

#### **AGENDA**

# Middle Rogue Metropolitan Planning Organization Policy Committee

Date: Thursday, November 19, 2015 Time: 2:30 p.m.Location: Courtyard Conference Room, Grants Pass City Hall, 101 NW 'A' Street, Grants Pass, Oregon Phone: Sue Casavan, RVCOG, 541-423-1360 MRMPO website: www.mrmpo.org Call to Order/Introductions/Review Agenda .......Darin Fowler, Chair Presentation Item: Jenna will update the Policy Committee on the status of the Rogue River Greenway and Background: talk about possible connections to the Grants Pass area. None Attachment: Action Requested: None – presentation item Action Items: Background: At the October meeting, the Policy Committee approved changes to the RVACT-MRMPO Coordination Policy. ODOT proposes a few minor revisions and adding the RVACT Chairperson as a signatory. Attachment: #2 – Revised RVACT – MRMPO Coordination Policy. *Action Requested:* Approve proposed revisions. 5. Regional Transportation Plan (RTP) Chapter 9......Dan Moore Background: The MRMPO TAC reviewed and revised Chapter 9 Air Quality at their November 5,

2015 meeting, and recommends Policy Committee approval. Staff will provide the

Policy Committee with an overview of the chapter.

Attachment: #3 – RTP Draft Chapter 9

Action Requested: Consider approving Chapter 9.

Background: The MRMPO TAC reviewed updates from Chapter 12 Safety and Security at their

November 5, 2015 meeting, and recommends Policy Committee approval. Staff will

provide the Policy Committee with an overview of the updates.

Attachment: #4 – RTP Draft Chapter 12

Action Requested: Consider approving Chapter 12.

Background: The MRMPO TAC reviewed revisions to the Transportation Options (TO) section of

Chapter 5 Existing Transportation System at their November 5, 2015 meeting, and recommends Policy Committee approval. Staff will provide the Policy Committee with

an overview of the chapter.

Attachment: #5 – RTP Draft Transportation Options Section of Chapter 5

Action Requested: Consider approving TO Section of Chapter 5.

\*(Limited to one comment per person, five minute maximum time limit)\*

(Opportunity for MRMPO member jurisdictions to talk about transportation planning projects.)

The next MPO Policy Committee meeting is scheduled for Thursday, December 17, 2015 at 2:30 p.m. in the Courtyard Conference Room at Grants Pass City Hall.

• The next Middle Rogue MPO TAC meeting is scheduled for Thursday, December 3, 2015 at 1:30 p.m. in the Courtyard Conference Room at Grants Pass City Hall.

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**

Middle Rogue Metropolitan Planning Organization Policy Committee

## October 15, 2015

The following attended:

MRMPO POLICY COMMITTEE

Pam Van Arsdale, Vice Chairman

NAME REPRESENTING

Jan Fish Gold Hill Ian Horlacher for Mike Baker ODOT

Colleen Roberts Jackson County
Robert Brandes Josephine County
Terry Haugen Grants Pass

Others Present

Art Anderson ODOT
Aaron Cubic Grants Pass
Ian Horlacher ODOT
Dan Dorrell ODOT

Leslie Orr Grants Pass Bike/Ped John Vial Jackson County

**RVCOG Staff** 

Dan Moore RVCOG
Bunny Lincoln RVCOG
Andrea Napoli RVCOG

#### 1. Call to Order / Introductions/ Review Agenda

The Vice Chairman called the meeting to order at 2:34 pm.

#### 2. Review / Approve Minutes

The Vice Chairman asked if there were any changes or additions to the previous meeting minutes.

Rogue River

On a motion by Ian Horlacher, seconded by Jan Fish, the minutes were approved as presented.

#### 3. RVACT/MRMPO Coordination Policy Revisions (Resolution 2015- 3)

Dan Moore presented the proposed revisions to the existing Coordination Policy. The Commission wants to implement a Chair/Co-Chair scenario. The proposed makeup (revised) of the subcommittee includes:

- The sitting chairperson of the MRMPO Policy Committee
- The sitting Chairperson of the RVACT
- The sitting Vice Chairperson of the MRMPO Policy Committee
- An MRMPO Policy Committee member selected by the RVMPO
- The sitting Chairperson of the MRMPO serving as an ex-officio member of the subcommittee
- The ODOT Area Manager

Dan Moore went over several revisions to the Coordination Policy proposed by Mike Baker, included in the above Policy overview.

On a motion by Ian Horlacher, seconded by Robert Brandes, Resolution 2015-3 - RVACT/MRMPO Coordination Policy Revisions were approved, with added changes, by unanimous voice vote.

#### Action Item:

#### 4. Regional Transportation Plan (RTP) Chapter 6 – Plan Implementation

Andrea Napoli presented an overview of RTP Chapter 6:

## A. Projects in the RTP -

• Local Jurisdiction Transportation System Plans

#### **B.** Project Selection Criteria -

- Mobility
- Community Vitality/Livability
- Transportation Options
- Resource Conservation
- Evaluation & Review

#### C. RTP Project List (by Jurisdiction) –

- Project Timing
  - Short Range 2015 to 2020
  - Medium Range 2021 to 2030 Tier 1
  - Long Range 2030 to 2040
- Other Projects

Tier 2

#### D. Tables -

- 6.1 Policy foundation for MPO Project Selection
- 6.2 RTP Project List by Jurisdiction (Short Range)
- 6.3 RTP Project List by Jurisdiction (Medium Range)
- 6.4 RTP Project List by Jurisdiction (Long Range)

- 6.5 Tier 2 Projects (Unfunded)
- E. Map(s)
- Other Projects

The MRMPO TAC recommended approval of the Chapter. Adoption of the TSP is a land use decision, and must follow the required rules for same, thereby creating the expectation that at least 180 days will pass before adoption can be expected.

On a motion by Colleen Roberts, seconded by Ian Horlacher, the Regional Transportation Plan (RTP) Chapter 6 – Plan Implementation was approved by unanimous voice vote.

## 5. Regional Transportation Plan (RTP) Chapter 7 – Transportation Sustainability

Dan Moore presented an overview of RTP Chapter 7, stipulating that sustainability measures were being added to assist in meeting the stated goals:

#### A. Definitions -

- Oregon Transportation Plan Update (2006), "Creating a balance between the economy, social needs, and the environment in order to ensure healthy and equitable lifestyle and resources for future human, plant and animal communities."
- ORS 184.421, "Using, developing and protecting resources in a manner that enables people to meet current needs and provides that future generations can also met future needs, from the joint perspective of environment, economic and community objectives."

## B. Recommended Sustainability Strategies (from the ODOT Transportation Plan) -

- Environmentally Responsible Transportation System
  Strategy 1.2 added the word "emissions" after "greenhouse gas..."
- Energy Supply
- Creating Communities
- Economic Viability

The MRMPO TAC recommended approval of the Chapter.

On a motion by Ian Horlacher, seconded by Jan Fish, the Regional Transportation Plan (RTP) Chapter 7 – Transportation Sustainability was approved, with the Strategy 1.2 text addition, by unanimous voice vote.

