will implement a demand-response service available to all citizens with this funding. There is high potential for a Valley feeder service to establish ridership demand before regular fixed-route service is implemented and to provide service in areas that are not conducive for a fixed-route. The service will begin by using the available capacity in the Valley lift vehicles. RVTD serves an area on ¾ mile on either side of its fixed-routes with paratransit services, known as Valley Lift. Currently the service is limited to eligible clients who are older adults or disabled persons. FTA allows transit providers to fill available capacity in paratransit vehicles with persons from the general public. RVTD is seeking funds to pilot a service called "Valley Feeder" that will enable general public to schedule trips on the Valley Lift vehicles.

Analysis
Implementation of this project will impact PM_{10} and CO emissions by assuming a reduction in vehicle trips. The analysis will examine reductions in PM_{10} and CO. PM10 emission factors for paved roadways and CO are derived from the RVMPO Air Quality Conformity Determination (AQCD) for the 2013 – 2038 RTP.

Assumptions used in this analysis:
1. New Transit Trips = 7.5/day*2 trips*306 = 4,590 trips
2. Trip Length (miles) = 5.4 (average vehicle trip length in RVMPO)
3. Percent of Transit Riders drive alone factor = 34.4%
4. Less VMT (Transit Trips*Trip Length) = (4,590*5.4) = 24,786*34.4% = 8,526
5. Paved Road PM_{10} Production Rate = 0.00069 kg (RVMPO AQCD)
6. CO Emission Factor = 4.4 grams (RVMPO AQCD)
7. Percent RVTD District within Medford UGB = 18% (RVTD 100,350 acres: Medford UGB 18, 070 acres)
8. Days of use = 306
9. 907134.7 = grams/ton

PM_{10} Analysis

Daily Paved PM_{10} Reduction = (VMT*0.00069 kg) = 5.9 kg/day
PM_{10} Annual Reduction = (5.9 kg*306 days) = 1,800 kg

CO Analysis

CO Annual Reduction = ((CO Emission Factor*VMT)*306)/907184.7*18% = 2.3tons
Tons → kg
1 English short ton = 0.907 metric ton
1 metric ton = 1000 kg
CO Annual Reduction = ((2.3/0.907)*1000) = 2,535 kg