Green Economy & Freight Initiative projects

Name of Project South Rivergate Freight Improvement Project

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

Project nomination narrative

Project nomination narratives provide in depth process, location and project definition details and serves as the nomination form for project funding consideration. **Project narratives should be kept to 12 pages total per project.** This narrative form is available electronically at: http://www.oregonmetro.gov/regionalflexiblefund. Please complete the following:

Project Definition

Base project information

1. Corresponding RTP project number(s) for the nominated project. RTP # 10214 (N. Lombard Multi-Modal Improvements) and RTP# 10373 (Rivergate ITS)
2. Project extent or area description. The South Rivergate Freight Improvement Project includes the South Rivergate District which is bordered by N. Lombard Street to the east, N. Burgard Road to the south, the Columbia Slough to the north and the Willamette River to the west (see project location map Exhibit B). Additionally, intelligent transportation systems (ITS) will be installed along N Columbia Boulevard, to improve the connection for trucks travelling between I-5 and the South Rivergate District.
3. Purpose and need statement (The purpose and need statement should address the criteria as they apply to the project, for example: the project increases access and relieves congestion in to support development of the X industrial area that is forecasted to grow by 2,000 jobs in the priority job sector of Y). The purpose of this project is to improve freight circulation and industrial land access within a regionally significant industrial district (South Rivergate). The needs addressed with this project include: 1) reducing freight delay and out-of-direction travel resulting from roadway blockage by inbound and outbound freight trains by identifying both short and long-term access and circulation improvement needs including grade separation and alternative routes and site access, 2) improve the safety and structural condition of a strategic freight connection by rebuilding the N. Lombard/Rivergate intersection to accommodate turning movements for high volumes of heavy trucks and to identify the long-term improvement needs on N. Rivergate Boulevard between Lombard and Time Oil Road, 3) Improving freight efficiency by implementing ITS solutions for reducing rail/truck conflicts and improving freight access and circulation in South Rivergate as well as implementing ITS solutions to improve safety and reduce travel times for trucks travelling between South Rivergate and I-5 and other connections.
4. Description of project design elements. The Rivergate Freight Improvement Project will be phased to identify both short and long-term access and circulations improvements and recommended capital improvements that will include the following project elements: 1)Transportation Background Analysis – Identify current and projected truck and freight rail

volumes in South Rivergate. Identify traffic circulation and site access issues and constraints; 2)Access and Circulation Strategy – Based on transportation analysis, develop a short and long-term access and circulation strategy for South Rivergate and identify transportation system alternatives and capital improvement needs; 3) Rail Blockage Solutions – Evaluate alternatives including cul-de-sacs/turnarounds, grade separation, rail operation improvements, ITS/notification signage; 4) North Lombard/Rivergate Intersection Improvements - Reconstruct the N. Lombard/Rivergate intersection to accommodate turning movements for high volume of heavy trucks, replace the existing sidewalk and reconstruct the full width of the roadway; 5) North Rivergate Boulevard Improvements – Identify the current and long-term roadway improvements needs on N. Rivergate Blvd between N. Lombard and Time Oil Road including rebuilding the full segment of roadway; 6) Time Oil Road Improvements – Evaluate the cost/benefit of improving Time Oil Road as a city-owned facility and alternative access route when N. Rivergate Blvd is blocked by freight rail traffic; and 7) ITS/Traffic Circulation Solution – Install ITS communication infrastructure including advanced notification systems for rail blockages and CCTV cameras to monitor truck/rail traffic. Phase I: Short-term project planning and development and capital improvements (estimated costs): a) Project Planning and Development ($250K), b) North Lombard/Rivergate Blvd intersection reconstruction ($765K), and c) ITS communication infrastructure ($485K). Total Phase I Cost: $1.5 million. Phase II: Preliminary design and engineering for recommended long-term operational and capital improvements that may include the following options, or combinations: a) Grade seperation of North Rivergate Blvd at the UP Railraod crossing ($11 million – Port estimate), b) Construct cul-de-sacs or turnarounds at the N. Rivergate Blvd/UP Railroad crossing, c) Reconstruct North Rivergate Blvd from Lombard to Time Oil Road ($3.8 million - PBOT estimate), d) Improve Time Oil Road as a city-owned facility and/or alternative access route (cost to be determined).