#### 6. Oregon MPO Consortium Work Plan (Draft FY 15-16 Work Program)

Dan Moore presented an overview if the General Scope & Work Plan, including responsibilities for:

- 1. OMPOC Coordination
- 2. Coordination with State/Federal Agencies, Legislators and National Organizations
- 3. Resource Development
- 4. Technical Support for MPOs (Short, medium & long term)

The Committee members held a brief discussion about the operation mechanics of OMPOC. There will be one Staff person who will be helping the MPOs. ODOT will provide Staff funding and the match.

Dan Moore also explained that he used other, adopted RTPs in formi

## 7. MRMPO Planning Update

- The RR Greenway presentation will be made at the next meeting.
- RTP final chapters will potentially be brought to the November Policy Committee meeting, with the public involvement process, including individual jurisdictions, to follow.
- Staff will propose a slight adjustment to the RVMPO boundaries at the next meeting.

#### 8. Public Comment

None.

#### 9. Other Business / Local Business

- Connect Oregon and Enhance It project applications are due Nov. 20<sup>th</sup>.
- 75% of the RTP efforts have been completed.

#### 10. Agenda Build for Next Meeting

## 11. Adjournment

The meeting was adjourned at 3:25 p.m.

Next MPO TAC meeting – Thursday, Nov. 5, 2015 @ 1:30 pm

## Resolution 2015 - 3

## Middle Rogue Metropolitan Planning Organization - Policy Committee

# Rogue Valley Area Commission on Transportation / Middle Rogue Metropolitan Planning Organization Coordination Policy

**Whereas** the Rogue Valley Area Commission on Transportation has been vested by the Oregon Transportation Commission with the responsibility for State Transportation Improvement Program project priority recommendations and:

**Whereas** the Rogue Valley Area Commission on Transportation recognizes the <u>need for advisability</u> of project funding coordination with the Middle Rogue Metropolitan Planning Organization;

**Therefore,** if the Rogue Valley Area Commission on Transportation (in its prioritization of State Transportation Improvement Program funding) or the Middle Rogue Metropolitan Planning Organization (in its prioritization of <u>State</u> Transportation Improvement Program funding) foresees the potential for funding alignment problems between the two bodies, either body by majority vote, may call for the formation of a joint subcommittee of the two bodies for the purpose of recommending a resolution of the said funding alignment problems. The said subcommittee shall consist of the following:

- 1) The sitting Chairperson of the Middle Rogue Metropolitan Planning Organization Policy Committee.
- 2) The sitting Chairperson of the Rogue Valley Area Commission on Transportation.
- 3) The sitting Vice-Chairperson of the Rogue Valley Area Commission on Transportation.
- 4) A Middle Rogue Metropolitan Planning Organization Policy Committee member selected by the Middle Rogue Metropolitan Planning Organization Policy Committee.
- 5) The sitting Chairperson of MRMPO Technical Advisory Committee serving as an ex-officio member of the subcommittee.
- 6) The Oregon Department of Transportation Area Manager.

When the said subcommittee is called for by the majority vote of either body, the subcommittee shall meet within fourteen (14) calendar days to attempt to resolve any anticipated funding alignment problems. The recommendations of the subcommittee shall be forwarded to the Middle Rogue Metropolitan Planning Organization and Rogue Valley Area Commission on Transportation for consideration.

This process will be evaluated annually biennially by both the Rogue Valley Area Commission on Transportation and Middle Rogue Metropolitan Planning Organization to determine its effectiveness.						
- <b>ADOPTED</b> by the Policy Committee of the Middle Rogue Metrop of October, 2015.	olitan Planning Organization on the 15th day					
Darin Fowler, Middle Rogue Policy Committee Chair	Date					
Michael Montero, RVACT Chair	<del>Date</del>					

# **Chapter 9 – Air Quality**

## Introduction

To receive transportation funding or approvals from the Federal Highway Administration and the Federal Transit Administration, state and local transportation agencies with plans, programs or projects in nonattainment or maintenance areas, must demonstrate that they meet the transportation conformity requirements of the federal Clean Air Act, as implemented in specific federal and state transportation conformity rules.

To meet the requirements, Metropolitan Planning Organizations (MPOs) must show that the anticipated emissions resulting from implementation of transportation plans, programs and projects are consistent with and conform to the purpose of the State Implementation Plan (SIP) for air quality. A SIP is a plan mandated by the Clean Air Act and developed by the state that contains procedures to monitor, control, maintain and enforce compliance with the National Ambient Air Quality Standards (NAAQS). SIPs are required to be developed once a region has violated the standards.

Within the MRMPO area, demonstration of conformity to two SIPs is required: a carbon monoxide (CO) limited maintenance plan, or SIP, within the Grants Pass Central Business District (CBD), and a particulate ( $PM_{10}$ ) limited maintenance plan within the Grants Pass Urban Growth Boundary (UGB).

#### 1. Carbon Monoxide Status

Oregon Department of Environmental Quality (ODEQ) developed a Carbon Monoxide Limited Maintenance Plan (LMP) for the Grants Pass area, which was submitted to EPA on April 22, 2015 and went into effect on September 28, 2015. To be eligible for CO LMP, an area has to have a design value at or below 7.65 ppm. Based on ODEQ's review of the 2002 – 2005 CO emissions data for Grants Pass the area meets the requirements for an LMP.

As an area with a limited maintenance plan, the MRMPO is no longer required to perform emissions analysis for CO but still must demonstrate conformity as discussed below.

## 2. PM<sub>10</sub> Status

Grants Pass has been below the NAAQS for  $PM_{10}$  since 1988. Oregon Department of Environmental Quality (ODEQ) developed a  $PM_{10}$  Limited Maintenance Plan (LMP) for the Grants Pass area, which was submitted to EPA on April 22, 2015 and went into effect on September 28, 2015.

As an area with a limited maintenance plan, the MRMPO is no longer required perform emissions analysis for PM<sub>10</sub> but still must demonstrate conformity as discussed below.

According to federal rules, while areas with approved limited maintenance plans are not required to perform a regional emission analysis, they are required to demonstrate conformity of the transportation plans as stated in 40 CFR Part 93, Subpart A.

## 3. Conformity Findings

The air quality conformity determination (AQCD) for this plan shows that with the implementation of the MRMPO 2015-2040 Regional Transportation Plan and 2015-2018 Metropolitan Transportation Improvement Program current federal air quality standards for regional transportation conformity will continue to be met in the Grant Pass CO and  $PM_{10}$  Limited Maintenance Areas.

## 4. How the MRMPO Demonstrates Conformity

An AQCD is required whenever the Regional Transportation Plan (RTP) or Metropolitan Transportation Improvement Program (MTIP) is updated, or every four years, whichever comes first. USDOT must make the conformity determination before the plan and program can go into effect.

