



Regional Freight Investments Projects

Name of Project: Central Eastside Access and Circulation Improvements

(project name will be adjusted to comply with ODOT naming convention if necessary)

Project Definition

Project Description

- Facility or area: The Central Eastside Access and Circulation Project area encompasses the following intersections within the City of Portland: NE 16th Ave and NE Irving St, SE Stark Street and SE Martin Luther King, Jr. Blvd, SE Washington Street at SE Grand Ave and SE Martin Luther King, Jr. Blvd, Hawthorne Bridge viaduct at SE Martin Luther King, Jr. Blvd ramp, SE Clay Street and SE Grand Ave, SE Mill Street at SE Martin Luther King, Jr. Blvd
- City: Portland
- County: Multnomah

Base project information

- **Corresponding RTP project number(s) for the nominated project.**
RTP# 10241: Clay/MLK Jr, SE: Intersection Improvements

RTP# 10264: Central City Traffic Management, N, NW, NE, SE, SW: Transportation System Management improvements.

RTP# 10302: MLK Jr, N (Columbia Blvd. - CEID): ITS
- Attach a completed Public Engagement and Non-discrimination checklist (Appendix A).

Purpose and need statement.

The Central Eastside Industrial District (CEID) is one of two industrial sanctuary districts within Portland's Central City. The CEID is traditionally home to light industrial uses such as manufacturing and production, warehousing and freight movement, and wholesale sales. Recently, there has been significant growth in the "industrial office" use category, which includes technology-based firms in the emerging information economy. The CEID is also crossed by several transit corridors (served by Portland Streetcar, TriMet Frequent Service Lines 6, 12, 14, and 15, as well as lines 10, 19, 20, and 70) which are undergoing a rapid transformation with residential mixed-use development. The Central City 2035 Plan anticipates 9,000 new jobs and 2,500 new households in the CEID over the next 2 decades. The CEID is also an important corridor for through truck traffic from the Union Pacific intermodal facility at Brooklyn accessing the freeways and Port facilities. As the district grows, investments in the transportation system that reduces both congestion and safety conflicts will be required to accommodate the anticipated growth. This proposal will use Regional Flexible Funds to improve freight access and circulation at key choke points while leveraging a significant local match to improve bikeways leading into and through the CEID, enhancing safety for all modes.

Description of post implementation measurement of project effectiveness.

One of the key elements of this project is that it provides equipment for monitoring the performance of traffic flow along the MLK/Grand couplet in the CEID and at NE 16th Ave and Irving Street which provides direct access to I-84. By utilizing the new signal and traffic counting equipment, the ITS solutions that are implemented through this project will allow for better analysis of the performance of the MLK/Grand corridor and the key intersections where choke points occur than what is possible presently. This will inform decisions about signal timing and future safety and capacity improvement needs.

Additionally, through outreach to the Central Eastside Industrial District stakeholders, TriMet, and the City of Portland's modal advisory committees (Bicycle, Pedestrian and Freight), the effect of the proposed upgrades on truck travel time and freight delay as well as impacts to other travel modes can be assessed and the ITS solutions and traffic management strategies can be adjusted accordingly.

Project Cost and Funding Request Summary

- **See attached for a completed Cost Methodology worksheet (see Appendix E or alternative cost methodology).**

The project cost estimate was determined by engineers in the Signals and Street Lighting group at PBOT. Slight modifications to the Unit cost and Description in the Metro-provided spreadsheet were made (see item 1.E), due to the unique nature of these proposed signals (adjacent to streetcar tracks and on a bridge structure). Funding for the project can be obligated within the allotted timeframe; the local funding will come from Transportation System Development Charges, an ongoing revenue stream for PBOT, and from other local sources. This project is not expected to have significant environmental impacts and would be eligible for a categorical exclusion under NEPA. The individual project elements, including local match elements, were developed as part of Central City 2035, a multi-year planning effort with robust public engagement. The specific RFFA request was vetted through the Portland Freight Committee via 2 open public meetings of that body.

- Total project cost: **\$5,402,433**
- RFFA funding request by project phase:
PE: \$563,689; Construction: \$2,438,744; TOTAL: \$3,002,433
- Local match or other funds: **\$2,400,000**

Map of project area

- See attached file for a map of the project consistent with instructions in Appendix B.

Project sponsor agency

Contact information (email & phone #) for:

- **Application lead staff:**

Robert Hillier, Freight Planning Coordinator; Robert.hillier@portlandoregon.gov; 503 823-7567.

