POWELL BOULEVARD/FOSTER ROAD CORRIDOR TRANSPORTATION PLAN – PHASE I

Draft Selection and Refinement of Multi-modal Improvements Report

Prepared for:

Oregon Department of Transportation

Prepared by:

David Evans and Associates, Inc.
2100 SW River Parkway
Portland, Oregon 97201

and

Metro
600 NE Grand
Portland Oregon 97232

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INTRODUCTION:

This memorandum presents recommendations for the Powell Boulevard/Foster Road Corridor Transportation Plan – Phase I based on results of a process that evaluated, initial multi-modal (transit, roadway, bicycle and pedestrian) improvements.

The Powell/Foster Corridor represents both a key transportation challenge and an opportunity to meet 2040 regional land use goals. Metro's Regional Transportation Plan (RTP) identifies the Powell/Foster as a top priority among corridor requiring refinement plans. Despite policy changes to level-of-service standards that permit greater levels of congestion, significant multi-modal improvements will be needed in order to continue to serve transportation needs of the communities and industrial areas in southeast Portland and Gresham. The corridor is also critical to providing access to the planned growth areas in Damascus, Springwater and Pleasant Valley that have recently been added to the Urban Growth Boundary.

In the fall of 2002, Metro commenced a Phase I Corridor Transportation Plan. The purpose of the Phase I corridor plan was to define and preliminarily evaluate an initial range of multi-modal alternatives that will accommodate the 2020 corridor travel demand in a way that supports the Metro 2040 Growth Concept. The Cities of Portland and Gresham, and Multnomah and Clackamas counties, ODOT and TriMet partnered with Metro in this planning effort. The planning effort was funded by a combination of Metro and Transportation Growth Management (TGM) grant funds.

Metro, ODOT, TriMet and the local jurisdictions formed a Technical Advisory Committee (TAC) that met on a monthly basis for nearly a year. At the TAC meetings ODOT, TriMet and the local jurisdictions provided oversight and technical expertise for defining the objectives of the study, developing a set of multi-modal alternatives to be studied, and the evaluation criteria to be used. The TAC also provided oversight and comment on the analysis of both the travel performance measures and the engineering and environmental impacts. The TAC has provided comments on the study findings and served as a collaborative body for developing the recommendations. The recommendations presented in this report will be sent to TPAC and JPACT for final review and approval.

Some of the key objectives used to develop and evaluate alternatives were:

- Cost-effectiveness;
- Impacts to neighborhoods and the environment;
- Preservation of the through movement function of the alternatives;
- Safety; and
- Opportunities for access management

The details of the Phase I corridor plan goals/criteria, transportation needs, roadway and transit alternatives, evaluation findings and preliminary costs are available in the **Powell/Foster Corridor Transportation Plan: Initial Alternatives Evaluation Report** (September 2, 2003).

This Phase I recommendation is organized by transportation mode and facility segment or route. Maps are provided for segments where various roadway capacity improvements were considered. For each segment or service, a brief summary of conclusions from the Phase I evaluation of

alternatives is presented. More complete conclusions and rationale for the recommendations are contained in the Selection and Refinement of Multi-modal Improvements Report (September 16, 2003). The recommendations section describes projects or studies to address the transportation needs in the corridor. The next steps section outlines specific actions and responsibilities for implementing the recommendations.

Projects have been prioritized into three categories based on needs: short-term (within 0 to 5 years); intermediate term (5 to 10 years); and long-term (10+ years). The actual scheduling for implementation will depend on individual jurisdictional decisions and the availability of funding.

Metro and DEA, with input from the Powell/Foster Technical Advisory Committee (TAC) and Project Management Group (PMG), conducted a preliminary evaluation of the initial range of multi-modal alternatives for primary roadway segments within the Powell/Foster Corridor. The evaluation of initial alternative sets was based on system-wide and corridor-level travel performance measures, as well as planning-level environmental and engineering measures. The transportation performance measures by individual roadway segments primarily relate to accessibility and mobility of both autos and transit. A separate evaluation of the need for stand alone pedestrian and bicycle facilities in the corridor was also conducted. The roadway alternatives evaluation, refinement and selection, focuses specifically on roadway segments where different conceptual design options were under consideration. The results of the evaluation are documented in the **Transportation Improvement Options: Initial Alternatives Evaluation Report** (September 2, 2003).

ALTERNATIVES SELECTION AND REFINEMENT RECOMMENDATIONS:

This section summarizes the Phase I Corridor Plan-recommended multi-modal alternatives for the Powell Boulevard/Foster Road Corridor. The recommendations are organized by travel mode (transit, roadway, bicycle and pedestrian) and by roadway segment. Each selected alternative is compared to 2020 Regional Transportation Plan (RTP), and grouped into one of two RTP-related categories:

1. **Implement or affirm the action identified in the RTP, and**
2. **Amend the designation or action identified in the RTP.**

In addition to the selected alternative and its relation to the RTP, recommendations for subsequent actions or "next steps" related to the selected alternative are identified. The next steps generally define the type of action and whether action is recommended to occur as part of the Powell Boulevard/Foster Road Phase II Corridor Plan process, or through another process.

TRANSIT RECOMMENDATIONS:

The transit recommendations and next steps are summarized below for the entire length of both Powell Boulevard and Foster Road, and for north-south bus service connecting the Columbia Corridor with Pleasant Valley, Damascus and Clackamas Regional Center and routes connecting Gresham with Pleasant Valley and Damascus. Two sets of transit options were evaluated; 1) a 2020 Base transit network that incorporates the 2020 Financially Constrained RTP transit network, and 2) a "Transit A" transit network that enhances transit service, especially north-south transit routes that run through the study area.

The 2020 Base transit network incorporates the 2020 Financially Constrained RTP transit network. This represents a substantial increase in both transit service and route coverage compared to the existing system in portions of the Powell/Foster Corridor. Thus, many of the ridership gains that could be expected from providing improved transit service to the Damascus/Pleasant Valley/Happy Valley area are already captured within the 2020 Base alternative.

Powell Boulevard (Ross Island Bridge to Highway 26)

Summary Conclusion: Powell Boulevard is an important transit corridor that is currently designated for Regional Bus service in the RTP. Because Division is designated for frequent bus service and the Gresham Regional Center is served by MAX, Powell Rapid Bus did not significantly increase ridership in the corridor.

Recommendation: Gresham is incorporating many transit elements and intersection design concepts in the Powell Boulevard Schematic Design Project. These will include many of the following: extended right turn pockets (allowing for their use as a transit queue-bypass lane), far-side bus stop accommodations and traffic signal improvements (including transit priority). The same types of improvements should be developed in City of Portland as part of the project development study for Powell Boulevard from I-205 to SE 174th Avenue. These types of improvements enhance transit operations and reliability and are consistent with the RTP designation of Powell Boulevard as a Regional Bus Route. The improvements also allow for a future reconfiguration of existing transit services that could include Rapid Bus, when warranted.

Bus service "streamlining" is anticipated to continue on portions of Powell Boulevard, which will improve ridership levels. Improvements will include transit queue-bypass lanes, far-side bus stops and traffic signal pre-emption.

Next Steps: The cities of Gresham and Portland should continue to seek transportation system management (TSM) funding for enhancements to transit operations and reliability.

Rationale for Recommendation:

The 2020 Base includes extensive bus service on Division Street and Powell Boulevard. Powell Rapid Bus does not increase overall transit ridership on those routes. In addition, Gresham is already well served by the MAX light rail transit service. Therefore the recommendation on Powell Boulevard would be Regional Bus with the City of Portland incorporating the same types of bus service improvements as Gresham as part of the project development study for Powell Boulevard from I-205 to SE 174th Avenue.

Foster Road (Ross Island Bridge to Damascus Town Center)

Summary Conclusion: Because it links three town centers and would serve a strong ridership base west of SE 122nd Avenue, the Foster Rapid Bus demonstrated good transit ridership gains and fulfills an important need in a growth area.

Recommendation: Affirm the RTP designation of Foster Road as Rapid Bus. The roadway design concept should incorporate extended right turn pockets with queue bypass signals, far-side bus stop accommodations and traffic signal improvements. Furthermore, design and implementation of the

Foster Rapid Bus should be timed to concur with residential and employment growth in Pleasant Valley and Damascus areas and in the context of TriMet's Transit Investment Plan covering all regional needs. TriMet will continue to incrementally improve service in the corridor as warranted by demand.

Next Steps: Metro and TriMet should reaffirm the RTP (Priority System) Project No. 1228. Overall capital improvements and implementation should take place in conjunction with growth in this ridership area.

Rationale for Recommendation:

The ridership forecast model in Phase I showed a significant increase in transit ridership with Rapid Bus service on Foster Road. A Rapid Bus concept represents a significant improvement in transit service levels to the currently undeveloped Pleasant Valley and Damascus areas. In addition, the Foster Rapid Bus would connect with other transit service in Lents (existing) Pleasant Valley (planned) and Damascus (planned), where multiple routes meet at a single point offering transfer opportunities.