In the MRMPO area, the conformity document must show that through the horizon of the plan and program transportation conformity requirements will be met. These requirements (CFR 40 Part 93 Subpart A) and how the MRMPO is meeting regulations in regards to the adoption of the 2040 RTP are presented below.

- a. Transportation plans and projects provide for timely implementation of SIP transportation control measures (TCMs) in accordance with 40 CFR 93.113;
  - 1. The equivalent State Rule is OAR 340-252-0140.
  - 2. There are no TCMs identified in the SIPs for the Grants Pass PM<sub>10</sub> and CO Maintenance areas.
- b. Transportation plans and projects comply with the fiscal constraint element per 40 CFR 93.108;
  - 1. The equivalent State Rule is OAR 340-252-0090.
  - 2. As required by federal regulations, the adopted MRMPO 2040 RTP is financially constrained, containing only those projects that funds are identified for or 'reasonably expected' to be available over the time frame of the plans.
  - 3. The financial constraint assumptions developed for the MRMPO 2040 RTP are shown in Chapter 8 of the RTP.
- c. The MPO's interagency consultation procedures meet applicable requirements of 40 CFR 93.105;
  - 1. The equivalent State Rule is OAR 340-252-0060.
  - 2. A draft of the AQCD document was circulated to ODOT, EPA, Oregon DEQ, FHWA, and FTA prior to adoption.
- d. Conformity of transportation plans is determined no less frequently than every four years, and conformity of plan amendments and transportation projects is demonstrated in accordance with the timing requirements specified in 40 CFR 93.104;

- 1. The equivalent State Rule is OAR 340-252-0050 which currently specifies conformity to be determined every four years.
- e. The latest planning assumptions and emissions model are used as set forth in 40 CFR 93.110 and 40 CFR 93.111;
  - 1. The equivalent State Rule is OAR 340-252-0110 for the latest planning assumptions.
  - 2. Estimates of population and employment for the area have been made, which are based on the adopted comprehensive plans and TSPs for the MRMPO area. Assumptions regarding the financial situation the MRMPO area is anticipated to face over the next 24 years have been updated, in conjunction with ODOT, Josephine Community Transit, and the local jurisdictions.
  - 3. Equivalent State Rule is OAR 340-252-0120 regarding the latest emissions model.
  - 4. The Grants Pass area is designated as attainment for PM<sub>10</sub> and carbon monoxide. Limited maintenance plans for carbon monoxide and PM10 for the area went into effect on September 28, 2015. As such, no regional emissions modeling is required for the conformity determination.
- f. Projects do not cause or contribute to any new localized carbon monoxide or particulate matter violations, in accordance with procedures specified in 40 CFR 93.123; and
  - 1. Projects included in the MRMPO 2040 RTP that are required to perform hot spot analysis will have this conducted by the project sponsors during the appropriate phase of the project.
- g. Project sponsors and/or operators provide written commitments as specified in 40 CFR 93.125.
  - 1. Project sponsors and operators will conform to the CAA requirements.

Response to the applicable conformity criteria and procedures as they apply to the MRMPO 2040 RTP, as per State of Oregon conformity rules (OAR 340-252-0010 et seq.), is made in the following text. This checklist is provided to assist in the state and federal review of this conformity determination and the consultation requirements of OAR 340-252-0060.

## 5. Actions to be taken

The MRMPO Policy Committee, as the policy board for the federally designated Metropolitan Planning Organization, must formally adopt the findings described in the AQCD. Then, USDOT and the federal Environmental Protection Agency confer on the analysis. Ultimately, USDOT will make a conformity determination based on the AQCD. At that time, the MRMPO's 2015-2040 plan will go into effect, as well as the 2015-2018 MTIP.

# Chapter 12 – Safety & Security

# A. Multi-Modal Safety

Public safety is by far the most important element considered in every transportation project. Its significance begins with federal goals and policies, continues with state transportation goals and on to the regional and local planning level. Safety is one of the planning factors in MAP-21 that must guide state and regional transportation planning.

The federal planning factors can be found in Vision and Goals, Chapter 2. According to the Bureau of Transportation Statistics' (BTS) Safety data Action Plan:

"Deaths and injuries are a major cost in transportation. Transportation fatalities rank third as the cause of lost years of life in the U.S. (behind heart disease and cancer). Several travel modes have death counts whose impact exceeds that of AIDS. But the Department of Transportation has not yet responded to this public health threat by developing data programs as capable as those used in the federal medical community."

The ideal situation is that all elements of the multi-modal transportation system are safe. However, that is not always the case and plans must be made for elimination of physical transportation infrastructure hazards and problems to create a safer travel environment.

Safety often is discussed along with security, but the two are different and must be addressed separately because they involve different issues and circumstances.

The simplest distinction between safety and security is that safety problems, crashes, are unpremeditated unfortunate events. As such, they may be caused by driver error or impairment, adverse weather, a temporary hazard in the right-of-way, poor infrastructure, poor vehicle design, inadequate vehicle maintenance, or all of the above. By contrast, security events always connote a negative intention (See Security Section).

# 1. Approach to Safety

There are two components to efforts toward improving transportation safety: public education, and facility improvement. Federal, state and local agencies engage in efforts addressing both. In the area of education, programs go beyond safe-driver programs to provide information to pedestrians, children traveling to school and workers in traffic zones. Crash data show driver error and the failure of bicyclist and pedestrians to obey the rules of the road are factors in most crashes, so traffic safety education can play a significant role in crash reduction. In addition, children, who are among the most vulnerable pedestrians, can be better protected through increasing their awareness of traffic hazards and safety rules.

Education includes law enforcement. ODOT research indicates a direct relationship between traffic law enforcement and crash rates. Due to funding shortfalls, the Josephine County Sherriff's Department does not respond to crashes within the County's jurisdiction. This may result in an under-reporting of crashes. In addition, the number of state police on the road has fluctuated but generally has remained below national average rates. Gold Hill does not have law

enforcement. Jackson County Sheriff's department responds to crashes in Gold Hill. Crash records show that two common infractions have a significant impact on traffic crash rates and severity: red-light running and speeding.

These can be reduced through the consistent enforcement of safety-related traffic laws. While the behavior of system users is critical, the facilities themselves need to be designed, built, maintained and operated in ways that make them safe. In the design and construction area, this means following standards for everything from lane widths and driveway spacing to sign placement and crosswalk location. Operations and maintenance programs look at where crashes occur and why, to determine whether any change on the ground could make accidents less likely. Visibility, for example, is important especially at intersections, to allow motorists a clear view of signs, cyclists, pedestrians, and other cars.

Landscaping, which is used to improve appearances and conditions for neighbors and pedestrians, cannot be allowed to obstruct a clear line of sight when needed for traffic safety purposes.

## 2. Safety

During the five-year period from 2009 through 2013, 3,796 crashes were reported in the Grants Pass Urbanized Area, according to the ODOT Crash Analysis & Reporting Unit. The majority of these crashes occurred on arterial streets, with approximately 12% occurring on urban minor arterials and 45% occurring on urban principal arterials. Approximately 13% of crashes during this period occurred on urban collectors, 6% on urban local roads, and less than 16% occurred on rural roads. The majority of these crashes (74%) occurred in Grants Pass, while 2% occurred in Rogue River and less than 1% occurred in Gold Hill. Of these reported crashes, 45% sustained property damage only, 52% involved injuries and 1% of the crashes involved fatalities.

