



## Plan Priorities and Framework

A wide range of transportation improvements and strategies have been identified by WSDOT, local agencies, Yakima Transit, People for People, and others in the region. As noted above, TRANS-Action and DRYVE have assembled lists of regional transportation improvements for the upper and lower valleys. When taken together with WSDOT plans and projects, these programs and improvements create a comprehensive, multimodal transportation system to serve the region for 20 or more years.

However, as discussed in Section 8, the total costs of these improvements and programs far outstrip the likely available future funding. Because not all projects and programs can be funded over the next 20 years, the region established priorities for its transportation improvements. The priorities were used in the technical evaluation to establish a framework for the M/RTP. The framework essentially identifies the core transportation needs which other regional improvements will tie into. The framework was defined to help guide the development of a financially-constrained M/RTP; however, the framework for the M/RTP was not constrained by available funding.

## Regional Priorities

The M/RTP established five broad priorities for guiding the development of the Yakima Valley regional transportation system. The M/RTP priorities are based on input from the public workshops, WSDOT, local agencies, and existing plans. The region’s priorities blend the priorities of the Washington Transportation Plan 2007-2026 (WTP), and the Transportation Elements of local agency Comprehensive Plans. The priorities

will be used to help direct available funding, including grant monies, toward specific projects and programs. The regional priorities are consistent with the WTP. The five highest priorities for the Yakima Valley M/RTP are:

### Preservation

Maintaining and upgrading existing transportation facilities is critical to ensuring the usefulness of prior transportation investments and reducing future deficiencies.

### Safety

Constructing transportation safety improvements to reduce fatalities and injuries. Reducing safety problems also improves traffic operations and reduces congestion caused by collisions.

### Economic Development

Investing in the transportation system to support the economic growth of the region, including freight mobility for agricultural, manufacturing, and industrial sectors, and improved access and circulation serving retail, service, and tourist sectors.

### Congestion Relief

Resolving congestion issues along regional corridors and access to the corridors increases mobility for a range of travel modes, reduces air quality impacts, and reduces delays.

### Transit

Expanding transit service beyond the city of Yakima to meet the travel demands of the growing region.

### The Five Highest Priorities for the Yakima Valley M/RTP are:

- *Preservation*
- *Safety*
- *Economic Development*
- *Congestion Relief*
- *Transit*



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While these are the five highest priorities, the M/RTP also considers a range of other factors in the selection of transportation improvement projects and programs. These factors include:

- Regional connectivity
- Costs
- Funding
- Non-motorized transportation
- Environmental impacts and mitigation
- Land use plans
- Security and emergency response needs

These factors can greatly influence the benefits of a project or program to the region. The region will strive to ensure that transportation projects and programs bring the communities the best value for the least cost, consistent with least-cost planning practices.

### Framework for the Metropolitan/ Regional Transportation Plan

A framework for the M/RTP was prepared based on the regional priorities. The framework establishes the key improvement projects and programs for the region. Other regional projects and programs were then added to the framework to complete the financially constrained M/RTP.

The framework for the M/RTP was prepared through evaluation of alternative strategies, which are described below. An evaluation of the alternative strategies was used to identify the most cost effective improvements to address existing and future transportation demands and deficiencies for the region. The major

improvements and programs from each strategy that best achieved the priorities were combined into a recommended regional strategy. Based on review and input from the YVCOG member agencies, the framework for the M/RTP was established. The framework was then used as the basis for identifying other high priority transportation strategies for the region and subareas for the next 20 years. The other projects build off of and complement the overall framework for the M/RTP.

### Overview of Alternatives Evaluation

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Based on the regional priorities, a range of potential transportation system strategies were defined for evaluation. Three strategies were defined, each combining key WSDOT and local agency improvement projects based on a specific focus. All of the strategies assumed that projects and programs already underway will be completed by 2027. System maintenance also was included with each scenario. This was defined as the “Baseline” scenario. The three strategies are summarized in Table 1.

The three strategies were defined to intentionally address existing and future transportation issues with different types of improvement projects and programs. The objective was to see if one type of strategy will better address specific types of transportation issues in the region. For example, the “Focus on Efficiency” strategy was useful in identifying which corridors could be best addressed with intersection and operational solutions, which tend to be less costly. The “Focus on Key Corridors” strategy was defined to determine whether additional capacity along key routes will shift or divert traffic away from existing corridors with congestion or safety problems. The “Focus on Mobility, Transit, and Other Modes” strategy was defined



to better understand how travel demands could be met using alternatives to the automobile. It also addressed the needs for special needs populations that do not drive.

The intent of the evaluation of these strategies was to identify the solutions that will help the region best meet its identified transportation priorities. Within the metropolitan area, the YVCOG MPO travel forecasting model was used to assist in the evaluation of the Baseline scenario and the Efficiency and Key Corridors strategies (see Appendix E). The model also provides data for 2006 conditions, which was used for calibration. Evaluation of the Other Travel Modes strategy was conducted without use of the MPO model, because the model is not set up to directly evaluate changes in travel modes.