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- **Project Manager** (or assigning manager) Dan Layden, Dan.Layden@portlandoregon.gov & 503-823-2804
- **Project Engineer** (or assigning manager) Lola Gailey, Lola.Gailey@portlandoregon.gov & 503-823-7563
- **Describe the agency's record in delivering federal aid transportation projects on time and budget or whether the lead agency has failed to deliver a federal aid transportation project and if so, why.**

The Portland Bureau of Transportation is one of the few local agencies in the state that are fully certified by ODOT to deliver federal aid projects and has extensive experience with delivering federal aid projects. The bureau has successfully delivered federal transportation projects for over 20 years, and was one of the first agencies to become fully certified. The bureau has delivered a wide range of projects including large bridge projects, active transportation and safe routes to school projects. The large majority of the projects have been delivered on time and on budget. On the few occasions where projects have encountered budget issues the bureau has been able to identify funding to deliver the projects. The bureau has had a few projects that have been delayed mostly due to permitting and right of way issues. For all current projects, those issues are resolved and the projects are on track to be delivered. The status of some of the bureau's projects are listed below.

The following are examples of completed and ongoing ITS projects:

- 1) NE/SE 82nd Avenue ITS (completed in 2006)
- 2) US 26 Adaptive Traffic Signal System (completed in 2010)
- 3) Active Corridor Management Project (initiated in 2015)

The following are examples of previously awarded RFFA projects and their status:

- 1) N. Lombard/St. Louis/Ivanhoe/Philadelphia intersection project (Construction Phase completed in 2012)
- 2) N. Portland Rd/Columbia Blvd intersection project (2014/15 RFFA. Planning and Design Phase completed in 2013. Construction Phase funded by STIP and will begin in 2017)
- 3) North Time Oil Road-Burgard Street Intersection Project (2014/15 RFFA. Design Phase 90 percent completed. Construction Phase to begin in late 2016)
- 4) Going to the Island Freight Improvement Project (2014/15 RFFA. Design Phase to be completed in 2017 and Construction completed in 2019)
- 5) South Rivergate Freight improvement Project (2016-18 RFFA. Design Phase to begin in 2016. Project construction will be funded by multiple local and federal funding sources)
- 6) SE Foster Road (2014-2016 and 2015-2017 RFFA. Design phase underway. Construction to occur in 2017)

- **Describe how the agency currently has the technical, administrative and budget capacity to deliver the project, with an emphasis on accounting for the process and requirements of federal aid transportation projects.**

The bureau currently has the staff capable to provide all the administrative services related to project management and all technical services related to design, engineering, and construction management for delivering federal-aid projects. PBOT staff members are recognized nationally

for expertise in areas related to the proposed projects including multi-modal traffic signal design, implementation of truck signal priority, and traffic management through ITS.

Highest priority criteria

- 1. What additional sources of funding, and the amounts, will be leveraged by an investment of regional flexible funds in the proposed project?**

The City will allocate \$1.6 million in Transportation System Development Charges to add 4 new traffic signals at SE Ankeny and MLK, SE Salmon and Grand/Washington, and at SE 11th and Ankeny. Additionally, the City will allocate \$800,000 from local funds to reconstruct SE Clay Street from SE 1st Ave to SE Grand Ave., for a total of \$2.4 million in local matching funds.

- 2. Describe the freight vehicle delay problem and how the proposed project will reduce this problem.**

The portion of the CEID west of Martin Luther King, Jr. Blvd has the most permissive industrial zoning in the district, as it is the only area where the “industrial office” use type is allowed. As a result, this area has seen the most significant job growth in recent years. SE Stark St, SE Taylor St, and SE Clay St are the only signalized intersections that provide access from this area to the main north-south arterial (MLK/Grand), which also provides access to the freeway system. These intersections experience significant congestion throughout the day, particularly during peak hours. One reason for this congestion is the through/left conflict: vehicles turning left on MLK/Grand must wait for a gap in opposing traffic in order to turn. This causes significant delay as the queue length often exceeds the storage capacity on the block. The proposed “left turn couplet” concept will provide protected left turn signal phases and separate eastbound-to- northbound turns from westbound-to southbound turns, effectively doubling the queue storage capacity and substantially reducing delay.

At Irving and 16th, a stop-sign controlled intersection experiences significant delay during the PM peak, often spilling back onto NE 12th Ave. By signalizing this intersection, the delay will be significantly reduced. This is the primary freeway access point for trucks in the northern half of the district.

On the Hawthorne bridge viaduct, motor vehicles turning right to access SE Martin Luther King, Jr. must wait while through bicycles cross over the intersection. The Hawthorne Bridge carries high volumes of bicycle traffic, often resulting in significant queuing as motor vehicles wait for a gap. Signalizing this intersection will create a safer environment for all modes while reducing congestion and excessive motor vehicle idling.