#### **Crash Data – Functional Class**

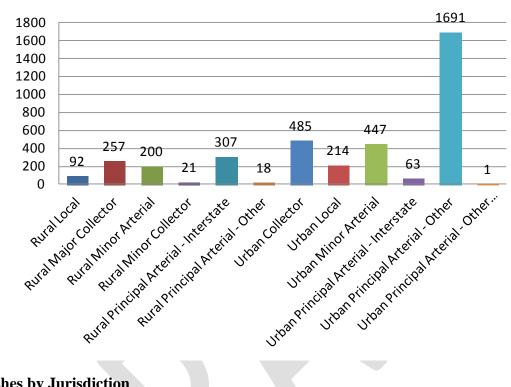
From 2009 through 2013, 795 crashes were reported along rural roadways (including the rural portions of Interstate 5) within the MRMPO Planning Area. Crashes on urban roads totaled 3,001, or 80% of the total crashes from 2009 to 2013. Within the Planning Area there were 1,957 injury crashes and 1,803 property damage only crashes. There were a total of 36 crashes involving a fatality from 2009 through 2013.

**Table 12.1** 

Crashes - MRMPO Planning Area by Functional Classs 2009 to 2013							
Years	2009	2010	2011	2012	2013	Totals	% of Total
Rural Local	20	13	29	15	15	92	2%
Rural Major Collector	37	59	63	53	45	257	7%
Rural Minor Arterial	34	31	37	44	54	200	5%
Rural Minor Collector	5	2	3	4	7	21	1%
Rural Principal Arterial - Interstate	51	53	62	65	76	307	8%
Rural Principal Arterial - Other	5	2	4	3	4	18	0.5%
Urban Collector	83	85	116	125	76	485	13%
Urban Local	34	33	54	46	47	214	6%
Urban Minor Arterial	67	68	105	102	105	447	12%
Urban Principal Arterial - Interstate	14	13	15	9	12	63	2%
Urban Principal Arterial - Other	307	305	376	350	353	1691	45%
Urban Principal Arterial - Other Freeways and Exp	1	0	0	0	0	1	0.03%
Totals	658	664	864	816	794	3796	100%

Figure 12.1





#### **Crashes by Jurisdiction**

From 2009 to 2013, there were 2,798 crashes in Grants Pass, 88 crashes in Rogue River, 19 crashes in Gold Hill and 891 crashes in the rural areas of the MRMPO.

**Table 12.2** 

Crashes by Ju	risdiction 2	009 to 201	3				
Years	2009	2010	2011	2012	2013	Totals	% of Total
<b>Grants Pass</b>	507	480	634	602	575	2798	74%
Rogue River	11	18	21	18	20	88	2%
Gold Hill	3	3	2	6	5	19	1%
Rural Areas	137	163	207	190	194	891	23%
Totals	658	664	864	816	794	3796	100%

#### **Crashes Types**

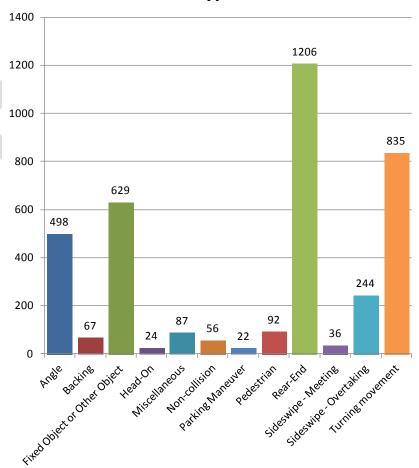
The number of traffic incidents within the Planning Area ranged from 658 to 864 crashes per year, with a low of 658 crashes in 2009 and a high of 864 crashes in 2011. The most common type of crash was rear-end, which comprised 32% (1,206 crashes) of all crashes over the 5-year period. Turning crashes made up 22% (835 crashes) of the crash total.

**Table 12.3** 

Crash Types 2009 to 2013							
Years	2009	2010	2011	2012	2013	Totals	% of Total
Angle	85	72	103	122	116	498	13%
Backing	11	12	18	11	15	67	2%
Fixed Object or Other Object	115	100	141	128	145	629	17%
Head-On	5	1	6	6	6	24	1%
Miscellaneous	14	17	22	15	19	87	2%
Non-collision	12	8	15	8	13	56	1%
Parking Maneuver	2	4	4	8	4	22	1%
Pedestrian	19	17	18	22	16	92	2%
Rear-End	190	234	291	238	253	1206	32%
Sideswipe - Meeting	9	3	9	6	9	36	1%
Sideswipe - Overtaking	44	42	55	50	53	244	6%
Turning movement	152	154	182	202	145	835	22%
Totals	658	664	864	816	794	3796	100%

Figure 12.2





#### **Crashes Data – City & Counties**

During the 2009 - 2013 period, the majority of the crashes occurred within the City of Grants Pass (74%); 23% occurred in unincorporated areas of Josephine and Jackson Counties within the Planning Area, 1% in Gold Hill and 2% occurred within Rogue River.

Of crashes occurring within the urbanized area, 47% were property damage only and 52% incurred injury. There were thirty six fatal accidents. The majority of crashes within urbanized areas were the result of rear-end collisions (32%) or turning movements (22%).

**Table 12.4** 

Crash Severity 2009 to 201	.3						
Years	2009	2010	2011	2012	2013	Totals	% of Total
Fatalities	11	8	7	6	4	36	1%
Non-Fatal Injury	347	325	453	421	411	1957	52%
Property Damage Only	300	331	404	389	379	1803	47%
Totals	658	664	864	816	794	3796	100%

Crashes occurring for the years 2012 and 2013 are shown on Map 13-1.

#### **Safety Priority Index System**

ODOT has developed a safety priority index system (SPIS) to identify hazardous locations along state highways. This rating system considers not only the number of crashes at a particular intersection, but the rate of crashes based on the overall volume of traffic going through that intersection. Crash rates help paint a more complete picture of the safety conditions of a segment than the number of crashes. Rates account for the traffic volumes traveling along a specific segment of roadway, whereas crash numbers do not account for traffic levels.