The Foster Rapid Bus would significantly improve transit travel times between central Portland and the planned development areas in Pleasant Valley and Damascus. Because it links three town centers and would serve a strong ridership base west of SE 122nd Avenue, the Foster Rapid Bus should be included as an element in roadway improvements on Foster Road.

The Powell-Foster Rapid Bus concept that was analyzed for this study would improve transit travel times and frequencies in the corridor. This improvement would be most evident on Powell Boulevard west of 50th Avenue where frequent service would be provided by both routes.

North-South Bus Service

Summary Conclusion: Based on analysis of a network that enhanced north south routes, significant improvements to bus services connecting employment areas in the Columbia Corridor, Pleasant Valley and Damascus town Centers and Gresham and Clackamas Regional Centers are warranted.

Recommendation: Phase I recommends improvements to north-south bus service connecting the Columbia Corridor with Pleasant Valley, Damascus and Clackamas Regional Center and routes connecting Gresham with Pleasant Valley and Damascus. Several of these cross-town routes studied in Phase I performed well in the regional transportation model and would provide an important element in the overall transportation strategy serving these future growth areas.

Long-range transit plans for the Columbia Corridor, East Multnomah County, Gresham, Pleasant Valley and Damascus should recognize the importance of high quality north-south transit connections serving these communities. The optimal routes would be selected through community and TriMet processes that would take into account levels of development, key transfer points, roadway grades and other characteristics.

Next Steps: TriMet should incorporate potential north-south service in future updates to the Transit Investment Plan. Within that context, TriMet should work with the local jurisdictions to further design and develop expanded transit services between the Columbia Corridor, East Multnomah County, Gresham, Pleasant Valley and Damascus as population, employment and demand warrants.

Rationale for Recommendation:

Based on the preliminary results of north-south transit ridership that was obtained from an examination of the "Transit A" network that enhanced north-south transit routes, substantial improvements to north-south bus service connecting the Columbia Corridor with Pleasant Valley, Damascus and Clackamas Regional Center and routes connecting Gresham with Pleasant Valley and Damascus are warranted. However not enough analysis has been done to determine the most effective and needed routes, and optimal routes would need to be selected with community input and further study by TriMet.

ROADWAY RECOMMENDATIONS:

The roadway recommendations and next steps are summarized below for the six primary roadway segments and the I-205/Powell Boulevard Interchange, where more than one conceptual design option was explored under the Phase I corridor planning process. In addition, roadway recommendations and next steps for inner SE Portland and the area between Pleasant Valley and Damascus, where only one conceptual design was considered, are also summarized. These road segments consist of:

- **Powell Boulevard** (west of I-205),
- **I-205/Powell Boulevard Interchange,**
- **Powell Boulevard** (I-205 to SE 174th Avenue),
- **Powell Boulevard** (SE 174th Avenue to Burnside Street)
- **Foster Road** (Powell Boulevard to I-205)
- **Foster Road** (SE 122nd Avenue to Jenne Road),
- **Jenne Road/New SE 174th Avenue** (Powell Boulevard to Foster Road),
- **Highland Dr. and Pleasant View Dr./190th Avenue** (Powell Boulevard to Butler Road),
- **Butler Road/ Towle Avenue** (SE 190th Avenue to Powell Boulevard),
- **SE 242nd Avenue** (Palmquist Road to Hwy. 212), and
- **Other North/South Routes Between Pleasant Valley and Damascus.**

Powell Boulevard (Ross Island Bridge to I-205)

Summary Conclusion: Due to the built environment, excellent grid system of streets and numerous transit options, this portion of the corridor was not considered for roadway widening. However, the review of existing conditions and concerns raise through public outreach identified significant pedestrian, safety and urban design issues that need to be addressed in a more detailed study.

Recommendation: Develop and implement streetscape improvements to Powell Boulevard between the Ross Island Bridge and SE 50th Avenue. In the intermediate term, a streetscape study should consider enhancements to the aesthetic environment and evaluation of pedestrian safety. It should also address specific issues identified by community members such as pedestrian crossing improvements at Powell Park and Cleveland High School, Creston Park and Creston School, SE Milwaukie Avenue and SE 17th Avenue. Pedestrian crossing improvements could include signalized intersections and raised medians.

Next Steps: Amend the RTP to include a streetscape plan of Powell Boulevard in the intermediate term led by the City of Portland Office of Transportation (PDOT). The plan will identify specific intersection modifications, pedestrian and transit facilities and aesthetic improvements. ODOT, TriMet, neighborhood associations and Metro will assist in this planning effort.

I-205/Powell Boulevard Interchange

Summary Conclusion: The intersection of SE 92nd Avenue and Powell Boulevard is already congested during peak periods. Lack of full turn movements is anticipated to cause severe traffic queues (to Division, Holgate, 82nd Avenue and extending onto the freeway itself) by 2020.

Recommendation: In the short-term, design and construct improvements to allow full turn movements at the Powell Boulevard and I-205 interchange for construction in the short term. An I-205 ramp improvement study at Powell Boulevard and Foster Road is currently in the RTP.

Next Steps: Implement RTP (Priority System) Project No. 1164 to plan and design the interchange improvements. Amend the RTP to add a project for construction of the ramp improvements. Metro and ODOT should consider amending the RTP to advance the timing of both design and construction projects into the Financially Constrained System for completion in the short-term. ODOT should immediately lead a design study to evaluate modifications to the existing overpass with full access ramps to I-205. The study should also address impacts to the interchange influence area along Powell Boulevard, Division Street, and SE 92nd Avenue. PDOT, Multnomah County, TriMet and Metro should participate in this design effort.

Rationale for Recommendation:

Currently, Powell Boulevard narrows to one lane in each direction just east of I-205, and certain turns are prohibited at the interchange at I-205 and Powell. Traffic using the I-205 southbound off-ramp is not allowed to turn left onto Powell Boulevard (eastbound). Also, traffic traveling westbound on Powell Boulevard is not allowed to turn left onto the I-205 southbound on-ramp. These turn restrictions require motorists who are either exiting southbound I-205 at Powell Boulevard and attempting to travel eastbound on Powell, or who are trying to access I-205 southbound from westbound Powell to turn left (southbound) at the intersection of SE 92nd and Powell Boulevard.

In the future, the intersection of SE 92nd Avenue and Powell Boulevard would be severely congested if the I-205 and Powell interchange is not re-constructed to remove the current turn restrictions and allow all turning movements. By 2020, the congestion would result in southbound I-205 to westbound Powell traffic that backs up onto the freeway during peak periods. Failed operating conditions at this intersection would also cause southbound traffic on 92nd Avenue to back up to about Division Street, and northbound traffic on 92nd Avenue to back up to about Holgate Boulevard.

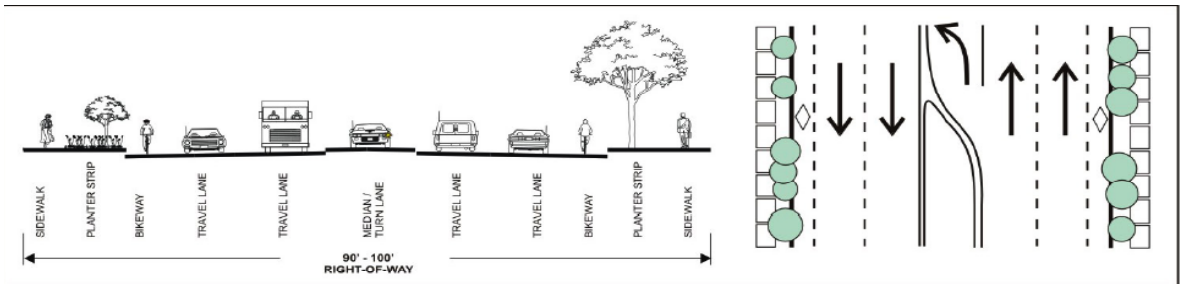
Traffic mitigation at SE 92nd and Powell would need to be extensive and was not considered a reasonable solution to the congestion problems. In order to best mitigate the impact, the intersection of SE 92nd and Powell would need to be expanded to accommodate an eight lane cross section for the Powell Boulevard approaches to the intersection, and six-lane cross sections for the 92nd Avenue approaches. The impacts to existing businesses of expanding the intersection would be dramatic and the intersection would still be operating nearly at capacity.

The study's public outreach effort to neighborhood groups, key stakeholders, and parents of school children that live in the area, found that a large majority of people in the area supported the idea of re-constructing the interchange and removing the current turn restrictions. Many respondents cited existing traffic problems at the interchange and considered the improvement of the I-205 and Powell Boulevard interchange as a top priority project.

