

The Outer Powell Boulevard Conceptual Design Plan

The Portland Planning and Sustainability Commission, April 10, 2012

Executive Summary

The Outer Powell Boulevard Conceptual Design Plan project was jointly undertaken by the City of Portland and ODOT to identify needed improvements to SE Powell Boulevard (US 26) between I-205 and the Gresham city limit just east of SE 174th Avenue. For transportation analysis purposes the study area will extend north to SE Division and south to SE Foster Rd. The road is an ODOT facility, and predominately consists of two travel lanes in a rural cross-section, with no curbs, drainage facilities, marked bike lanes, and few segments of sidewalk.

The overall goal of the Outer Powell Boulevard Conceptual Design Plan is to develop a conceptual design plan for improvements to SE Powell Blvd. to accommodate the 20-year needs of motor vehicles, bicycles, pedestrians and transit. Today, this section of Powell Blvd. is reminiscent of a 1950 rural highway with no provision for pedestrians, drainage or transit. It does have bike lanes. The 2003 Powell/Foster Corridor Transportation Plan led by Metro established the base case for Powell Blvd. improvements. This 2003 plan also called for a second planning effort study to determine specific design elements for future Powell Blvd. improvements. It is intended that this conceptual design plan will produce that level of design specificity.

The project was completed with input from technical and community stakeholders at each step in the planning process, and at three community open houses. Prior to developing and evaluating alternatives to arrive at a recommended solution, the project considered needs (e.g. project goals and objectives, future-year traffic forecasts and community desires, for example for improved bus stop access), constraints (e.g. extensive roadside development with little room for widening, numerous driveways), and opportunities (e.g. the potential to manage driveway accesses to enhance roadway capacity and safety for all modes).

The alternatives considered consisted of three vehicle lanes (one travel lane in each direction and one center raised median/turn lane), four lanes (two lanes in each direction with a narrow raised median), and five lanes (with a center raised median/turn lane). The design for pedestrian and bicycle accommodations next to travel lanes is comprised of an 8-foot-wide bike facility and a 12-foot wide sidewalk corridor consisting of a 7 ½-foot sidewalk zone and a 4 ½-foot furnishing zone to accommodate street trees, stormwater planters and other amenities. The alternatives included a design option with narrower bike and sidewalk facilities to be used only in constrained segments, for example to avoid removing large trees or major buildings during roadway widening.

The evaluation of alternatives applied criteria that considered operations and safety for motor vehicles and transit, the environment and safety for bicyclists and pedestrians, support for existing and planned land uses, property impacts (e.g. amount of additional property needed to accommodate widening, and whether existing buildings would be impacted) and planning-level estimated cost.

The three-lane alternative was selected as the recommended plan. For the segment of Powell between SE 162nd and SE 174th Avenues, the three-lane alternative is a “near-term” recommendation that analysis indicates will sufficiently accommodate forecasted traffic for up to 15 years. This plan document establishes benchmarks that when met will lead to further analysis to determine long-range needs on that segment. In addition to a transportation needs analysis, the conceptual design will respond to a number of other important issues. These issues are stormwater management,

right-of-way preservation and acquisition, urban design, local street connectivity, access management and transit.

The conceptual design plan will inform both future preliminary engineering phases for future public capital improvements and private development requirements for dedication and frontage improvements. The near term recommendation calls for a three-lane cross-section from 1-205 to 174th Ave. Long term capacity improvements beyond the three-lane cross-section may be needed from 162nd to 174th Ave. Also, intersection capacity improvements to some of the some north/south cross streets within the immediate vicinity of SE Powell Blvd. may also be needed.

Implementation Strategy

Benchmarks for Transitions from Near Term to Long Term

Project benchmarks have been identified that will be used to determine the timing of transition from near-term to long-term improvements, or potential modifications for all corridor segments and other recommendations of this plan. References to “this plan” are to be interpreted as the Outer Powell Boulevard Conceptual Design Plan. The project benchmarks are listed below.

- New information will be considered as it becomes available from future RTP model updates, including households and employment projections and traffic projections, if found to have significant increases in forecasted growth than the forecasts now available and used for this plan.
- Traffic congestion will be monitored annually at the intersections of SE 122nd, SE 136th, SE 162nd and SE 174th. ODOT, PBOT and community stakeholders will review the data and determine if trends are likely to lead to future traffic volumes that have significant increases than the forecasts used for this plan.
- As a result of recommendations and a public involvement process for a Regional High Capacity Transit Plan for the Powell-Division corridor, a consensus determination is made by Metro, TriMet, ODOT and the City of Portland that the streetscape or right-of-way needs for SE Powell Boulevard is significantly different than the recommendations of this plan.
- As a result of the East Metro Connections Plan recommendations, or other planning processes, funding commitments are established for a major north-south arterial project southeast of Portland that significantly changes traffic patterns in the concept plan area and affects SE Powell Boulevard.
- Any new streetscape or capacity alternatives that are developed as a result of new information as outlined above shall address the same project evaluation criteria as used for this plan. It is also recognized that any improvements proposed for funding through safety or preservation programs will have to meet the eligibility and criteria of those programs.
- The recommendations of this plan shall remain in effect and be supported by ODOT and the City of Portland for a period of 10-15 years.