The ODOT SPIS is considered when making decisions regarding expenditure of state funds for highway improvements. The highway locations with SPIS scores that are in the highest 10 percent of all SPIS scores are evaluated for potential safety improvements. The following locations in the Planning Area were among the top 10% of SPIS groups in the 2014 SPIS report, covering years 2011 - 2013:

**Table 12.5** 

Intersection	SPIS Score	Percent
SE M St & SE 8 <sup>th</sup> St	75.82	95
SE M St & Redwood Hwy	70.53	95
NW D St & NW 5 <sup>th</sup> St	65.79	95
NW D St & NW 4 <sup>th</sup> St	55.91	90
Hubbard Lane & SW Ravenwood	47.52	90
SE M St & 9 <sup>th</sup> St	47.32	90
Hubbard Lane & SW Clementine	46.31	90

## 3. RTP Safety Projects

Virtually all the road projects listed in the RTP have a safety element. One of the most common types of improvement, urban upgrade, makes roads safer for motorists as well as bicyclists and pedestrians by adding sidewalks and bicycle lanes that are separate from motor traffic. For motor vehicle drivers also benefit from having marked lanes for non-motorized modes, marked crosswalks and signals. Options for the MRMPO planning include:

- Using published sources, continue to develop tables, charts and maps of transportation crashes and incident data by mode.
- As resources and source agency databases allow, create Geographic Information Systems (GIS) –related database files and maps of accident and incident data by mode.
- Coordinate with appropriate lead agencies, with the primary focus being on highway and
  pedestrian safety improvements accidents since those constitute the highest number of
  accidents, but also focusing on transit safety needs.
- Continue Intelligent Transportation Systems planning and project programming, particularly with a view to investments that will enhance safety.
- Continue reviewing with MRMPO committees and the public project evaluation matrix and
  other specific funding program scoring matrices to ensure that safety projects receive
  appropriate weighting and priority in plans and programs.
- Help jurisdictions identify additional transportation funding sources that are specifically targeted at safety projects to supplement the limited funds from conventional transportation sources.

# **B. Multi-Modal Security**

The federal government in 1998, called for states and MPOs to address transportation security issues. In 2005, a new transportation act strengthened the requirement, which has been extended to the current MAP-21. The transportation acts require long-range regional transportation plans to consider security distinct from transportation safety. Furthermore, in 2002 Transportation Security Administration (TSA) was created with extensive requirements for operational and capital improvements relating to security. While the public's eye has been on passenger aviation, TSA's mission relates to all modes.

The federal government anticipates that over the next several years, security considerations will result in changes in how transportation is planned, designed, implemented and operated.

Transportation goals, planning processes, databases, analytical tools, decision-making considerations, and organizational structures will change due to security concerns.

Transportation will be on the front line in responding to security risks. The response to security concerns will be cross-jurisdictional and functional lines and be among the most complex and important challenges to transportation professionals. While it may be too early to begin changing our long-range infrastructure network plans in response to security risks, there will be changes in spending priorities in the near term and most probably over a longer period of time."

There is a wide range of such incidents that could cause varying levels of disruption to the transportation system. One report recommending a national research and development strategy for improving surface transportation security presented a wide ranging list of possible threat scenarios. The list originated in a U.S. Department of Transportation vulnerability assessment of the U.S. transportation system. The nature of the threats was characterized primarily as being a physical, biological, chemical or cyber attack. The types of responses would clearly be different depending on the nature of the attack.

The magnitude and scope of an incident will clearly be an important determinant for gauging the appropriate public safety/emergency response. And most studies of sudden disruptions to the transportation network, either from natural or man-made causes, have concluded that the redundancies in a metropolitan area's transportation system provides a rerouting capability that allows the flow of people and vehicles around disrupted network links. For instance, in the MRMPO area, parallel routes offer that redundancy.

#### 1. Definitions

The simplest distinction between safety and security is that safety problems- accidents – are just that—unpremeditated unfortunate events. As such, they may be caused by driver error or impairment, adverse weather, a temporary hazard in the right-of-way, poor infrastructure or vehicle design, or all of the above.

By contrast, security events always connote a negative intention, whether the perpetrator is a disgruntled single individual, a member of a gang, or a member of a political organization, that is, a terrorist. In number, terrorist attacks on transportation systems are few, with the vast majority of security breaches being perpetrated by non-political actors. But terrorist events, when they do occur, can be much more dramatic, harm many more people, and require much more to address.

Table 12.6 below provides a description of various types of security problems that can arise in any transportation system.

**Table 12.6** 

Event	Description
Aggravated Assault	An unlawful attack by 1 person upon another for the purpose of inflicting severe or aggravated bodily injury. This type of assault usually is accompanied by the use of a weapon or by means likely to produce death or great bodily harm.
Arson	To unlawfully and intentionally damage, or attempt to damage, any real or personal property by fire or incendiary device.
Burglary	The unlawful entry of a structure to commit a felony or a theft. This includes offenses known locally as burglary (any degree), unlawful entry with intent to commit a larceny or felony, breaking and entering with intent to commit a larceny, housebreaking, safe cracking and all attempts at these offenses.
Larceny/Theft	The unlawful taking, carrying, leading or riding away of property from the possession or constructive possession of another. This includes pocket picking, purse snatching, shoplifting, thefts from motor vehicles, thefts of motor vehicle parts and accessories, theft of bicycles, theft from buildings, theft from coin operated devices or machines, and all other theft not specifically classified.
<u>Trespass</u>	To unlawfully enter land, a dwelling or other real property.
Vandalism	The willful or malicious destruction, injury, disfigurement or defacement of any public or private property, real or personal, without consent of the owner or person having custody or control by cutting, tearing, breaking, marking, painting, drawing, covering with filth, or any other such means as may be specified by local law.
<u>Terrorism</u>	The willful or malicious destruction, injury, disfigurement or defacement of any public or private property [etc. as above] by domestic or foreign nationals for the purpose of making a political impact.

# 2. An Approach to Security

FHWA guidance offers one approach to handling potential security or disaster incidents. The plan offers six options for action.

**Prevention:** This has several components, ranging from the actual stopping of an attack before it occurs, to providing improved facility designs that prevent large scale destruction. Surveillance, monitoring, and sensing technologies will likely play an important role in the prevention phase of an incident.

**Response:** A range of responses is offered.

*Mitigation:* Reducing the harmful impact of an attack as it occurs and immediately after. This entails identifying the most effective routing for emergency vehicles, evacuations and effective communication systems among emergency response teams and for general public information.

*Monitoring:* Recognizing that an incident is underway, characterizing it, and monitoring developments. Clearly, surveillance, monitoring, and sensing technologies would be critical to this phase of incident response, as would public information.

*Recovery:* Facilitating rapid reconstruction of services after an incident. Depending on the degree of damage to the community and/or transportation system, regaining some level of normalcy will require bringing the transportation system back to adequate levels of operation.

*Investigation:* Determining what happened in an attack, how it happened, and who was responsible. This is primarily a security/police activity that reconstructs the incident and determines causality and responsibility.

*Institutional Learning:* Conducting a self-assessment of organizational actions before, during, and after an incident. This element provides a feedback to the prevention element in that by understanding what went wrong or right in response to an incident, steps can be taken to prevent possible new threats.

## 3. MRMPO Area Security Planning

Within the planning area, some specific strategies have been developed. They are discussed below in the context of national security planning initiatives.