Powell Boulevard (I-205 to SE 174th Avenue)

Five-lane option on Powell Boulevard:

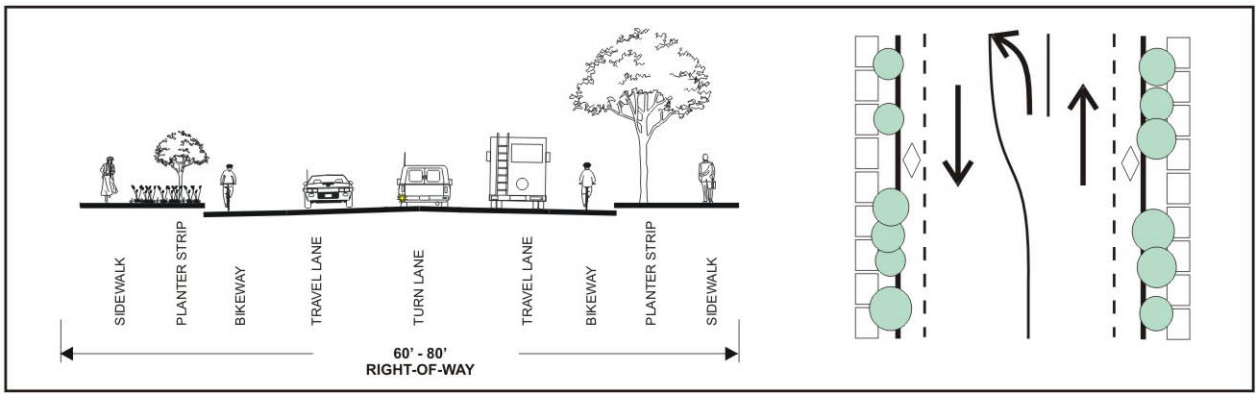
- Widen Powell Boulevard to four lanes with a median and turn pockets where needed, plus bike lanes and sidewalks
- Improve the I-205/Powell Boulevard interchange to accommodate all directional movements



Five-lane cross-section on Powell Boulevard

Three-lane option on Powell Boulevard (only in Alternative 3A):

- Widen Powell Boulevard to two lanes with a median and turn pockets where needed, plus bike lanes and sidewalks.
- Construct a new northbound access road between Foster Road and Powell Boulevard on the east side of I-205.
- Construct minor improvements (addition of sidewalks, landscaping and paved shoulders) to SE 103rd Avenue/104th Avenue, 111th Avenue/112th Avenue and 136th Avenue, and turn lanes where needed at intersections with these streets and with Holgate Boulevard and Harold Street.
- Add a westbound right turn lane at the southbound I-205 off-ramp approach to Division Street and add a southbound left turn lane at the westbound Division Street approach to SE 92nd Avenue.



Three-lane cross-section on Powell Boulevard

Summary Conclusion: The evaluation found that a three-lane option for Powell would exacerbate significant congestion problems on Powell and create major backups at intersections in this segment as well as west of I-205. It also spread traffic to neighborhood streets and created or worsened congestion problems on SE Holgate Avenue, SE 122nd, SE 136th, Division and Foster Road. Further, the overall costs of a three lane and a five-lane configuration on Powell were similar due to the need to provide extensive improvements on nearby streets to disperse traffic. Both options had substantial right of way effects. Finally, public outreach found significant support for widening this portion of Powell.

Recommendation: Four through lanes are needed on Powell Boulevard throughout this segment. In the short term, conduct a project development study to determine the right-of-way requirements and general dimensions needed to support four traffic lanes, plus turn lanes where needed, as well as bike lanes and sidewalks.

The project development study should examine detailed needs and develop schematic designs that support multi-modal transportation needs and planned land uses in this segment. It should include significant community input and address specific needs for turn lanes, lane widths, signals and other traffic control, bicycle facilities, pedestrian refuges, bus stops, stormwater management and access management.

The City of Portland and ODOT are responsible for jointly developing mechanisms for accommodating the right of way requirements for a five-lane cross-section, plus other modal improvement needs, consistent with applicable laws and regulations.

The project development study shall develop a phasing plan for construction of improvements. For the segment of Powell between I-205 and the intersection area of SE 122nd Avenue, any roadway construction project or frontage improvements shall be designed to accommodate the planned cross-section and multi-modal needs. For the segment from SE 122nd to 162nd Avenues, alternative interim improvement approaches may be considered, subject to further specific needs analysis and compatible with the long-term planned street improvements.

Next Steps: Affirm RTP Project 2028: Powell Boulevard Improvements, a modernization project to widen Powell Boulevard to five lanes from I-205 to Gresham including sidewalks and bike lanes. PDOT, Metro and ODOT should consider amending the RTP to move Project No. 2028 into the Financially Constrained System and to designate this project as having a short-term planning time frame. Based on costs and timing of needs, the study will develop a phased construction schedule. PDOT and ODOT should lead the project development study, with the assistance of TriMet and Metro, to determine the improvements. Prior to the study, PDOT and ODOT shall research mechanisms for accommodating right of way requirements.

Rationale for Recommendation:

A five-lane section on Powell Boulevard east of I-205, plus improvements to the I-205 interchange, would provide more acceptable levels of mobility and travel performance on Powell Boulevard compared to a three-lane option. In addition, access management improvements and more turn lane capacity on Powell from SE 162nd to SE 174th would also provide a more acceptable level of mobility and travel performance. In addition, the estimated costs and low impacts were similar under either the three lane or five lane option.

The 3-lane Powell option causes significant congestion problems and provides a much poorer level of mobility and travel performance on Powell Boulevard and SE 92nd Avenue. It also significantly increases congestion on Holgate Boulevard, parts of SE 122nd and SE 136th Avenue, and on Foster near 136th Avenue. It also has the potential to spread peak period traffic onto other local streets in the area.

The 3-lane Powell option would significantly increase congestion along Powell and cause unacceptable traffic operations at the intersections of Powell and SE 122nd, and SE 148th. In order to mitigate traffic impacts at these and other intersection along Powell, extended five-lane sections at the intersection approaches would need to be completed. The mitigation of a 3-lane Powell would likely have similar impacts to a 5-lane Powell with only short segments between intersections that would be 3-lane cross-sections.

The overall costs of the 3-lane Powell option were similar to a 5-lane option. While the costs of the 5-lane option are higher on Powell Boulevard, improvements to local streets (i.e. 103rd/104th, 111th/112th and 136th) and a collector distributor road along the east side of I-205 that was designed to handle anticipated traffic, bring the estimated costs of each option into a similar range. In addition, the right-of-way costs are substantial under either option.

Further, with a 3-lane Powell option, traffic mitigation projects and/or widening projects would need to be considered on Holgate Boulevard east of I-205, on SE 122nd south of Division Street, and at SE 136th and Holgate Boulevard. In addition, the extended five-lane sections at the intersection approaches along Powell Boulevard that would be needed under the 3-lane option, would add both capital cost and acquisition cost to the overall cost estimates.

The study's public outreach effort to neighborhood groups, key stakeholders, and parents of school children that live in the area, found a high level of support for widening Powell Boulevard east of I-205. Many of the people interviewed or that responded to a survey, cited existing traffic problems along Powell Boulevard east of I-205 during peak travel times, and they supported adding lanes to Powell Boulevard.

Regional policy considerations about the appropriateness of restricting traffic volumes on Powell Boulevard (a major arterial) and increasing traffic on other streets with lower functional classifications, also helped formulate the recommendation to conduct a project development study to widen Powell Boulevard to 4-lanes plus turn lanes where needed as well as bike lanes and sidewalks.

Powell Boulevard (SE 174th Avenue to Burnside Street)

Summary Conclusion: The City of Gresham recently completed a schematic design for this segment. The design balances mobility and land use goals and has general community support.

Recommendation: Implement the City of Gresham's schematic design for Powell Boulevard to prioritize standard street improvements and enhance neighborhood identity with additional transit and pedestrian amenities.

From the City of Gresham's westerly city limit near SE 174th Avenue to SW Duniway Avenue, the Powell Boulevard five-lane cross section would be retained. Mid-block pedestrian crossings will be added west of SE 182nd Avenue and at SW Duniway Avenue. An intersection improvement including a westbound right turn lane will be added at the intersection of SE 182nd Avenue and Powell Boulevard. Bus pullouts are on Powell are recommended for this intersection. This area is also deemed a focal point where gateway treatments will be considered.

From SW Duniway Avenue to NW Birdsdale Avenue, three lanes are proposed with a raised landscaped median where access allows. Driveway access at NW Bryn Mawr Place will be realigned to create a new unsignalized intersection, to improve pedestrian crossing opportunities, and consolidate and improve bus stops.

From NW Birdsdale Avenue to NW Eastman Parkway, an imbalanced four-lane cross section is proposed with two westbound travel lanes, a center turn lane and one eastbound travel lane. Intersection improvements are proposed at NW Birdsdale Avenue. SW Towle Avenue is recommended as a transit focal point.