Near-Term Project Priority Improvements

Near-term project priority improvement elements include:

- safety projects for all modes including left turn lane access;
- pedestrian and bicycle system gaps along SE Powell Blvd.;
- pedestrian crossing improvements including good transit access for pedestrians;
- improvements resulting in faster and more reliable transit travel times; and,
- Transportation System Management (TSM) improvements such as upgraded signal systems.

Street Segment Priorities for Improvements

The following street segments are listed in order of priority for proposed improvements.

- Segment 2
- Segment 1
- Segment 3
- Segment 4

If ODOT Safety Program funds become available for improvements along certain street segments or intersections these specialized locations will be considered a top priority.

Additional Right-of-Way Needs Requiring Further Study

- The segment of SE Powell Boulevard between 99th Avenue and the I-205 interchange area will be subject to additional analysis based on long term needs.
- The intersecting side streets of SE 136th Ave., SE 162nd Ave., and SE 174th Ave. may require additional right-of-way for improvements in the intersection area. In addition, right-turn lanes along Powell Boulevard may be needed which will be determined during project development.
- A median plan will be developed to serve various uses depending on location. These medians may include turn lanes for safe vehicular access to properties and streets fronting SE Powell Blvd. Raised medians provide access management functions for traffic safety and safe crossing refuges for pedestrians. Where possible, at-grade pedestrian crossings will be provided through raised median sections.
- On-street parking will not be allowed as part of a construction project under State jurisdiction but may be considered if the roadway is transferred to City jurisdiction and pending a needs/impacts evaluation.

Additional Considerations for Project Development

In addition to the recommended plan elements described above, other key decisions to be made during the project development process are:

- reduction of the design speed east of SE 136th Avenue to 35 mph, consistent with the speed to the west of SE 136th Ave.;
- modifications to corner radii, medians and pole locations that would be needed at the SE Powell/SE 174th intersection to address difficult turning movements for school buses;
- avoidance of impacts to major features and community facilities such as large trees and significant buildings;
- avoidance of impacts to Ed Benedict Park and amenities; and,
- minimize impacts to commercial businesses across from Ed Benedict Park.

Options available for avoiding or minimizing impacts to sensitive locations along the corridor, especially for those indicated above include:

- employing short segments of constrained corridor designs as described in this plan;
- shifting the centerline alignment, or equal width expansion of each side of the street, where practical;
- reducing the length and width of center median sections, or replace standard width medians with narrow raised medians where left turn access is not required;
- explore alternative driveway locations east or west of constrained roadway sections where left turn access is required;
- explore alternative locations for bus stops and pedestrian crossings;
- explore a common pedestrian facility that serves both the corridor and the edge of the park.

It is recognized that the USDOT Section 4(f) statute will apply when considering right-of-way options and impacts involving public parks. The intent of Section 4(f) is to avoid any roadway use of a park unless there is no feasible and prudent alternative or unless the impact is found to have minor impacts. [Section 4(f) of Department of Transportation Act (49 USC 303)].

Integration into Local Plans

Recommendations made within the Outer Powell Blvd Conceptual Design Plan are intended to be incorporated in future updates of the City of Portland's guiding transportation policy document, the Transportation System Plan (TSP) as well as the City's Comprehensive Plan which is currently undergoing revision. Amendments may include changes to street classifications based on findings from this plan and changes to the major transportation improvements list recognizing the proposed cross sections and associated costs. More specifically, the City may consider recommending the following TSP amendments.

- Amend the freight classification along SE Powell Blvd. from a Major Truck Street to a Truck Access Street. Powell is not found to be performing the role of a major truck corridor although commercial destinations along the street will still require truck access.
- Amend the street design classification along SE Powell Blvd. from a Regional Corridor to a Community Corridor. The street dimensions proposed by the plan are more reflective of the scale found with the Community Corridor designation. Depending on the outcome and recommendations of the Comprehensive Plan update and accompanying zoning designations some segments of Powell Blvd. may be more appropriately designated as a Community Main Street.
- Amend the traffic classification of SE 174th between SE Division and the south city limits from a Neighborhood Collector to a District Collector. A minor traffic role change of SE 174th may allow for an improved balance of traffic circulation in the localized area of SE Powell Blvd., SE Division, SE 162nd Ave. and SE 174th Ave. thereby maintaining community scale street dimensions for all of these streets.
- Update the Master Street Plan map for the Far SE District to be consistent with the Local Streets and Accessways report prepared as part of this plan.
- Update the Major Transportation Improvements list project description and estimated costs for SE Powell Blvd. to reflect the recommendations of this plan.

In addition to the potential TSP amendment recommendations listed above that have been identified during this planning process, outreach activities also found community interest in potential land use planning actions that would reinforce the street plan benefits and respond to community development goals. These actions could include zoning amendments that would support main street style development in suitable locations, and more commercial zoning generally, replacing high-density residential. These actions would require a separate planning process than conducted for this conceptual design plan for SE Powell Boulevard.