5. Description of post implementation measurement of project effectiveness (Metro staff is available to help design measurement methodologies for post-construction project criteria performance). Project effectiveness will be measured in several ways, primarily involving engagement with the freight community and local business owners and stakeholders. Business owners in the South Rivergate can be surveyed to determine if the information from the implemented solutions is resulting in behavior changes regarding route choice. Additionally, measuring traffic volumes along Time Oil Road and other vicinity streets will yield data regarding how the information provided by these solutions is being utilized. Closed Circuit cameras that will be installed at several intersections will also provide important data to City staff regarding the performance of key intersections connecting I-5 to South Rivergate; this can inform decisions about signal timing and future improvement needs. Other measures include measuring travel time delay and truck queuing at the N. Rivergate/UPRR crossing during roadway blockages from freight rail traffic. Specific performance measures will be determined based on the outcomes and of this study.

Map of project area

1. Provide a map of the project consistent with instruction in Exhibit B

Project sponsor agency

1. Contact information (name, e-mail, phone number) for:
   - Application lead staff Robert Hillier, PBOT Freight Planning Coordinator; robert.hillier@portlandoregon.gov; 503-823-7567

- Project Manager (or assigning manager) TBD
- Project Engineer (or assigning manager) TBD

2. Describe whether the lead agency has recently led or failed to deliver a federal aid transportation project, and how the agency currently has the technical, administrative and budget capacity to deliver the project. 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 such projects, from project development, through design engineering and construction. 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.

Location

1. Describe how you identified the travel corridor or general area for the project and how regional and local data relevant to the project criteria support this location as your top priority(s). (See Appendix D of the Nomination Packet for criteria relevant to prioritizing project location) This project is located in a regionally significant industrial district (Rivergate) which contains some of the highest concentrations of industrial-sector employment in the Portland-Metro region. Rivergate is Oregon's primary gateway for international trade containing about half of the marine terminals and over three fourths of the marine terminal acreage in the Portland Harbor. Rivergate is also a regional freight rail hub containing the Ramsey, South Rivergate and Barnes Rail Yards providing shippers access to the Class 1 railroads. The N. Lombard Street/Rivergate Boulevard intersection is part of the designated National Highway System (NHS) freight route providing regional shippers access to the St. Johns Bridge/Hwy 30 and Interstate 5. North Rivergate Blvd is the only public access road into South Rivergate which is often blocked by inbound and outbound unit trains at an existing at-grade rail crossing resulting in lengthy delays and blocked access to adjoining industrial properties. The only alternative route into South Rivergate is Time Oil Road which is privately owned and requires 4 miles of round-trip out of direction travel. South Rivergate supports a high concentration of major industrial employers that include Evraz Steel, Simplot, Ash Grove Cement, Georgia Pacific, Archer Daniels Midland (ADM), and Del Monte Foods. This project will evaluate access and circulation alternatives in South Rivergate including a grade-seperated crossing of N. Rivegate Blvd, turn-around/cul-de-sac at the rail crossing, advanced notification system as well as evaluating the cost/benefit of improving Time Oil Road as a city facility and designated alternative route into South Rivergate.

Highest priority criteria

1. Describe how the project will reduce freight delay. Currently, North Rivergate Boulevard provides the only pubic access road into the South Rivergate industrial area. Recent traffic counts show N. Rivergate Blvd carries about 2,300 vehicles per day with heavy trucks (5-axles and greater) accounting for over 25 percent of all daily vehicles. Many of these trucks are heading to and from Evraz Steel carrying raw steel slab (weighing 105,000 lbs each) from the Port's Terminal 6 facility to the Evraz rolling mill for processing before being shipped out to local and regional markets. Field investigations have shown that large trucks are having difficulty navigating the investigation of N Rivergate Blvd at N Lombard Street without crossing into the opposing travel lane creating delay and safety concerns. The existing six-foot sidewalk along the southbound Lombard to westbound Rivergate movement has been

severely damaged by heavy trucks as a result of the inadequate turning radius and also tracking about four feet beyond the back of the sidewalk. Field investigations by PBOT Engineering staff also show the entire 2,500-foot segment of N. Rivergate between Lombard and Time Oil Road is in poor structural condition and needs rebuilding, particularly with a high volume of heavy trucks using this facility. This project will reduce freight delay and improve safety by rebuilding the N. Lombard/Rivergate intersection to accommodate turning movements for the high volume of heavy trucks and replacing the existing sidewalk on the inside of the curve away from turning vehicles to improve pedestrian safety. This project will also identify alternatives to the existing at-grade rail crossing of N. Rivergate Blvd which is often blocked by inbound and outbound unit trains resulting in lengthy delays, blocked access to adjoining industrial properties, and out-of-direction travel. The only alternative route into South Rivergate is Time Oil Road which is privately owned and requires trucks to travel at lower speeds due to the presence of speed humps, curves, and poor pavement condition. The project will evaluate access and circulation alternatives in South Rivergate including a grade-separated vehicular crossing of N. Rivegate Blvd, turn-around/cul-de-sac at the rail crossing, advanced notification system as well as evaluating the cost/benefit of improving Time Oil Road as a city facility and designated alternative route into South Rivergate. For trucks travelling to and from the South Rivergate district from I-5 and other freight routes such as North Portland Road, the ITS components of this project will reduce freight delay and improve safety by providing signal priority to trucks, and by providing information to City staff and dispatchers regarding traffic conditions and signal operations along N Columbia Boulevard.