East of NE Eastman Parkway to Burnside, Powell Boulevard is currently five lanes. The schematic design maintains the existing cross section with recommended enhancements to promote community identity. Street lighting, street trees, on-street parking, transit stop improvements and center medians are all proposed at different intervals in effort to acknowledge

Downtown Gresham, encourage future transit-oriented development, and provide safe transit and pedestrian access.

Next Steps: The City of Gresham has received Oregon Transportation Investment Act (OTIA) and local matching funding for this project. Over the next year, Gresham will complete an access management plan for the segment between Eastman and Hogan to extend the size and number of center medians, where possible, in order to provide a more pedestrian friendly environment in the downtown area. Final design will begin in 2004 and construction will be completed by 2008.

Foster Road (Powell Boulevard to I-205)

Summary Conclusion: The City of Portland has recently completed a streetscape plan for this area. The streetscape plan will help develop neighborhood identity, provide for better balance between modes and address safety issues.

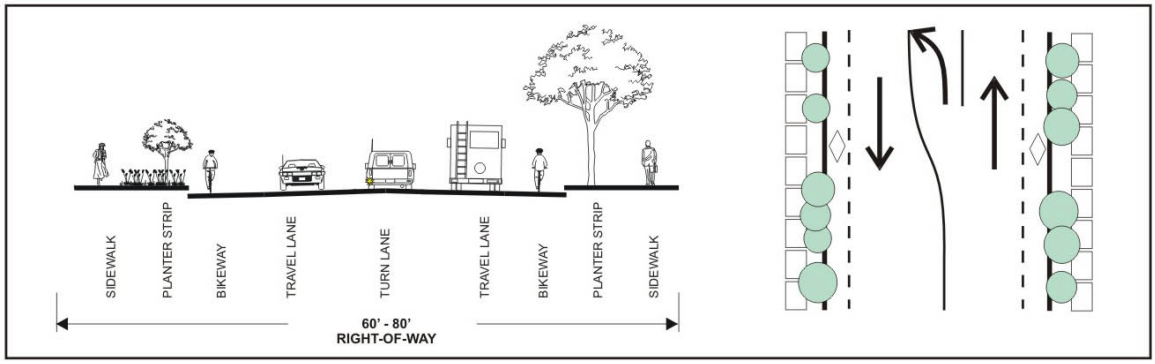
Recommendation: Implement the City of Portland's Inner Foster Transportation and Streetscape Plan which recommends a variety of urban design treatments throughout this segment.

Next Steps: Metro and the City of Portland should consider amending the Financially Constrained RTP project 1159 and 1162 descriptions to specifically refer to the improvements identified in the Inner Foster Streetscape Plan.

Foster Road (I-205 to Jenne Road)

Three-lane option on Foster Road (2020 Base):

– Widen Foster Road to two lanes with a median and left turn pockets where needed, plus bike lanes and sidewalks

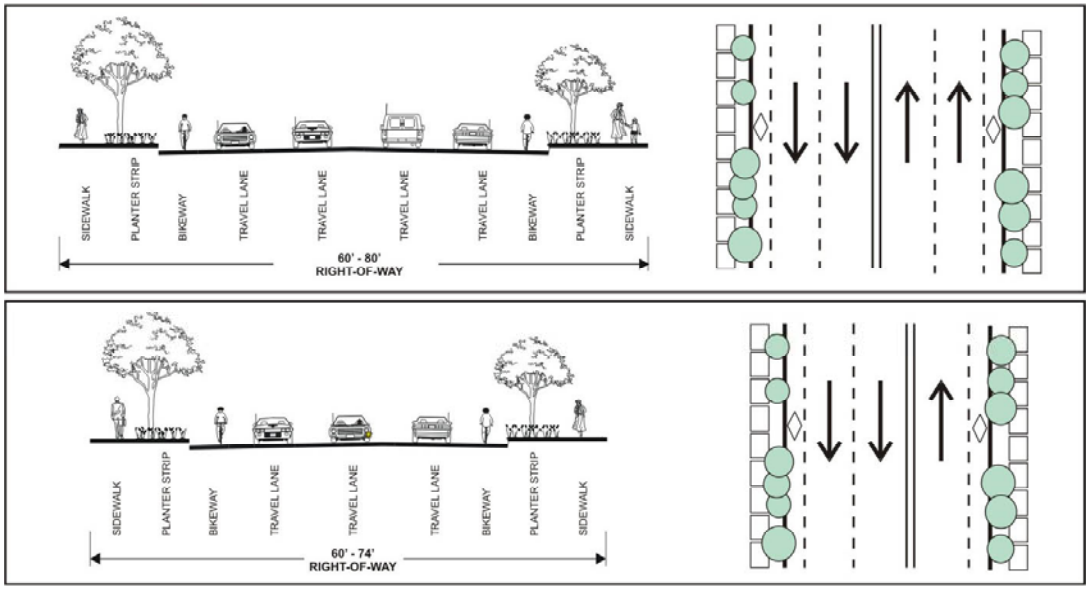


Three-lane cross-section on Foster Road

Extra eastbound-lane option on Foster Road or reversible lane option:

– Widen Foster Road to three lanes with two lanes in the eastbound direction and one lane in the westbound direction, plus bike lanes and sidewalks, or

– Widen Foster Road to three lanes with one lane in the eastbound direction and one lane in the westbound direction at all times and a reversible third lane that would accommodate travel in the AM and PM peak traffic directions, plus bike lanes and sidewalks



Four-lane cross-section on Foster Road (above top)
Extra eastbound lane cross-section on Foster Road (above bottom)

Three to four-lane option on Foster Road (only in Alternative 2):

– Widen Foster Road to four lanes from 122nd Avenue to Barbara Welch Road and three lanes (two lanes plus turn pockets) from Barbara Welch Road to Jenne Road

Summary Conclusion: Additional lanes on Foster between SE 122nd and Jenne are needed to handle anticipated growth in Pleasant Valley and relieve congestion. The four-lane option between SE 122nd Avenue and Barbara Welch Road provided better mobility and was safer than either of the three lane options. In addition, cost and environmental effects were similar between the options. Foster Road between Barbara Welch and Jenne is more environmentally sensitive and topographically constrained and traffic demand is less in this portion of the segment so further evaluation of the lane configuration is appropriate.

Recommendation: Widen Foster Road to a four-lane section from SE 122nd Avenue to Barbara Welch Road and advance a range of alternatives to be studied in Phase II of the Powell/Foster Corridor Transportation Plan from Barbara Welch Road to Jenne Road. The Phase II plan should consider the needs for, and feasibility of, various two to four-lane configurations east of Barbara Welch Road. Depending on more detailed analysis of the capacity needs and constraints, options may include consideration of combined bike/pedestrian facilities or alternative routes for portions of this segment.

Next Steps: Amend the RTP (Financially Constrained System) Project No. 7006 to revise the project description to widen Foster to four lanes from SE 122nd to SE Barbara Welch Road. A short-term planning study of Foster Road from SE Barbara Welch Road to Jenne Road should be completed to determine the appropriate cross section to meet roadway, transit, pedestrian and bike needs. Metro will lead this planning effort as part of the next phase of the Powell Foster Corridor Plan with participation from the City of Portland, ODOT, Multnomah and Clackamas Counties and TriMet. Depending on the outcome of the Phase II planning study, construction may be either intermediate or long term.

Rationale for Recommendation:

Adding lanes to Foster Road is needed to handle anticipated growth and relieve congestion. Providing a high level of transit on Foster Road along with other east/west capacity and transit improvements in the corridor were not enough to address the magnitude of the congestion problem on Foster Road between SE 122nd and Barbara Welch Road. Adding left turn pockets on this portion of Foster Road still results in poor travel performance with a major traffic bottleneck on eastbound Foster Road (east of SE 136th), which causes diversion of traffic onto other eastbound routes including local streets.

Overall travel performance would improve compared to the baseline condition by widening Foster Road to four-lanes between SE 122nd and Barbara Welch Road and by adding an extra eastbound lane between Barbara Welch Road and Jenne Road.

The extra eastbound lane option (adding a peak directional lane between 136th Avenue and Jenne Road) would only address traffic congestion in the PM peak and does not address westbound AM peak period congestion. In addition, costs and environmental impacts are similar under the four-lane Foster Road option and the extra eastbound lane option. However, right-of-way impacts to commercial and residential properties are somewhat higher under the four-lane Foster Road option.