The evaluation of the Efficiency and Key Corridors strategies was based on 2027 land use forecasts and resulting travel demands. The travel demand model was used to forecast levels of congestion on the transportation system in 2027. The Baseline scenario established the forecast benchmark for the metropolitan area. The lane miles of highway and arterial links were evaluated as either approaching or exceeding their planning level capacity. In addition, the number of intersections forecast to operate with some level of significant congestion was identified. Based on WSDOT and local standards, the goal was to provide an evaluation of level of service (LOS) D or better.

The model was used to evaluate the ability of the Efficiency and Key Corridor strategies to resolve the congestion identified for the 2027 Baseline. At this regional level, the forecasting process primarily provides for a relative comparison of the alternatives. Transportation Elements of local agency Comprehensive Plans

provide more detail at individual locations compared to the regional analyses.

The charts on the following page show the relative changes in some key transportation performance measures for the metropolitan area. Under any of the alternatives, the overall mileage of the highway and arterial system is projected to increase by approximately 6 percent or less during the next 20 years under any of the strategies. Under the Key Corridor strategy, which was defined to add capacity through widening or constructing new roadways, the highway/arterial system in

*Table 1 - Alternatives Evaluation Strategies*

Strategy	Focus of Strategy
<p><b>A. Focus on Efficiency</b></p>	<ul style="list-style-type: none"> <li>• Address existing safety issues</li> <li>• Resolve existing and forecast intersection congestion and operational issues</li> <li>• Improve spot freight mobility problems</li> <li>• Support transportation demand management</li> </ul>
<p><b>B. Focus on Mobility, Transit, Other Modes</b></p>	<ul style="list-style-type: none"> <li>• Increase transit service frequency in metropolitan area</li> <li>• Expand transit service hours</li> <li>• Expand transit service coverage</li> <li>• Develop new and improve existing bicycle and pedestrian routes throughout region</li> <li>• Enhance transfers between travel modes</li> <li>• Increase efficiency of intermodal freight transfers</li> </ul>
<p><b>C. Focus on Key Corridors</b></p>	<ul style="list-style-type: none"> <li>• Widen existing highways and arterials to add capacity</li> <li>• Construct new corridors to support regional traffic patterns</li> <li>• Enhance transit service along key corridors</li> <li>• Develop and expand pedestrian and bicycle facilities in key travel corridors</li> </ul>



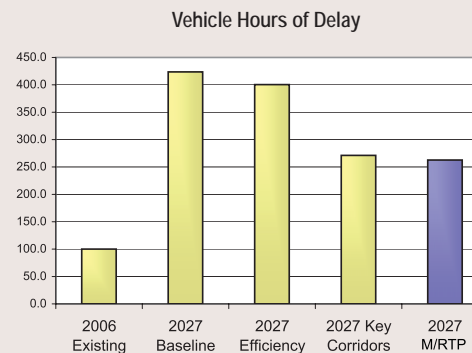
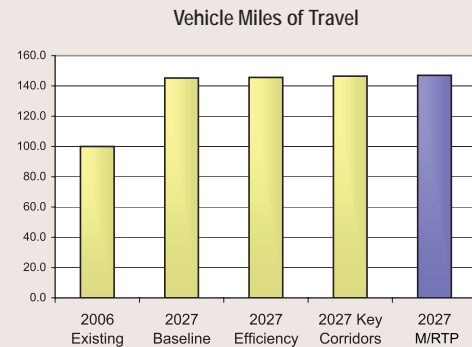
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### Comparison of 2006 and 2027 MPO Travel Demand Measures

*The overall mileage of the highway and arterial system is projected to increase by approximately 6 percent or less during the next 20 years under any of the strategies.*

*Total travel demands (as measured in vehicle-miles traveled) in the metropolitan area are projected to increase by 45 to 47 percent over 2006 levels under any of the 2027 scenarios.*

*Between 2006 and 2027, the overall level of delays due to congestion is projected to more than quadruple if only the 2027 Baseline improvements are completed.*



the metropolitan area will increase by only 6 percent over 2006 levels. Under the Baseline scenario and Efficiency strategy, the lane miles of the roadway system will increase by 1.0 to 2.5 percent over existing conditions.

Total travel demands (as measured in vehicle-miles traveled) in the metropolitan area are projected to increase by 45 to 47 percent over 2006 levels under any of the 2027 scenarios. This compares with the forecast growth in households (34 percent) and employment (32 percent), in the communities covered by the MPO travel demand model for the metropolitan planning area. The vehicle miles travel within the metropolitan planning area is forecast to grow at a faster rate than the growth in households or employment. This results from more people and cars per household, which in turn results in more trips within the area. The Yakima metropolitan area also is continuing to serve many of the regional needs for residents outside of the metropolitan area. This results in more travel between the metropolitan area and the smaller outlying communities within Yakima County or adjacent counties. The increases in through traffic on I-82 also results in the vehicle miles travel increasing at a faster rate than households and jobs in the MPO planning area.