2. Describe how the project increases freight access to industrial lands, employment centers & local businesses, and/or rail facilities for regional shippers. As previously noted, this project is located in a regionally significant industrial district (Rivergate) which contains some of the highest concentrations of industrial-sector employment and multi-modal freight transportation hubs in the region (truck, rail and marine terminals). This project will directly improve freight access and mobility for the high concentration of existing businesses and future industrial users located in the South Rivergate area. South Rivergate supports a high concentration of major industrial employers that include Evraz Steel, Simplot, Ash Grove Cement, Georgia Pacific, Archer Daniels Midland (ADM), and Del Monte Foods, with Evraz alone providing over 500 jobs. 2010 census tract data indicate that approximately 2400 jobs are located at businesses in South Rivergate (in 2007 prior to the recession there were 3,895 jobs). In the larger Rivergate area, which is affected by traffic in South Rivergate, 2010 Census date shows over 5000 jobs (in 2007 there were over 6500 jobs). In addition, the global agricultural company Archer Daniels Midland (ADM) recently expanded their Portland operation and is constructing an $11 million, 23,599-square-foot sugar processing facility in South Rivergate. This project provides near-term access improvements by rebuilding the N. Lombard/Rivergate intersection to accommodate the current needs for South Rivergate businesses. Other near-term improvements include advanced notification systems will help mitigate the impacts of rail blockages by informing roadway users. Longer-term access and circulation improvements will include potential road/rail grade separation, cul-de-sac/turnarounds, alternative access routes to meet the needs of a growing industrial area and major employment center in the Portland region.

3. Describe how the project contributes to "greening the economy" and how the project helps expand economic opportunities to Environmental Justice/underserved communities. (For the purposes of this allocation we are defining "greening the economy" to be initiatives that contribute to creating a low carbon, resource efficient, and socially inclusive economy) This project is located in North Portland (US Census Tract # 41.01) which contains a workforce population with a significantly higher and growing percentage of African-American (12 percent) and Latino populations (24 percent) and lower income households compared with the rest of Multnomah County, which has a 6 percent African-American and 10 percent Latino populations, respectively. Based on U.S. Bureau of Labor Statistics data, the manufacturing, wholesale trade, transportation and construction sectors provide primarily middle-income jobs and play an important equity role in stemming the erosion of middle-income jobs and widening income inequities. The manufacturing and transportation 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 serve the EJ community in North Portland by improving access to the major industrial employment centers in the South Rivergate industrial area. South Rivergate is a regional multi-modal freight hub providing shippers with access to the Class 1 railroads and many businesses in South Rivergate also provide truck-to-rail and rail-to-ship access. Improving access to these intermodal freight terminals help facilitate increased use of rail and ship which is more sustainable by moving freight with less carbon emissions per ton-mile then by truck. Additionally, ITS improvements will reduce carbon emissions by granting trucks travelling to and from the area signal priority and reducing idling time at red lights and railroad crossings.

High priority criteria

1. Describe any conflicts with freight/active transportation you've identified in your project area. How does the project design mitigate these conflicts? The current configuration of the N. Rivergate/Lombard intersection is inadequate to accommodate the turning movements of heavy trucks which now cross into the opposing travel lane and over an existing sidewalk to negotiate the turn onto N. Rivergate Blvd. This intersection carries about 2,300 vehicles per day with heavy trucks accounting for over 25 percent of all daily vehicles which creates a major safety concern for all vehicles and pedestrians at this location. This project will improve safety and reduce conflicts between trucks and other vehicles by rebuilding the N. Lombard/Rivergate intersection to accommodate the turning radius for the high volume of heavy truck movements. This project will also enhance pedestrian safety by rebuilding the existing sidewalk away from turning vehicles and provide an improved connection to the exiting multi-use path recently constructed along N. Lombard.

2. Does the project help reduce air toxics or particulate matter? Please explain. The existing at-grade rail crossing on N. Rivergate Blvd causes excessive truck idling and unnecessary out-of-direction travel which results in increased fuel use and emissions. Improving freight mobility and site access and reducing delay for the estimated 2,275 average daily vehicles (50 percent which are trucks) that rely on N. Rivergate Boulevard as the primary roadway into South Rivergate will reduce emission levels in North Portland. Further reductions in emissions will

be realized by granting trucks signal priority at two intersections along N Columbia Blvd. between South Rivergate and I-5.