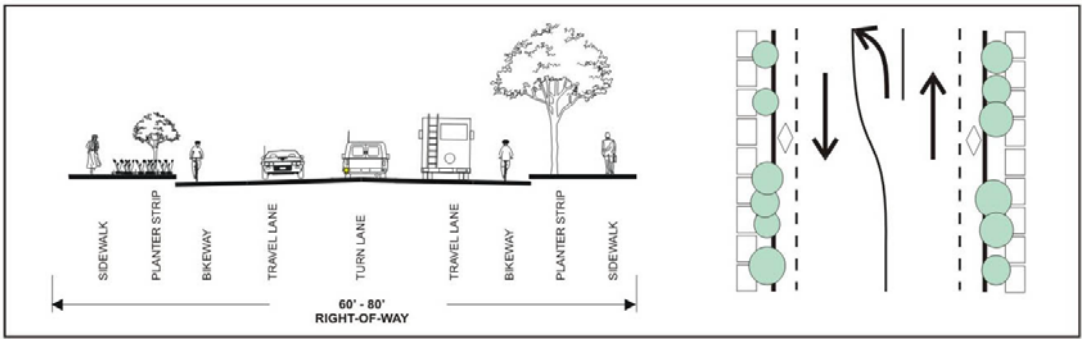
Johnson Creek and tributaries floodplain/channel and steep slopes severely constrain the width of Foster Road between Barbara Welch Road and Jenne Road. Given the topographical and environmental constraints, and the lessening of peak direction travel demand along Foster Road from SE Barbara Welch Road to Jenne Road, a new short-term planning study is needed to determine the appropriate cross section to meet roadway, transit, pedestrian and bike needs.

Even with the recommended improvements, unacceptable levels of congestion are expected to occur on sections of Foster Road by 2020. Long-term congestion relief may require identification of a new east-west route south of Foster Road.

Jenne Road/New SE 174th Avenue (Powell Boulevard to Foster Road)

Three-lane option on Jenne Road:

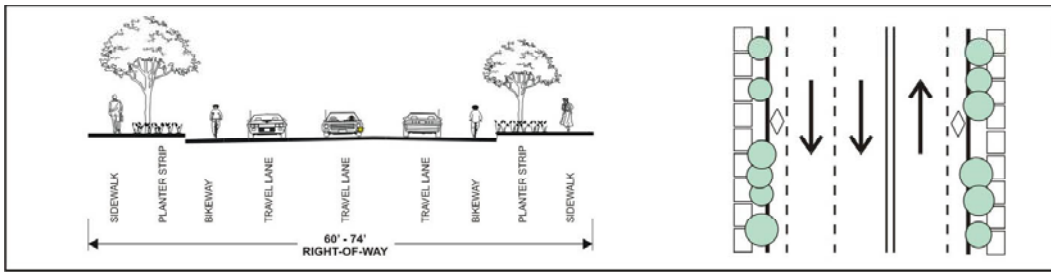
– Widen Jenne Road to two lanes with left turn pockets where needed, plus bike lanes and sidewalks.



Three-lane cross-section on Jenne Road

Extra southbound lane option on Jenne Road (only in Alternative 2):

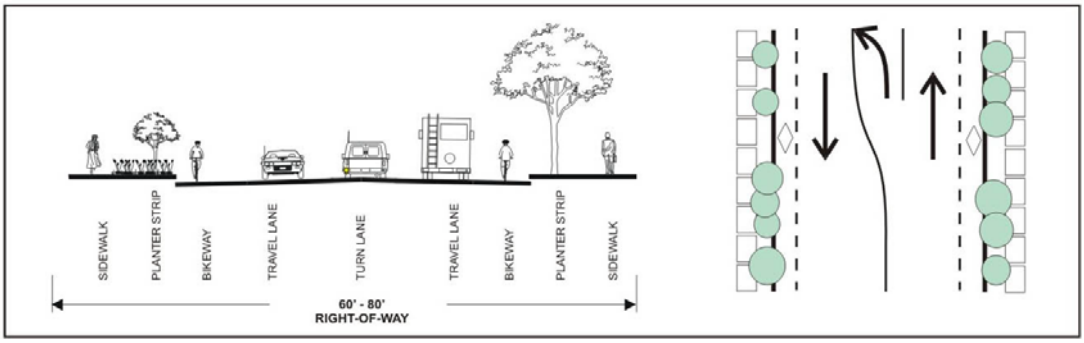
– Widen Jenne Road to three lanes with two lanes in the southbound direction and one lane in the northbound direction, plus bike lanes and sidewalks.



Extra southbound lane cross-section on Jenne Road

New 174th Avenue option (only in Alternative 1):

– Construct a new two-lane road with turn pockets where needed plus bike lanes and sidewalks from a new intersection at 174th Avenue located south of the Springwater Corridor Trail south to a new intersection at the future Giese Road proposed under the Pleasant Valley Concept Plan. Under this option, Jenne Road between Foster Road and the connection to the new road would be maintained in its existing configuration and classified as a local road.



New three-lane cross-section on 174th Avenue

Summary Conclusion: Additional north south capacity in this area is needed to provide access to and from growth areas in Pleasant Valley and Damascus. Widening Jenne is difficult due to topography. The extra southbound lane option would only provide p.m. peak directional capacity, presented safety issues, and was as expensive as developing a new arterial in this area. The new 174th Avenue option would enhance connectivity and significantly improve north south mobility throughout this portion of the region.

Recommendation: As part of Phase II of the Powell/Foster Corridor Transportation Plan, complete a project development study of a new extension of SE 174th Avenue between Jenne and the future

Giese Roads. The study may result in an amendment to planning documents to call for a new extension of SE 174th Avenue in lieu of widening Jenne Road to three lanes between Foster Road and Powell Boulevard.

Phase II would consider a new SE 174th Avenue that could be built as a minor arterial with a two-lane cross section between SE Giese and Jenne Roads with turning lanes and merging lanes where warranted, bike lanes, sidewalks and provision for future bus stops. In addition, the project development study would consider a range of configurations up to a four-lane cross section with turning lanes for SE 174th Avenue from the intersection of Jenne Road to Powell Boulevard. The Jenne Road/new SE 174th Avenue intersection could be realigned as a "T" design. Jenne Road would revert to a local street with minimal improvements over its existing condition.

It is recommended that a project development study for the new SE 174th Avenue roadway be initiated to: (1) determine the feasibility of a new roadway alignment in consideration of engineering issues and existing and planned residential subdivision development; (2) finalize cross section(s) and locate proposed right-of-way reservations; and (3) assess the feasibility of the new SE 174th Avenue as an infrastructure corridor to serve the Pleasant Valley development.

Next Steps: Metro, the City of Gresham and the City of Portland should consider amending the description of the Powell/Foster Corridor Refinement Plan in the RTP to include, in the short term, a Metro led study of the extension of SE 174th Avenue from Powell Boulevard to SE Giese Road. The study should develop conceptual designs and determine required right-of-way. The cities of Portland and Gresham, Multnomah County and TriMet would participate in this planning study. If appropriate, at the end of the study, Project No. 7016 (widening of Jenne to include bike/ped facilities and turn pockets) may be eliminated or modified and a new intermediate-term, RTP project added for construction of the SE 174th Avenue.

Rationale for Recommendation:

Additional north-south capacity in this area is needed to serve Pleasant Valley. Adding turn pockets on Jenne Road is not sufficient and would result in unacceptable levels of congestion on Jenne Road. Widening Jenne Road may not be very feasible from an engineering standpoint given the extremely constrained right-of-way and steep topography along much of Jenne Road. A new road would more effectively accommodate forecast north-south travel between Powell Boulevard and Pleasant Valley than an option to add an extra southbound lane or turn pockets on Jenne Road.

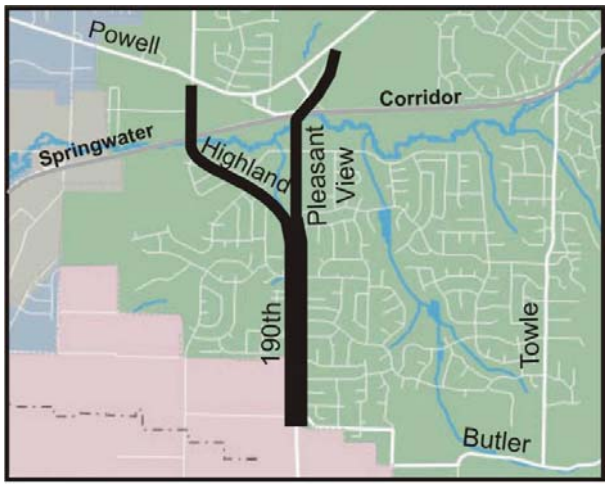
The new 174th Avenue option would relieve congestion and provide much better travel performance on Jenne Road by diverting trips to the new roadway. The new 174th Avenue option would increase traffic and create more unacceptable congestion on the three-lane section of SE 174th south of Powell Boulevard. This segment should be a considered for potential widening in any future project development study. The new 174th Avenue option would also provide better overall travel performance by improving north-south connectivity and reduce southbound congestion on Highland Drive and SE 190th Avenue.

While the extra southbound lane option also improves the level of service on SE 174th Avenue and Jenne Road, it would only address traffic congestion in the PM peak and does not address northbound AM peak period congestion.

The total estimated cost for the extra southbound lane option on Jenne Road is similar to the new 174th Avenue option ($12 million to $13 million).