- 3. How will the proposed project increase freight access to industrial lands, employment centers and local businesses, and/or rail facilities for regional shippers?**

The CEID is one of 2 industrial sanctuaries in the Central City. It currently has about 19,000 jobs and is projected to add 9,000 jobs by 2035. Improving access and circulation within the district, including traffic flow at congested intersections, is key to accommodating that growth.

- 4. How will the proposed project help support economic sectors that are low-carbon and resource efficient? How will the proposed project offer economic opportunities for Environmental Justice or underserved communities?**

The fastest growing sector in the district is in the “industrial office” use category. This includes design, architecture, software development and other elements of the information economy. By nature these types of firms have a lower footprint as their work products tend toward digital and intellectual property items that have very minimal physical presence.

A significant portion of the CEID is shown on the RFFA Equity Analysis Concentration of Low Income map as above average or significantly above average. Industrial jobs are generally more middle income compared to retail sales and service jobs, which are limited under the area’s industrial zoning. Supporting projected job growth with transportation system improvements will provide opportunities for local residents to obtain livable wage employment.

Higher priority criteria

- 5. How will the proposed project improve safety? Describe how conflicts between freight vehicles and active transportation or other modes will be removed or mitigated.**

The Central City 2035 Southeast Quadrant Plan provides a 20-year transportation and land use blueprint for the Central Eastside Industrial District CEID. Among the key themes developed for the transportation system were 1) improving freight circulation through the district, especially east-west movement across the MLK/Grand corridor, 2) reducing the potential for conflict between modes, and 3) providing safe and legible facilities for people riding bicycles into and through the district. This proposal draws on these themes, and adopts elements from several projects developed and endorsed by the project Stakeholder Advisory Committee into a circulation and safety enhancement project for the CEID. The local funding proposed for the project will pay for improvements on designated bikeways.

A protected crossing at MLK has been identified as a key missing piece in the Ankeny Street bikeway. Combined with the bike-ped only NE Couch Court, currently under construction, filling in this gap will allow people on bicycles to cross the district and access the Burnside Bridge (after crossing under it via 3rd Ave) on a low-stress bikeway, avoiding the high-volume, mixed traffic situation on NE Couch St.

Salmon Street was identified as the preferred east-west bicycle route through the district in the SE Quadrant Plan. It provides a direct connection between neighborhoods to the east and the Eastbank Esplanade, but lacks any physical improvements west of 12th Ave. As a result, people on bicycles tend to disperse once they reach the CEID, with many heading north to Taylor in order to cross MLK and Grand at signalized intersections. An improved and legible bicycle route through the central portion of the district will attract bicycle traffic, improving predictability for all modes and reduce the potential for freight-bicycle conflicts.

- 6. How will the proposed project reduce air toxics or particulate matter in the project area? What is the current air quality condition of the project area? What strategies (e.g. diesel retrofit trucks, engine change outs, etc.) will be used during construction and after the implementation (e.g. diesel retrofit trucks, etc.) of the project to reduce air pollution?**

The project will reduce particulate matter and other airborne pollutants by utilizing ITS and traffic operational solutions that include new signals, CCTV cameras and Bluetooth Readers to ensure the smoother flow and circulation of vehicles within and through the Central

Eastside Industrial District. By adding and synchronizing the new traffic signals along the MLK/Grand corridor and adding protected left turns at high volume intersections, emissions from heavy trucks and motor vehicles will be reduced through improved traffic flow and reductions in excessive idling time at the multiple intersections in the district. Additionally, the project will indirectly have a positive benefit on emissions in the area by ensuring that public transit (TriMet buses and Streetcar) and bicycle and pedestrian access along and across the corridor is also managed as efficiently as possible, thereby reducing the number of private vehicle trips in accordance with the regions modal split goals.

- 7. Describe the EJ communities which are in proximity to the proposed project area. How will the project reduce the impacts of freight movement on these communities (e.g. reduced noise, traffic, land use conflicts, emissions, etc.)?**

The project is located in the Central Eastside Industrial District which is one of Portland's oldest industrial areas and continues to serve its historic role as a major wholesale and central distribution center. This area also serves as a center for emerging industries and industrial office employment and remains an active employment center for creating middle-income jobs for the Portland region. The transportation and logistics sectors are a major source of middle-income and upward-mobility jobs for communities of color. In 2008, manufacturing and transportation sectors made up 18% of jobs held by people of color in Multnomah County, compared to 10% of the jobs held by white employees. This project will ensure the continued economic competitiveness of area employers and help slow the erosion of middle-income jobs and the widening income inequalities in the Portland region.

Based on Metro Equity Analysis data the CEID and MLK/Grand corridor has a significantly above average concentration of LIFT Paratransit riders and the highest concentration of transit ridership (bus deployments) in the Portland region. This project will improve traffic circulation for all modes in the project area which will remove barriers to non-auto job access for all employees in the district.