3. Does the project help reduce impacts, such as noise, land use conflicts, emissions, etc. to Environmental Justice communities? Please explain. As previously noted, North Portland contains a significantly higher percentage of African-American, Latino and lower income households compared with the rest of Multnomah County. Providing access improvements (either grade separation, cul-de-sac/turnarounds, Time Oil Rd alternative route or ITS solutions) will provide multiple benefits to the EJ community by reducing the overall emission levels in North Portland from excessive vehicular idling and improved access to a major employment center that provides an important source of middle-income jobs. Making these access improvements will also reduce the incentive for using the local street system for non-local freight use.

4. Describe how the project increases freight reliability. As previosly noted, trucks and all other vehicles (as well as pedestrians) heading to or leaving South Rivergate typically experience on a daily basis lenghly delays by the increased number of unit trains crossing N. Rivergate Boulevard. These unit trains exceed 7,000 feet in length and travel at about 5 mph through N. Rivergate Blvd at just starting or coming to a stop as they move to and from the South Rivergate Rail Yard. With the recent expansion of the South Rivergate Yard, roadway blockages are expected to increase in regularity and further delay truck/vehicle movements in South Rivergate. Reducing the rail/truck conflicts along N. Rivergate Blvd by providing alternatives to the existing at-grade rail crossing as well as improving the operation of the existing Rivergate/Lombard intersection will increase freight reliability for the businesses and employees located within this regionally significant industrial district.Reducing travel times to and from this area from major area roads through implementation of ITS solutions will further.

Priority criteria

1. 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 or have any other significant sources of funds? Please explain. There are limited funding sources available for this type of freight improvement project. Currently, a grade separated rail crossing at North Rivergate Blvd or other roadway-related freight improvements would not be eligible for funding under the ConnectOregon program. This project will advance an essential freight street improvement that provides the only public access into a regionally significant industrial district.

2. Will this nomination leverage other funds or prepare a project to compete for discretionary funding that may otherwise not come to the region? Describe any opportunities you have identified. This project is an extension of the recently completed N. Lombard multi-modal improvement project from T-6 to Rivergate Blvd ($3.6 million Oregon Transportation Investment Act) and will both leverage and complement three previously awarded RFF projects for implementing the Portland Freight Master Plan: 1) N. Portland Rd/Columbia Blvd

intersection project: aka: St Johns Truck Strategy Phase II (recently completed Planning and Design Phase); 2) N. Lombard/St. Louis/Ivanhoe/Philadelphia intersection project (Construction Phase completed); and 3) N. Burgard/Time Oil Rd intersection (Construction phase to begin in 2013/14). This project will also leverage other Rivergate transportation investments including: 1) South Rivergate Yard Expansion ($11 million – ConnectOregon, Port, Union Pacific and BNSF Railroads) and 2)Ramsey Rail Yard Improvements ($13.9 million ConnectOregon, federal SAFETEA-LU, Port Union Pacific and BNSF Railroads).

3. Describe how the project may help reduce the need for highway expansion. As part of the NHS freight network, this project provides a key link to the wide variety of intermodal freight and rail shippers and port terminal operations in the Rivergate Industrial District and Portland Harbor. This project provides direct access to the many industrial businesses located in South Rivergate, many of which also have truck-to-rail and rail-to-ship access. Improving access to these intermodal facilities helps reduce the need for highway expansion.

4. Describe any multi-modal elements included in the design of your project. This project improves access to a regionally significant multi-modal freight hub that provides regional shippers access to the Class 1 railroads as well as rail-to-ship access. This project will also improve pedestrian safety and circulation by improving the existing sidewalk infrastructure and improved access to public transit service in South Rivergate.

Process

1. 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. (Answer should demonstrate that the process met minimum public involvement requirements for project applications per Appendix A) The Portland Freight Committee (PFC) was the primary review body for evaluating and recommending candidate green economy & freight projects for 2016-18 Regional Flexible Fund allocation. The PFC is advisory to the Portland City Council on issues related to freight mobility and its membership includes over 40 representatives of freight service providers, shippers, port, rail, trade associations and businesses directly related to multi-modal freight activities. Beginning in December 2012, the PFC formed a subcommittee to identify candidate projects from the Portland Freight Master Plan. At their February 7th 2013 meeting, the PFC voted unanimously to recommend the South Rivergate Freight Improvement Project for 2016-18 Regional Flexible Funds Allocation.

2. 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. As described above, 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 represented on the PFC and have at varying degrees participated in the process of identifying candidate RFF freight projects. PBOT staff has also actively coordinated with Metro in seeking technical guidance on the nomination of candidate freight projects.