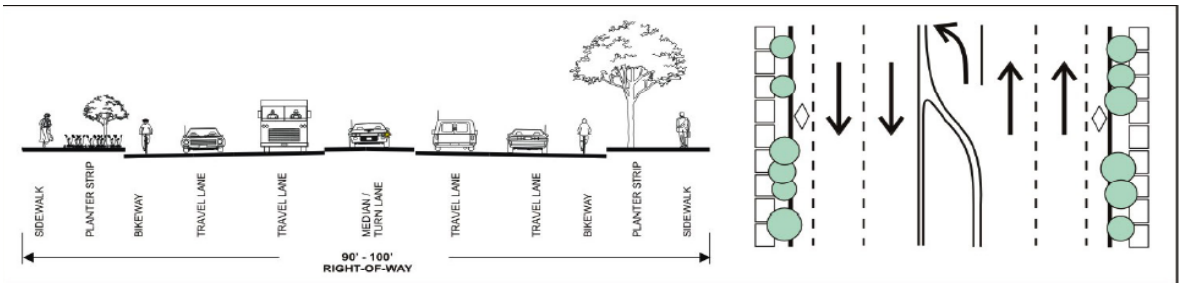
The new 174th Avenue option provided the best alternative for improving overall congestion on north/south roadways in the area and improving north/south connectivity into the Pleasant Valley area. The recommended project development study for the new SE 174th Avenue roadway is primarily based on the need to obtain more information about engineering issues and planned subdivision development that could impact a promising option for providing a needed north/south roadway connection. The project development study would also be needed to finalize potential cross sections, determine general alignment, determine proposed right-of-way reservations, and identify further environmental constraints and mitigation.

Highland Drive and Pleasant View Drive/190th Avenue (Powell Boulevard to Butler Road)



Five-lane Highland Drive option:

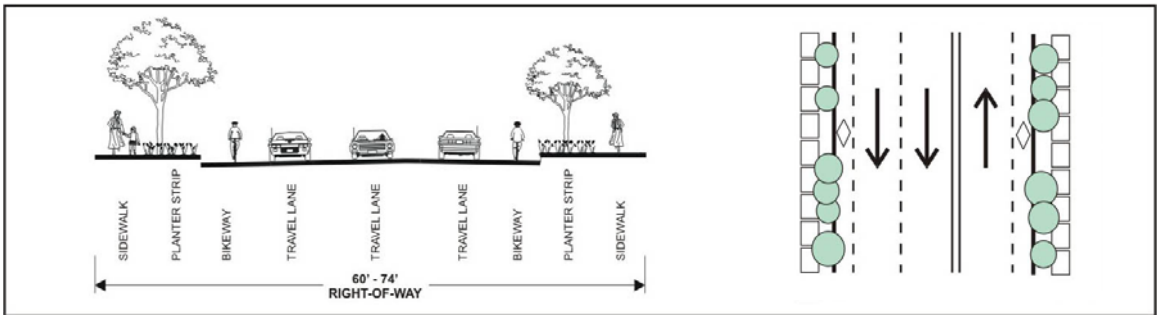
– Widen Highland Drive and 190th Avenue (to Butler Road) to four lanes with a median and left turn pockets where needed, plus bike lanes and sidewalks.



Five-lane cross-section on Highland Drive

Three-lane Highland Drive and Pleasant View Drive option (only in Alternative 1):

- Widen Highland Drive to three lanes with two lanes in the southbound direction and one lane in the northbound direction, left turn pockets where needed, plus bike lanes and sidewalks
- Widen Pleasant View Drive to three lanes with two lanes in the northbound direction and one lane in the southbound direction, left turn pockets where needed, plus bike lanes and sidewalks



Three-lane cross-section on Highland Drive

Summary Conclusion: The RTP currently calls for a five-lane improvement on Highland and 190th. This study found that a modified three-lane couplet on Highland Avenue and Pleasant View Drive would provide the same overall capacity, while improving connectivity. The overall costs and impacts of the two options were similar.

Recommendation: Amend planning documents to call for a three-lane cross section on both Highland Drive and Pleasant View Drive. Highland Drive would be widened to accommodate three lanes (two lanes in the southbound direction and one lane in the northbound direction) with left turn pockets where needed, plus bike lanes and sidewalks. Pleasant View Drive would be widened to three-lanes (two-lanes in the northbound direction and one lane in the southbound direction) with left turn pockets where needed, plus bike lanes and sidewalks. The recommendation also includes the construction of a new bridge on Pleasant View across Johnson Creek and would advance the RTP five-lane roadway with sidewalks and bike lanes improvement on SE 190th Avenue between Highland Drive and Butler Road.

Next Steps: Amend RTP Project No. 2045: SE 190th Avenue/Highland Drive Improvements and RTP Project No. 7012: Highland Corridor Plan and substitute two intermediate term projects: Highland Drive Couplet and Pleasant View Drive Couplet from Powell Boulevard to SE 190th Avenue.

Next steps include initiating a refinement plan of the three-lane Highland Drive and Pleasant View Dr. design option as an element of the Phase II Corridor Plan. This refinement plan would need to address design, operational, and safety-related issues associated with this option as compared to the five-lane Highland Drive/190th Avenue. The refinement plan would also include development of a conceptual design for the modified couplet option, including the unconventional intersection of Highland Drive, Pleasant View Drive and 190th Avenue and locations for left turn accommodations and non-motorized facilities.

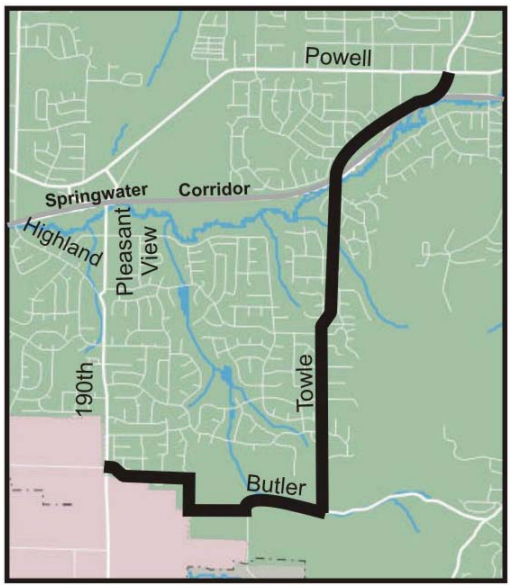
Rationale for Recommendation:

This study did not directly compare the travel performance of the 5-lane Highland Drive option (2020 base) and the 3-lane Highland/Pleasant View option. The 3-lane Highland/Pleasant View option was combined with the new 174th Avenue road option. The 3-lane Highland/Pleasant View option appeared to perform better, but that was largely due to traffic shifting to the new road at SE 174th Avenue. The 5-lane Highland Drive option without other north-south roadway improvements has very poor travel performance with an unacceptable level of service southbound on Highland/190th from Powell to Giese Road. The 3-lane Highland/Pleasant View option is recommended because it distributes traffic between two different intersections with Powell Boulevard.

Both options have similar costs and engineering and environmental impacts.

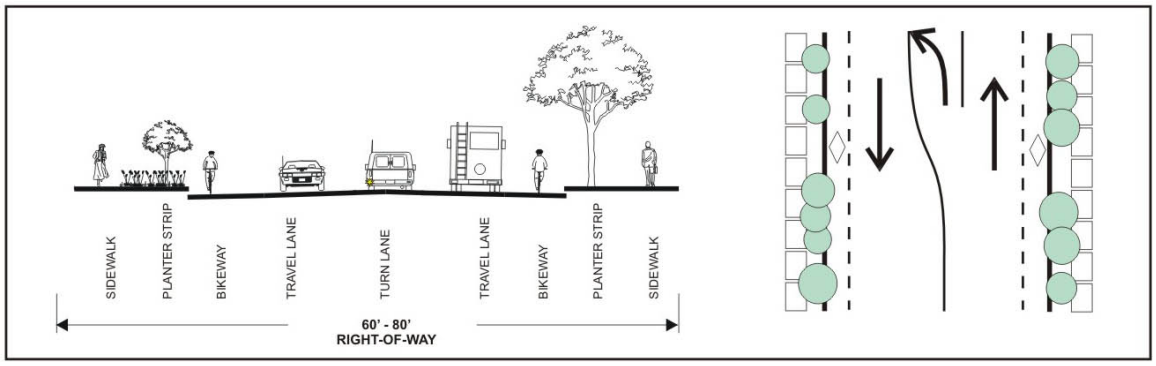
The 3-lane Highland/Pleasant View option appears to be promising, and could lessen the need for adding turn lanes on Highland Drive and Powell Boulevard at the SE 182nd /Highland Drive intersection. This analysis should be carried forward by initiating a refinement plan of the three-lane Highland Drive and Pleasant View Dr. design option as part of the Phase II Corridor Plan. This refinement plan would need to address design, operational, and safety-related issues associated with this option as compared to the five-lane Highland Drive/190th Avenue option.