- 8. Describe the freight reliability issues the proposed project is intended to address. What are the anticipated improvements to reliability this project will deliver?**

As described previously, this project will utilize ITS solutions to maximize the efficiency of the primary north/south route through the Central Eastside Industrial District in addition to improving the performance of several heavily used freight intersections. The ITS monitoring equipment will ensure that City and ODOT staff are aware of any problems with the performance of the MLK/Grand corridor, and the CCTV cameras and Bluetooth readers will provide real-time communication of these issues. The traffic signal improvements will ensure that control delay is minimal and predictable for vehicles travelling along the MLK/Grand corridor and the NE 16th Ave/Irving Street intersection at the I-84 entry ramp.

Priority criteria

- 9. Why may the proposed project not be eligible to receive funding from other potential sources? Is the project of an innovative or unique nature such that it is not eligible or typically funded with large, traditional transportation funding sources such as state trust fund pass through to local agencies, local bridge program, or large state funding programs (Modernization, Bridge, Preservation, etc.), or have any other significant sources of funds?**

There are limited funding sources available for this type of freight improvement project. The ITS solutions and other improvements proposed as part of this project would not be eligible for funding under the ConnectOregon program or through other sources. This project also leverages local City of Portland funding from System Development Charges and other sources.

10. Describe how the proposed project reduces the need to expand highway capacity.

By leveraging ITS and operational solutions to increase the efficiency of the MLK/Grand corridor, this project will increase the effective capacity of an important link for freight and other vehicles without expanding or widening any roads or intersections in this corridor. Additionally, improving the intersections to accommodate demand from other modes including buses, streetcar, and bicycles ensures that alternative modes of transportation remain competitive for travelling through the region.

Much of the bicycle traffic that crosses the MLK/Grand Corridor is travelling to and from the Central City along a route parallel to I-84. Ensuring that this traffic can be accommodated through other modes will maintain or reduce traffic levels along I-84, reducing any need for expansion of this or other highways.

11. Describe how the proposed project addresses issues and improves connectivity among multiple freight modes.

The MLK/Grand couplet serves as a critical link for north/south multi-modal freight movements between state route 99E/McCloughlin Blvd and the UPRR Brooklyn Intermodal Rail Yard and access to I-84 and I-5. With the growing traffic congestion in the district and increased demands on public right-of-way space from other travel modes, this project includes important system improvements that will enhance the efficiency of freight movement along the MLK/Grand corridor and the connecting state highway system. The intersection of NE Grand and I-84 and NE Irving and 16th provides direct I-84 freeway access for truck/container traffic from the Brooklyn Intermodal Yard and adjoining industrial districts and the proposed signal improvements will enhance access and connectivity to these multi-modal freight facilities.

Process

- **Describe the planning process that led to the identification of this project and the process used to identify the project to be put forward for funding consideration.**
- As noted in Question #5, the projects included in this RFFA application were developed as part of the Central City 2035 Southeast Quadrant Plan process. The SE Quadrant Plan was a 2-year effort by several City bureaus to develop a 20-year land use and transportation plan for the CEID. The project was guided by a Stakeholder Advisory Committee comprised of approximately 2 dozen stakeholders representing a broad array of interests across the CEID. Dozens of community meetings with neighborhood and business groups, in addition to open houses for targeting the general public, were part of the process. The project received unanimous support from both the Planning and Sustainability Commission and City Council.

The Portland Freight Committee was the primary review body for coordinating the project nomination process with the various regional agencies. The Port of Portland, ODOT, Metro, and the class I freight railroads (UP and BNSF) are all represented on the PFC and have at varying degrees participated in the process of identifying candidate RFF freight projects. In June 2016

the PFC initiated the process of reviewing candidate RFFA freight projects which resulted in the selection and recommendation of the following two projects to submit 2019-21 RFFA applications:

- 1) Central Eastside Access and Circulation Enhancement Project
 - 2) NE Columbia Boulevard ITS Project
- **Describe how you coordinated with regional or other transportation agencies (e.g. Transit, Port, ODOT, Metro, Freight Rail operators, ODOT Region 1, Regional Safety Workgroup, and Utilities if critical to use of right-of-way) and how it impacted the project location and design.**

ODOT has been involved in the Central City 2035 project, as several state highways lie within the borders of the Central City. However, nothing in this project proposal is on or expected to impact a state facility. Similarly, TriMet has been involved with the overall plan development, but there is nothing in this proposal specific to transit operations. However, it is anticipated that relieving traffic congestion will have a positive impact on transit. The Clay Street reconstruction project (local match funded) is being coordinated with the Union Pacific Railroad, since replacing the railroad crossing is their responsibility. As part of that project, the crossing gate will be connected to the existing traffic signal at Water Ave and Clay Street (construction in 2017; not included in this proposal).