Intelligent Transportation System (ITS) Program – In the past decade or so, a new federal transportation program focusing on information technology to address problems has been developed. This Intelligent Transportation Systems program can make a major contribution toward transportation security. It can assist in all four phases of security: planning, preparedness, response and recovery. However, planners must consider that because of ITS installations' dependence on computers and electrical power, they are also more vulnerable to security threats than are many other transportation elements.

**Freight** – Special security planning efforts focus on freight movements. The Federal Motor Carrier Safety Administration reviews security measures with motor carriers and shippers that may be the target of terrorist attack. Its mission is to increase the level of awareness of hazardous materials carriers to terrorist threats. The FMCSA field staff provide information in the form of recommendations and suggestions.

**Transit** – By law, 1 percent of urbanized funds / formula funds for transit are to be used for safety and security. More funding has been assigned over the past decade. The focus has been on intercity bus systems.

Activities have focused on protecting the driver; monitoring and communicating with over-the-road buses; implementing and operating passenger and baggage screening programs; assessing critical security needs and vulnerabilities; and training transportation personnel to recognize and respond to criminal attacks and terrorist threats, as well as in evacuation procedures. Because the security threat to bus operations is not limited to intercity services, all public transportation companies are required to have security plans. Josephine Community Transit with assistance from MRMPO, will prepare a security plan for its facilities and activities.

Emergency Planning - Another aspect of providing for secure transportation has to do with the subject of "emergency planning." While transportation security is directly related to preventing attacks that are intended to harm people and damage facilities, harm modes of travel, and harm important transportation infrastructure, emergency planning is intended to respond to unforeseen natural events and disasters. A security incident is one that directly pertains to acts of terror resulting in regional, local, or specific location attacks on people, sites, facilities, or transportation infrastructure; whereas emergency response planning efforts address preparedness and response and recovery to natural disasters such as earthquakes, floods, hurricanes, violent weather, fires, and similar incidents. There are several agencies that coordinate on security and safety matters for the purpose of homeland security. The term "homeland security" refers to domestic governmental actions designed to prevent, detect, respond to, and recover from acts of terrorism, and also respond to natural disasters. Homeland security represents a concerted, national effort to protect the homeland by all levels of government at the Federal, State, and local levels, for the sole purpose of protecting the United States from internal and external hazards.

## 4. MRMPO Planning

Security planning efforts in the planning area are directed and managed by the emergency responders – police, fire, medical – representing all of the MRMPO jurisdictions.

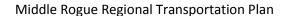
The MRMPO will coordinate with the agencies on producing and maintaining emergency response plans. In areas involving transportation, public works staffs collaborate and assist the responders in both planning and incident response.

The RTP's principal role is in identifying projects that assist responder efforts, most specifically in the area of Intelligent Transportation System (ITS) planning. The MRMPO will be developing an ITS plan in consultation with emergency responder representatives. As such, the MRMPO will provide a forum for agencies and the public to examine issues and identify needs and solutions.

Future contributions of the MRMPO are likely to focus in two areas: prevention and mitigation. Prevention planning can include: funding new strategies/technologies/projects that can help prevent events; providing a forum for security/safety agencies to coordinate surveillance and prevention strategies; finding funds for security-enhancing systems; continuing to coordinate with security officials in development of prevention strategies.

Other activities for the MRMPO could include:

- Using published sources, create annual tables of transportation security incident data by mode.
- Analyze the available databases for policy and program directions and review conclusions with appropriate lead agencies.
- Regularly review with the Technical Advisory Committee the MTIP scoring matrix and other specific funding program scoring matrices to ensure that security projects receive appropriate weighting and priority in the MTIP.
- Regularly review the Tier 1 and Tier 2 project development process for the Regional Transportation Plan (RTP) to ensure that security receives adequate priority in the development of the long range project list.



# F. Transportation Options

#### 1. Introduction

The MRMPO is starting a Transportation Options (TO) program with assistance from the Rogue Valley Transportation District (RVTD). The goal is to reduce Single-Occupant-Vehicle (SOV) trips and vehicle miles traveled (VMT) by encouraging use of other modes. It seeks to achieve these changes through better non-SOV facilities and education to make the use of these modes more attractive than driving alone. TO therefore includes ride-sharing, trip reduction and also transit, cycling and walking. TO is important because of the lack of adequate funds and space to maintain and expand road infrastructure nationwide. The traffic capacity of existing roads is quickly filling up; the auto encourages sprawl that requires extra facilities and more VMT per household; the auto is the largest producer of harmful emissions; and the largest consumer of petroleum-based fuels. TO can benefit society at a very reasonable cost compared to the cost of continuing on an SOV-focused system.

State Requirements for TO measures are based in the Oregon Highway Plan's Goal 4: "To optimize the overall efficiency and utility of the state highway system through the use of alternative modes and travel demand strategies."

Urban areas with populations over 25,000 are required by the Oregon Transportation Planning Rule (TPR) to address Transportation Options in their Transportation System Plans (TSPs). For these reasons, TO strategies are integral to the transportation planning being pursued in the Middle Rogue's Regional Transportation Plan (RTP). It is among the policy strategies in RTP Goal 3, which calls for using a variety of strategies to reduce reliance on single-occupant vehicles.

# 2. TO's Purpose

The purpose of TO is to reduce the number of single-occupant vehicles using the road system while offering travel options. TO employs a variety of improvements – both structural changes such as parking areas for carpoolers, and bike lanes, as well as policy initiatives such as staggered work schedules – to increase the capacity of the transportation system without the expense and inconvenience of major highway expansion. If implemented on an area-wide basis and actively supported by agencies, businesses, and residents, TO strategies may be able to reduce or delay the need for street improvements, save travelers some money, reduce energy consumption and improve air quality.

These benefits become increasingly important as the region continues to develop, and both the land and the funding for roadway construction grow scarcer. The Federal Highway Administration (FHWA) predicts that strategies to manage demand will be more critical to transportation operations than strategies to increase capacity (supply) of facilities. The inability to easily and quickly add new infrastructure, coupled with the growth in passenger and freight travel, are forcing metropolitan areas to pay more attention to managing demands.

## 3. How TO Works

The current transportation system in much of the US is built around the automobile with wide streets, high speeds, sprawling development, and a lack of pedestrian, bicycling and transit-supporting infrastructure. TO seeks to revitalize urban centers and assist rural areas to become friendlier to the pedestrian and bicyclist, making the auto less attractive. TO often relies on both incentives, such as bus pass programs, and disincentives such as SOV parking surcharges. Efforts have been made to

encourage major trip generators such as universities and major employers to take the initiative in developing TO programs. Experience elsewhere, however, indicates that employers need encouragement and incentives to adopt TO measures affecting the work commute – a major target of TO programs.

Stakeholders in the transportation system may not see the true costs of an auto based society and observe many actions resulting in the majority of transportation funding being dedicated toward expanding and improving the road system.

The affected public needs to continue efforts to mobilize their public officials to provide adequate transportation facilities and services for pedestrians, cyclists and transit service. Stakeholders also need to become part of a critical mass to show that non-SOV modes have interest, feasibility and merit.