The total vehicle-miles traveled in the metropolitan area do not change significantly with the addition of the widening and new corridor improvements. This means that the widening projects and new corridors serve the desired travel patterns, instead of having traffic divert to avoid congestion in other corridors. Therefore, constructing some of these projects will provide efficient solutions to regional travel needs.



The biggest differences are found in the overall level of congestion in the system. Between 2006 and 2027, the overall level of delays due to congestion is projected to more than quadruple with only the 2027 Baseline improvements. This is a direct result of the 45 percent increase in vehicle-miles traveled and only a 1 to 2 percent increase in the highway and arterial system lane miles in the metropolitan area. As the charts on the previous page illustrate, the Key Corridors strategy greatly reduces the overall delays from the 2027 Baseline scenario, while the Efficiency strategy only produces a minor reduction in system delays along the roadway links. The Efficiency strategy did, however, reduce delays at key intersections.

Outside of the metropolitan area, significant regional projects were qualitatively reviewed based on the priorities to establish the M/RTP framework. These include improvements that address preservation, safety, and economic growth. Projects that improved access to the regional state highway system or improved flow of freight traffic in communities were identified as part of the framework for the plan.

### Plan Framework

The framework for the M/RTP was developed by combining the most effective elements of the three independent strategies with the “committed” improvements assumed in the 2027 Baseline scenario. The M/RTP framework is comprised of the following elements and strategies.

#### *Baseline Improvements*

Already funded or partially funded significant regional improvement projects and programs form the baseline for the M/RTP. Also included are “committed” improvements that have been previously slated for funding in the future through state, regional, or local programs. The rest of the M/RTP will build on this starting point.

#### *Efficiency Strategies*

Improvements to existing corridors that address existing and forecast safety and operations are high priorities in the plan. Also included are projects that widen and reconstruct existing arterials to current standards to better handle forecast traffic volumes and improve non-motorized facilities. These improvements will be both in and outside of the Yakima metropolitan area. They focus on cost-effectively reducing safety and operational issues along existing arterials. They also support a range of travel modes, because automobiles, trucks, buses, pedestrians, and bicyclists can use these key regional intersections or roadway links. Transportation systems management, including signal timing upgrades, and access management strategies will also be incorporated in the existing corridors.

#### *Key Corridors*

In addition to the Baseline improvements and Efficiency strategies, the M/RTP framework identifies the need for the creation of several new key corridors or widening of existing corridors to address future transportation demands of the region. These include:

- Future widening of I-82 between US 12 and South Union Gap.
- Construction of the South Union Gap Beltway on the west side of I-82.
- Development of a new east-west arterial connecting under I-82 north of Yakima Avenue and south of US 12. This improvement could also have a half-interchange with I-82 providing access to/from the north.
- Upgrades to key freight corridors outside of the metropolitan area.
- Roadway upgrades to provide an improved north-south arterial route serving the west side of the metropolitan area,



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connecting between US 12 to Ahtantum Road.

- Preservation of right-of-way for other potential westside corridor connections.
- Improvements to enhance connectivity to regional highways, both in and outside of the metropolitan area.

### ***Transit and Transportation Demand Management***

The M/RTP framework includes strategies for expanding transit to meet the future travel demands throughout the Yakima Valley region. Strategies to reduce peak period travel demands also are included. The transit and transportation demand management (TDM) strategies include:

- Improving transportation services for people with special needs.
- Expanding fixed-route service coverage in the metropolitan area.
- Extending service hours to cover nighttime and weekend needs.
- Targeting service to larger employers or groups of employers.
- Enhancing service to regional destinations such as colleges, medical facilities, and regional commercial areas.

### ***Non-motorized Transportation***

Many of the improvements in the Baseline scenario, Efficiency strategy, and Key Corridors will also include enhancements for pedestrians and bicyclists. The framework for the M/RTP supports the completion of high-priority missing links to the non-motorized system, where roadway or other improvements are not identified as high priorities for the region. This will support growth in non-motorized travel demands, will improve safety, and will enhance access to transit.

### ***Other Projects***

The M/RTP provides a transition between the local agency transportation plans and the Washington Transportation Plan (WTP). The M/RTP is a financially-constrained plan which must set priorities, because available funding will not cover all of the identified needs during the 20-year time horizon. The M/RTP acknowledges that there are a range of needed improvements (both regional and local) that are desirable to meet the overall, transportation needs of the region. These projects are referenced in the M/RTP to help ensure that the total system needs are acknowledged and to support increases in future funding to help implement these projects.