Butler Road/Towle Avenue (SE 190th Avenue to Powell Boulevard)



Three-lane Butler Road and Towle Avenue option:

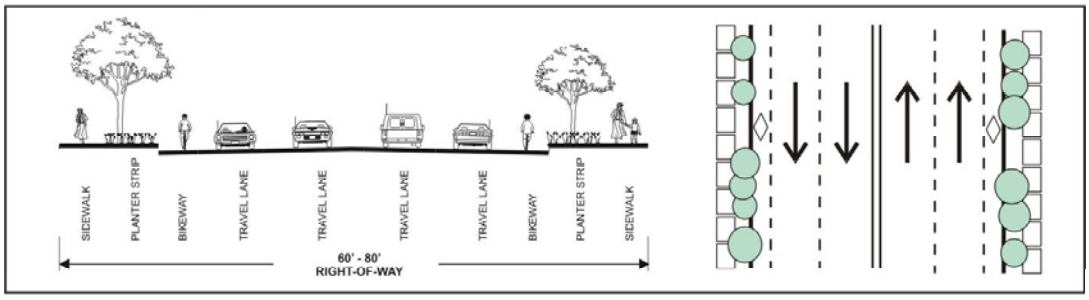
- Widen Butler Road between 190th Avenue and Towle Road, and widen Towle Road between Butler Road and Powell Boulevard to two lanes with left turn pockets where needed, plus bike lanes and sidewalks.



Three-lane cross-section on Butler Road and Towle Avenue

Four-lane Butler Road/Towle Avenue option (only in Alternative 1):

- Widen Butler Road between 190th Avenue and Towle Road, and widen Towle Road between Butler Road and Powell Boulevard to four lanes, plus bike lanes and sidewalks.



Four-lane cross-section on Butler Road and Towle Avenue

Summary Conclusion: The study found a need for more north-south capacity in this portion of the corridor. However, widening Butler Avenue and Towle Roads to four lanes does not address north-south mobility needs as well as the proposed extension of 174th Avenue between Jenne and Giese Roads. It is also more expensive and has greater impacts.

Recommendation: Affirm the RTP community street design designation and collector motor vehicle designation for affected sections of Butler Road and Towle Avenue. The Phase I corridor transportation study recommends a two-lane cross section with turn pockets where needed as well as bike lanes and sidewalks.

Widening Towle Avenue and Butler Road to a four-lane cross section may be considered in the future, based on forecasted growth in the Damascus area. If new growth projections produce significantly more travel demand in the area south of Pleasant Valley, then improvements to Butler Road and Towle Avenue will be revisited in Phase 2.

Next Steps: No Action. Affirm the existing status of RTP project (No. 7015) Towle/Eastman Corridor Plan.

Rationale for Recommendation:

Building a 4-lane project on Butler Road and Towle Avenue would not address the overall north-south congestion problem as well as building a new road at SE 174th between Jenne Road and Giese Road. The new 174th Avenue option would eliminate the unacceptable level of service on Butler at the bottleneck on Butler Road west of Towle Avenue, due to the added north-south capacity provided by the new road.

The estimated capital cost of building a 4-lane Butler Road/Towle Avenue is more than double the cost of building a 3-lane Butler Road/Towle Avenue option. In addition, the 4-lane option would require more than twice the amount of new right-of-way required for the 3-lane option.

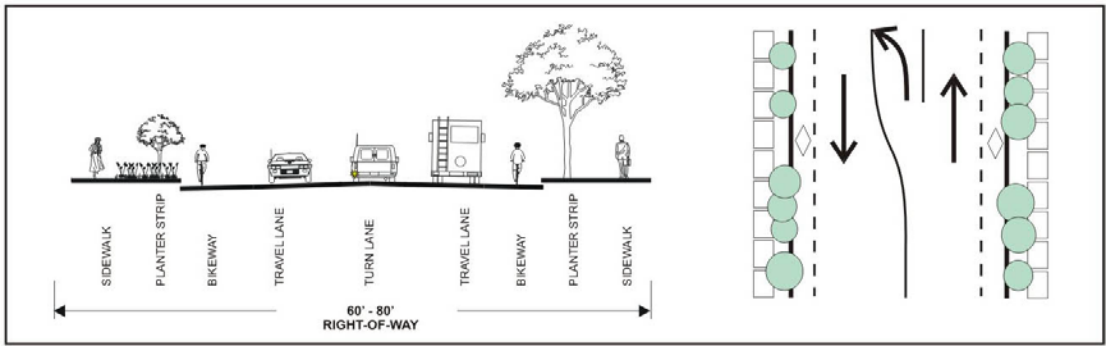
A 4-lane project on Butler Road and Towle Avenue may not be needed if the recommended new road at SE 174th between Jenne Road and Giese Road and other improvements on Highland Drive, Pleasant View Drive, and SE 190th are built. Due to the potential lack of need, high costs, and greater engineering and environmental impacts of building a 4-lane project on Butler Road and Towle Avenue, the Phase I corridor transportation study recommends a two-lane cross section with turn pockets where needed as well as bike lanes and sidewalks.

Widening Towle Avenue and Butler Road to a four-lane cross section may be reconsidered in the future, based on Damascus growth projections.

SE 242nd Avenue (Palmquist Road to Highway 212)

Three-lane option on SE 242nd Avenue:

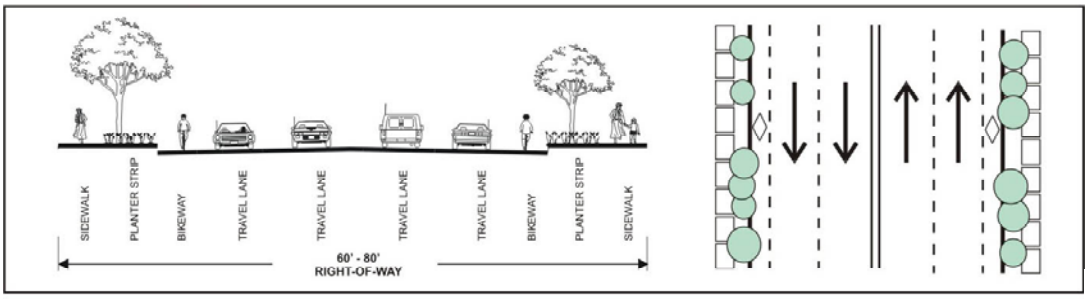
- Widen 242nd Avenue to two lanes with left turn pockets where needed, plus bike lanes and sidewalks



Three-lane cross-section on SE 242nd Avenue

Four-lane option (only in Alternative 1):

- Widen 242nd Avenue to four lanes, plus bike lanes and sidewalks



Four-lane cross-section on SE 242nd Avenue

Summary Conclusion: The study considered an option that would add turn pockets where needed to the current two-lane cross section as well as an option to widen the road to four lanes. Based on population and employment assumptions available at the time of this analysis, it appears that widening of SE 242nd to four lanes may not be needed.

Recommendation: Affirm the SE 242nd Avenue improvement in the RTP, which calls for reconstruction and widening of SE 242nd Avenue to three lanes from Highway 212 to the Multnomah County line. The Phase I corridor transportation study recommends a two-lane cross section with turn pockets, where needed, bike lanes and sidewalks.

Widening SE 242nd Avenue to a four-lane option may be considered in the future, based on Damascus and Springwater growth projections. If new growth projections produce significantly more travel demand in this area, then improvements to SE 242nd Avenue and other north/south routes into Damascus will be revisited in Phase II.

Next Steps: No Action. Affirm the RTP (Priority System) Project No. 7019: SE 242nd Avenue Improvement.

Rationale for Recommendation:

Both the 3-lane and the 4-lane options on SE 242nd Avenue generally have very good travel performance.

The estimated capital cost of the 242nd Avenue four-lane option is approximately $53 Million, or more than twice that of the 3-lane option.

The phase I corridor transportation study recommends a two-lane cross section with turn pockets where needed as well as bike lanes and sidewalks, at this time.

Widening SE 242nd Avenue to a four-lane option may be reconsidered in the future, depending on Damascus and Springwater growth projections.

Other North/South Routes Between Pleasant Valley and Damascus

Summary Conclusion: Land use planning in the Damascus area may result in a need for further analysis of north south routes in the Powell/Foster Corridor between Pleasant Valley and Damascus.

Recommendation: The Damascus Concept Planning will identify the need for additional transportation projects on north/south routes between Pleasant Valley and Damascus based on updated growth projections. This will include reaffirming the need and addressing the general location of the 190th Extension between SE 190th and Tillstrom Road, and SE 172nd. Damascus Concept Planning will include an evaluation of transportation system needs within Damascus and on roadways like SE 172nd Avenue, Foster Road, SE 242nd Avenue, and other north/south routes.