TO strategies are aimed at minimizing travel or encouraging travel by a mode other than a single-occupant automobile. A community or an employer could take a number of approaches to accomplish this. First, a community could attempt to decrease peak demand, either by shifting person-trips from the peak hour of demand, or by eliminating person-trips. (Person-trips represent the number of trips made by an individual, while vehicle trips account for multiple person trips depending upon the number of people traveling in the vehicle.) Second, for the person-trips that are necessary during the peak hours of demand, a community may encourage alternatives to single-occupant vehicles (SOVs).

There is a difference between TO outreach strategies for the employers and for the public. Employers can undertake a variety of marketing or promotional activities to support their employees not using a SOV, such as flyers, trip-reduction programs, incentives, and using the other modes themselves as a role model.

By contrast, not being organized around a workplace, the general population needs to be attracted into non-SOV travel with public outreach through special events such as Car Free Day. They can also take advantage of transportation-efficient mortgages, the real estate profit of having greenways nearby, and feeling secure about their kids walking to school on a sidewalk. Reaching this population relies on general marketing such as brochures, commercials, etc. and being available to be a personal consultant if needed.

Bicycling and walking are most applicable for short trips, while ridesharing and transit may be preferable for intermediate and long trips. Telework may be used as a trip alternative regardless of the distance. Finally, a community may reduce the demand on its surface transportation system by decreasing the distances traveled by vehicle trips. Some methods for reducing trip lengths include transit-oriented designs and compact, mixed-use developments. There is an important inter-relationship between the transportation options and land use.

The following are examples of policies and programs that can support TO.

#### **Alternative Work Arrangements**

Local governments and major employers (greater than 50 employees) encourage work arrangements providing an alternative to the 8-to-5 work schedule. These arrangements may include employee flextime programs, staggered work hours and compressed work weeks.

#### **Employee Flex-Time Programs**

One opportunity employers have to affect total trip demand is through influencing their own employees' peak versus off-peak travel behavior. A flexible schedule may allow employees to match their work

hours with transit schedules, make carpool arrangements, or merely avoid peak congestion times. Active promotion of alternative schedules might slightly decrease total peak hour traffic. Flextime is most useful in offices, particularly for administrative and information workers. It may not be as applicable for non-office employers since their employees often have to work hours that are not during the peak hour of traffic demand anyway (e.g., retail employers), or because their work requires continuous communication between workers. In addition, flextime may be difficult for small employers to implement.

#### **Staggered Work Hours**

Staggered work hours is a policy of established starting and finishing times for different groups of employees. Unlike flextime, the employer, not the employee, determines the staggered work hours. Like flextime, this tool has greater applicability to employees of large offices, since many non-office employees already work staggered work hours, or work in an interdependent manner. Currently, some metropolitan area employers have staggered work hours due to the nature of their business. To have a significant impact on peak period traffic, however, a change in work hours would need to be much more widespread than it is today.

Government agencies could take a lead by establishing a standard work schedule that differs from the typical 8 a.m.-5 p.m. schedule. For example, employees can be encouraged to work a 7-to-4 or 9-to-6 day work schedule. This is often done for the street and parks crews in public works situations because of summer hours and weather conditions. It might also be established for other employees although some agencies and local governments have encountered opposition from employee groups claiming they should have additional compensation for unusual work hours. Staggered work hours have to be considered in light of the need to have service desk hours that meet the needs of residents, but could actually increase the opportunities for resident contact.

#### **Compressed Work Week**

Compressed workweeks involve employees working fewer days and more hours per day. One common form of this policy is the 4-day/40-hour week where the employee works four 10-hour days. A second common form is the 9-day/80 hour schedule, in which the employee works 9 days and 80 hours over a two-week period. With the 4/40 schedule, the employee gets one business day off each week; with the 9/80 schedule, the employee gets one business day off each two weeks.

Because of the extended hours, both policies usually shift at least one leg of a work trip per working day (either the arriving or departing leg) out of the peak hours. The 4/40 policy additionally eliminates an entire work trip every five business days (1/5 of the work trips). The 9/80 policy eliminates an entire work trip every 10 business days (1/10 of the work trips). One of the problems with a compressed work schedule is the potential for increases in non-work trips during the "off day." Increases in non-work travel may offset reductions in work related driving. Such trips, however, are often taken during non-peak periods and can be expected to provide benefits by reducing peak hour congestion and by improving air quality.

#### **Telecommuting**

Telecommuting is another way employers can reduce total trip demand. Telecommuting or telework is work done away from the worksite with the assistance of telecommunications technologies, serving to reduce trips to and from the worksite. Phones, pagers, faxes, emails, computers, and the Internet all are telework tools. Telecommuting for one or two days per week could save significant trip miles and still allow the benefits of working at the central work site. Telecommuting arrangements also may involve

more than one employee, e.g., when an employer provides a satellite work center connected to the principal work center. Another telecommuting alternative is a neighborhood work center operated by more than one employer, or by an agency. Recent advances in communications technology should greatly enhance telecommuting options.

## Ridesharing

Ridesharing includes two principal categories: carpooling and vanpooling. Carpooling uses an employee's private vehicle to carry other people to work or other destination, either by using one car and sharing expenses, or by rotating driving responsibilities and vehicles. Vanpooling involves the use of a passenger van consistently driven by one or more of the participating employees, with the costs partially paid by the other riders through monthly fares. A common feature of vanpooling is that the van is often owned by the employer, a public agency (such as a transit district), or a private, non-profit corporation set up for that purpose. Otherwise a lease agreement can be set up.

Ridesharing can be greatly influenced by special treatment at the work place. Participation can be increased by employer actions that make ridesharing more convenient, such as providing guaranteed ride home services, preferential car/vanpool parking, and area-wide and employer-based commuter matching services.

#### **Guaranteed Ride Home (GRH)**

A guaranteed ride home often makes ridesharing more attractive. Surveys have shown that many employees drive to work because they feel they need their automobile during the day or because they may work late. In some cases, they need their automobile for work trips or errands or want it available for emergencies. Therefore, provision of daytime and emergency transportation, by allowing use of a company vehicle or employer-sponsored free taxi, can encourage ridesharing.

#### **Preferential Parking**

Preferential carpool and vanpool parking is another simple, inexpensive way for an employer to encourage employees to rideshare by increasing the ease of access to the workplace. Ideally preferential carpool and vanpool parking spaces are provided close to the building entrance to provide convenient access to the building, particularly during inclement weather conditions. Adequate enforcement strategies need to be in place so that the spaces are not filled with SOV.

#### **Ride-matching**

Commuter matching services, whether area-wide or employer-based, help commuters find others with similar locations and schedules. An employer-based matching service offers the advantage of a shared destination, but presents the disadvantage of limiting the pool of potential riders. A carpool matching service can be one-time or continuous. For the study area, the Rogue Valley Transportation District serves as the carpooling agency and performs a variety of services to support and encourage the use of carpools, including matching of potential riders through Oregon's Drive Less Connect program (www.drivelessconnect.com).

## **Support for TO**

Oregon State, County and City policies and goals include provisions to embrace TO measures. Health officials, real estate professionals, insurance companies, credit agencies, environmental stewards, people under the age of 16, people with disabilities, low-income populations can all benefit from TO measures.

#### **Current TO Activities**

Some of the current TO activities that are available to the MRMPO member jurisdictions offered by RVTD in conjunction with Josephine Community Transit (JCT) include:

- Alternative Transportation education programs that reach the public;
- Public outreach activities to promote TO and non-SOV transportation modes;
- Free assistance through the Drive Less Connect program with carpools, vanpools, telework, and trip-reduction incentives;
- Free employer trip-reduction analysis upon request;
- On site transportation fairs for employers upon request;
- Distribution of free materials in the community such as pedestrian and cycling reflectors;
- Trip Reduction Incentive Programs- Through the Drive Less Connect program by creating and assisting with building and maintaining a Trip Reduction program that tracks employees' trips and rewards those who use non-SOV modes;
- Coordination of events to raise awareness of efficient transportation such as the Drive Less Challenge; and
- Marketing of TO through general advertising in various media.

#### **Future TO Activities**

The following list of TO activities will be integrated with the current TO activities listed above as more resources become available:

- Government outreach to educate officials about TO measures including attending meetings to
  promote the use of TO measures, and reviewing planning documents and site design for TOsupportive policies and infrastructure;
- Supporting parking construction mitigation- reducing the need for parking expansion with TO measures;
- Bicycle parking review and site design;
- Individualized TO marketing programs;
- Marketing of TO through general advertising in various media; and
- Business commute challenge.

## 4. Educating the Public about TO

Education and marketing are important parts of any TO program. It is possible for education by itself to be an incentive or disincentive that causes positive transportation behavior changes. Education and marketing complement any incentive/disincentive programs in place by increasing awareness and understanding of those programs. Education can be hands-on such as supporting a bus/bike-buddy program or it can be through traditional media such as newspaper, radio and TV advertisement, flyers and brochures, transportation exhibits, attending public meetings and giving testimony to public officials. Education that would promote using alternative modes of transportation would consist of highlighting the health and economic benefits, the environmental benefits as well as the facilities that a person can use. Marketing that would make driving a car less attractive could show the true cost of owning a car, the environmental impact, how it increases sprawl and dependence on foreign oil, to name a few. Although education and marketing are basic building blocks to a successful program they can only supply so much initiative for using alternative transportation. An example would be that many

people know what times to catch a bus and where the bus stop is from successful education and marketing but they cannot use it because their work schedule runs after service hours, or possibly there is not connected sidewalk access from their work to the bus stop and they feel unsafe.

## 5. Facility and Service Requirements

TO addresses travel behavior – the choices people make – and seeks to establish conditions under which people will change a long-established habit of driving themselves to destinations. Providing the right kinds of facilities and services are crucial to the success of many of the policy changes and programs described in the preceding section. Several of those strategies are closely tied to land use planning and the provision of adequate pedestrian/bicycle facilities and transit services, and modifying parking requirements. Another example is that TO could include constructing of High Occupancy Vehicle (HOV) or "diamond" lanes or an exclusive busway.

Specific actions related to parking are included in the Parking section of Chapter 5. Strategies aimed at improving pedestrian and bicycle facilities are discussed separately in the Bicycle and Pedestrian sections of Chapter 5. Transit service is discussed in the Transit section of Chapter 5. One key to the success of several TO strategies is establishment of park-and-ride facilities. These facilities increase efficiency of the transportation system, reduce energy consumption and provide options to the single-occupant vehicle trip. Park-and-ride facilities increase the effectiveness of transit service by expanding the area from which a transit draws riders. Patrons living beyond walking distance of an established transit stop can drive or bike to the park-and-ride and use transit or meet carpool partners, instead of driving alone or cycling long distances to their destination. Having free easy-to-access, secure and safe, easy to understand layouts, and direct pedestrian and bicyclist connections make the use of park-and-ride lots desirable.

Park-and-rides are frequently located near freeway interchanges or at transit stations and may be either shared-use, such as at a church or Transit Oriented Development (TOD) center, or exclusive-use. Shared-use facilities are generally designated and maintained through agreements reached between the local transit operator and nearby businesses, churches, or other entities.

Public opinion also has indicated that SOV use continues to be the desirable option at least in part because of the relative lack of serious highway congestion and safety problems in the region. In short, driving isn't difficult enough to force people to look for alternatives. While that attitude speaks well of our roads, it indicates that success with TO measures will be difficult. A challenge for the region in the short-term will be to set the conditions in place now to support greater transit use in the future – when more drivers will be looking for easier traveling alternatives. Those conditions include reserving space for High-Occupancy Vehicle (HOV), Bus Rapid Transit (BRT) or carpool lanes, and park-and-ride areas, as well as securing funds to expand transit service for those who need it.

#### 6. Future Outlook

TO relies on efficient land use planning, education, and making the use of walking, cycling, carpooling and transit attractive. The 25-year outlook for TO should focus on how the cities in the MRMPO can begin having incentives for developers to make compact development accessible for pedestrians and bicyclists, and on how education can promote the use of these facilities. By engaging in these activities driving a car will become less and less attractive as an option. Transit is only one component of TO; pedestrians and cyclists need to be part of the program also.

Home-to-work and return trips comprise about one-fifth of total daily trips, and about half of the peak period traffic. Although all other types of trips are potential targets for TO alternatives, the effect is likely to be considerably less because the trips are not as regularly scheduled (e.g., shopping or business trips), often already have a higher vehicle occupancy (e.g., school trips), and sometimes involve the transfer of goods (e.g., shopping trips). Therefore, TO strategies recommended for the metropolitan area focus primarily on home-to-work and return trips. Strategies include establishing alternative work arrangements, promoting telecommuting and ridesharing, and, possibly, adopting a trip reduction ordinance.

## 7. Policy Issues and Actions

There are several actions that can be taken to further the aims of TO. They include:

- Identifying, encouraging and assisting role models who use alternative transportation. This can be done through awards, incentives and events.
- Encouraging developers to build high-density, multi-use buildings.
- Adopting maximum parking space requirements and an option to decrease parking further with the use of TO measures such as having attractive bicycle and pedestrian facilities, and carpool spaces within ¼ mile of transit service.
- Partnering with city government to encourage employers with more than 50 employees to adopt TO strategies.
- Prioritizing all city and county TSP bicycle and pedestrian construction projects to be completed in the earlier phases of this Plan.
- Encouraging developments with a large footprint to have a bicycle and pedestrian circulation plan.
- Securing funding for street aesthetics such as street furniture, landscaping, lighting, and creating dispersed tiny public places.
- Supporting the use of transit among major employers by encouraging the purchase of individual
  or subsidized group transit passes, having a bus shelter added nearby or other actions to reduce
  commuting trips; and
- Engaging in public, government and employer outreach to raise awareness about the use of TO strategies, including actively marketing to groups that have the greatest potential for reducing SOV trips