Next Steps: Based on the conclusions of the Damascus Concept Planning, Phase II of the Powell Boulevard/Foster Road Corridor Plan could affirm the need for the 190th Extension and evaluate costs, right-of way, and alignment issues. In addition, Phase II would incorporate any improvement projects identified in the Damascus Concept Planning and further evaluate any outstanding issues (i.e. Engineering cost estimates, right-of way impacts) on roadways north of Damascus.

BICYCLE and PEDESTRIAN RECOMMENDATIONS*:*

Summary Conclusion: Significant pedestrian and bicycle improvements are needed throughout the corridor to provide connections to regional and town centers and other key land uses and encourage the use of alternative modes. In prioritizing these improvements into short-, medium- and long-term timeframes, the evaluation considered four criterion including network connectivity, land use, access and ease of implementation. The land use criterion relates to the connections the project provides to schools, parks, commercial centers, residential development and other attractors.

Recommendation and Next Steps: The recommended roadway improvement actions described above would incorporate bike lanes and sidewalks and other safety and convenience accommodations and encourage the use of these facilities.

Bicycle-only and pedestrian-only improvement needs also are recommended for implementation. The project list is based on actions identified in the RTP, the transportation system plans (TSP) or capital improvement programs (CIP) of the affected jurisdictions[1].

[1] Projects identified in transportation system plans (TSP) or capital improvement projects (CIP) will require amendment to the Regional Transportation Plan. The update of the RTP will begin in 2003.

Short-term Bicycle and Pedestrian Recommendations (0 – 5 years)

On-Street Bicycle and Pedestrian Improvements

SE 92nd Avenue (Foster Road to Powell Boulevard)
Implement RTP Project No. 1157 and portions of Portland TSP Project No. 7008 (Powell to southern city limits): build sidewalks, crossing improvements, and bike lanes.

Division Street (SE 174th Avenue to Wallula Avenue)
Implement RTP Project Nos. 2056 and 2059, and Gresham TSP Project No. 21: Retrofit street to add bike lanes and sidewalks.

SW Walters Road/Springwater Trail Access
Implement RTP Project No. 2055: Study feasibility of widening roadway to add sidewalks and bike lanes.

On-Street Pedestrian Improvements

Division Street (SE 12th Avenue to SE 76th Avenue)
Implement RTP Project No. 1214 and portion of Portland TSP Project No. 70014 (Grand Avenue to I-205): design and construct intersection and streetscape improvements.

122nd Avenue (Bush to Harold)
Implement portions of Portland TSP Project No. 80016 (Bush to Harold and other locations): build sidewalks and crossing improvements.

Main Street (Division Street to 5th Street)
Implement Gresham TSP Project No. 185: improve pedestrian access points to MAX transit stops.

On-Street Bicycle Improvements

Hwy. 212 (SE 152nd Avenue to 242nd Avenue)
Re-stripe the shoulders as bike lanes on this key link that is designated as a Regional Corridor Bikeway in the RTP.

Off-Street Bicycle and Pedestrian Trails

Gresham-Fairview Trail (Springwater Corridor to Burnside)
Implement as identified in the Master Plan adopted by the City of Gresham, including RTP Project No. 2053. Additional funds should be acquired and the trail should be designed and constructed.

East Buttes Power line Corridor Trail (SE 172nd Avenue to Gresham-Fairview Trail)
Initiate a feasibility study of this project proposed in the Pleasant Valley Concept Plan, to look at property ownership, alignment options, and environmental issues.

Medium-term Bicycle and Pedestrian Recommendations (5 - 10 years)

On-Street Bicycle and Pedestrian Improvements

Holgate Avenue (SE 28th Avenue to SE 92nd Avenue)
Implement portion of RTP Project No. 1247, Portland TSP Project No. 7032 and portion of Portland TSP Project No. 7031 (52nd Avenue to I-205): provide ADA improvements and study possibility of removing a travel lane and retrofitting with bike lanes.

Holgate Avenue (SE 92nd Avenue to SE 122nd Avenue)
Implement portion of RTP Project No. 1247, portion of Portland TSP Project No. 80012 (92nd to 142nd) and portion of Portland TSP Project No. 7031 (52nd Avenue to I-205): provide ADA improvements and study possibility of removing a travel lane and retrofitting with bike lanes.

Holgate Avenue (SE 122nd to SE 136th Avenue)
Implement portion of RTP Project No. 1247 and portion of Portland TSP Project No. 80012 (92nd to 142nd): provide ADA improvement and study possibility of retrofitting with or adding bike lanes.

SE 111th Avenue/SE 112th Avenue (Mt. Scott to Division Street)
Implement RTP Project No. 2018 and Portland TSP Project No.: study feasibility of widening the roadway to provide sidewalks and bike lanes.

Towle Avenue (Butler Road to Eastman Pkwy.)
Implement Multnomah County CIP Project No. 162: construct sidewalks bike lanes, and intersection improvements.

Butler Road (190th Avenue to Regner Road)
Implement Gresham TSP Project No. 83 and Multnomah County CIP Project No.: construct sidewalks and bike lanes.

Butler Road (Regner Road to 242nd Avenue)
Recommend amendment to RTP, adding at project to retrofit this street with bike lanes. It is a key link that is designated as a Community Connector Bikeway in the RTP.

SE 162nd Avenue (Powell Boulevard to Division Street)
Implement RTP Project No. 2130 and a portion of Portland TSP Project No. 8006 (Stark to Powell): study feasibility of narrowing lanes to provide sidewalks and bike lanes.

Regner Road (Butler Road to Roberts Road)
Implement Gresham TSP Project Nos. 107-109: construct sidewalks bike lanes, and intersection improvements.

On-Street Pedestrian Improvements

Foster Road/Woodstock Boulevard within Lents Town Center
Implement Lents Town Center Revitalization Plan recommendations, including RTP Project Nos. 1158, 1160, and 1161, and Portland TSP Project No. 70039: construct sidewalks and crossing improvements.

Springwater Corridor Trail at Towle Road, Roberts Road, Regner Road and Hogan Road
Implement RTP Project No. 2058 and Gresham TSP Project No. 41: Widen sidewalks and provide lighting at Springwater entrances: Towle Road, Roberts Road, Regner Road, and Hogan Road

On-Street Bicycle Improvements

Holgate Boulevard (McLoughlin Boulevard to SE 42nd Avenue)
Implement RTP Project No. 1248 and Portland TSP Project No. 7033: study possibility of removing a travel lane and retrofitting with bike lanes.

SE 50th Avenue/SE 52nd Avenue (Woodstock to Hawthorne Boulevards)
Implement RTP Project No. 1126 and portion of Portland TSP Project No. 70018 (Tillamook to Woodstock): modify signals, add signage, and curb ramps. Provide bike lanes if parking lane can be removed.

SE 136th Avenue (Foster Road to Division Street)
Implement Portland TSP Project No. 8004: study feasibility of widening the roadway to provide sidewalks and bike lanes.

Clatsop Road (SE 132nd Avenue to SE 145th Avenue)
Recommend amendment to Portland TSP, adding a project to retrofit this street with bike lanes. It is a key link that is designated as a Community Connector Bikeway in the RTP.

Clatsop Road (SE 145th Avenue to SE 172nd Avenue)
Recommend amendment to Portland TSP adding a project to study the feasibility of widening this roadway to provide bike lanes. It is a key link that is recommended for designation as a Community Connector Bikeway in the 2003 RTP update.

SE 174th Avenue (Powell Boulevard to Division Street)
Implement RTP Project No. 2131: study feasibility of narrowing lanes to provide bike lanes.

Sunnyside Road (Hwy. 212 to SE 172nd Avenue)
Recommend amendment to RTP, adding a project to study feasibility of widening roadway to provide bike lanes. It is a key link that is designated as a Regional Corridor Bikeway in the RTP.

Off-Street Bicycle and Pedestrian Trails

Mt. Scott Trail (Clatsop Road to Foster Road)
As proposed in the Metro Regional Trails Plan, study feasibility of developing a soft-surface trail. Will need to address streamside issues, stream crossings, roadway crossings, and property acquisition/easements.

East Buttes Loop Trail (Powell Butte to Butler Road)
As proposed in the Pleasant Valley Concept Plan, study feasibility of developing a soft-surface trail. Will need to address stream crossings, roadway crossings, and property acquisition/easements.

Long-term Bicycle and Pedestrian Recommendations

On-Street Bicycle Improvements

Division Street (SE 52nd Avenue to SE 76th Avenue)
Implement amended portion of Portland TSP Project No. 70013 (bike lanes from SE 12th to SE 73rd Avenue as part of multi-modal improvements on Division Street from Grand Avenue to I-205): retrofit street to add bike lanes.

Off-Street Bicycle and Pedestrian Trails

Scouter Mountain Trail (Hwy. 212 to Foster Road)
As proposed in the Metro Regional Trails Plan, study feasibility of developing a soft-surface trail. Will need to address stream crossings, roadway crossings, and property acquisition/easements.