Green Economy & Freight Initiative projects

Name of Project Clackamas County Regional ITS Project Phase 2B

(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. The Clackamas County ITS Plan is identified in the Metro Regional Freight Plan as Metro ID#10020. This project also indirectly helps to implement the following RTP projects: 10022, 10023, 10059, 10061, 10869, 10890, 10894, 11104, 11349 and 11350.
2. Project extent or area description. The Freight Mobility Study will focus in two Subareas including the Clackamas Industrial area and the City of Wilsonville.
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). Back in 2011/12, Clackamas County applied for Metro's Regional Flexible Funds to address Green Economy and Freight Initiative projects. The scope of the Clackamas County Regional Freight Intelligent Transportation Plan (ITS) Project, set to start as early as summer of 2013, is to improve the reliability and safety of the regional freight system by reducing freight vehicle delay in known congested areas and improve freight-related roadway design deficiencies. The ITS project enhancements in these freight corridors will help reduce truck idling time caused by congestion which will in turn reduce air toxics or particulate matter in the industrial areas and in the neighboring residential areas. The enhanced travel time reliability and reduced freight traffic delay in the project area will improve the freight access for the Interstate Highway System to the existing industrial lands and employment centers located within the Project Area. The creation of the Freight ITS Plan will be done in cooperation with ODOT, Clackamas County and effected cities.The first round of the project is planned to be completed in two part process. Phase 1 will consist of the development of County's Freight ITS Plan, which will become an amendment to the County ITS Plan. Phase 2 of the project, which this cycle of funding will help to implement, will develop a project priority list followed by the construction of many improvements as funding allows. Since the Freight ITS Plan is anticipated to identify many more projects than the original funding can address, there will be a continuing need to seek additional funding. To secure additional funding, Clackamas County is applying for this iteration of Metro's Regional

Flexible Funds for Green Economy & Freight Initiative projects slated for 2016-18. The additional funds will help continue the implementation of priority list developed from Phase I & 2 from the original Freight ITS project.

4. Description of project design elements. In Phase 2B of this project, the County will continue with the implementation of projects identified in the priority list. Improvements are proposed to include a wide variety of ITS and small roadway improvements. Some of these improvements could involve upgrading traffic signal equipment and timing or providing travel information to inform freight trip decisions. Specific freight routes that are expected to be included in the Freight ITS Plan include: The Milwaukie Expressway (Highway 224) Intersections - Lake Road, Pheasant Court, and Johnson Road, Highway 212/224, between McKinley Street to Rock Creek Junction, Jennifer Street / Evelyn Street / 102nd Drive, SE 82nd Drive signalized intersection between the Gladstone Interchange and OR 212/224, Wilsonville North/South I-5 Connection , Day Road/Elligsen Road/Boones Ferry Road/95th Ave, Wilsonville Road, and Sunnybrook Between 97th Avenue and 82nd Avenue. The ITS treatments that could be deployed on various freight routes in these areas include signal system upgrades, over height vehicle active warning systems/enhancements at low vertical clearance underpasses, at-grade rail crossing surfacing improvements, traffic surveillance cameras, automated probe vehicle collection systems, fiber obtic communication systems, enhanced traveler information website, freight way finding signs, and weight in motion sensors and radar video counters.
5. Description of post implementation measurement of project effectiveness (Metro staff is available to help design measurement methodologies for post-construction project criteria performance). Evaluation of the performance of each of the freight ITS treatments is an important component to validating the return on project investment. Operational evaluation can typically occur is a much quicker fashion, when compared to safety evaluations, which may require more time to determine the impact on crashes. Nevertheless, the following are examples of approaches and metrics for measuring performance of freight ITS projects that could be conducted: Crash records for change in safety performance, conduct a road safety audit along key freight routes, 2070 Voyage controller logs for truck signal priority (frequency/duration to approximate # of truck stops avoided & impact to non-priority movements), freight automatic vehicle location (AVL) data for travel time, speed and reliability measures, probe vehicle data (i.e. GPS, Bluetooth) for travel time, speed and reliability measures, and user feedback from freight community on frequency, ease and usefulness of the treatment

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 Tanya Johnston, tjohnston@clackamas.us, 503-742-4677
   - Project Manager (or assigning manager) Bikram Raghubansh, bikramrag@clackamas.us 503-742-4706
   - Project Engineer (or assigning manager) Bikram Raghubansh, bikramrag@clackamas.us 503-742-4706

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. Clackamas County DTD and Transportation Planning Division have successfully completed numerous projects relating to active transportation. Our project management staff are professional engineers and planners capable of completing the proposed scope of work within the given time frame and within the estimated budget. The first round of the Clackamas ITS Freight Plan was previously funded through the Metro Regional Flexible Funds and the project is planned to be completed in two part process. Phase 1 will consist of the development of County's Freight ITS Plan, which will become an amendment to the County ITS Plan. The successful delivery to date of key deadlines and deliverables for the first funded phase of this project demonstrates Clackamas County's ability to complete federally funded transportation projects.

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) The Freight ITS improvements are consistent with the regional ITS Plan currently planned as part of the TransPort program. Improved freight travel reliability will help maintain effective freight access to industrial lands, employment centers & local businesses and rail facilities in this portion of the region for all regional shippers

Highest priority criteria

1. Describe how the project will reduce freight delay. The Freight Mobility Study will identify key freight routes and develop a strategy to improve operations along those key routes. The comprehensive "toolbox" of freight ITS treatments and Freight ITS Project Performance Measures will provide a variety of ITS system improvements that will help enhance travel time reliability and reduce freight traffic delay in the project area. Phase 2B of this project will continue with the implementation of these key improvements to reduce freight delay and enhance travel time significantly.

2. Describe how the project increases freight access to industrial lands, employment centers & local businesses, and/or rail facilities for regional shippers. In the development of Freight ITS Plan, the Freight Mobility Study will focus in two Subareas (see attached maps), Clackamas Industrial area and City of Wilsonville. These two areas are key industrial areas and contain some of the largest employers in Clackamas County. The focus will be on freight system problems and development of strategies to improve operations along the routes within the Subareas. The City of Wilsonville Subarea Freight Mobility Study will focus on freight movement within the City and the connections to I-5. The Freight Mobility Study will identify key freight routes and develop a strategy to improve operations along those key routes. Phase 2B of this project, for which we are requesting funding, will help continue to implement the project list that improve access to industrial areas and employment centers.

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) There are a limited (2) number of Environmental Justice communities within the Freight ITS Projects areas as identified by Metro in the demographic information prepared for this project. They are (1) a community that has a high proportion of multifamily housing and a higher than average concentration of low income and young residents along 82nd Drive on either side of Highway 212, and (2) a community with a higher than average concentration of elderly residents south Highway 212 between 135th Avenue and 142nd Avenue – primarily in 3 mobile home parks. The Freight ITS projects, as identified in Phase 2B, will improve freight system operations, reduce emission from freight traffic and enhanced freight corridor safety in the vicinity of these communities. From a more regional perspective, a substantial portion of the food consumed in the region is shipped from a series of distribution centers along OR 212 and OR 224. Improved freight reliability in the project area will support the efficient and equitable distribution of food to all communities in the region.

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 location of the Freight ITS Projects are highly congested arterial corridors that also have a high level of truck traffic. There are existing conflicts between the modes of traffic that use these freight corridors. The projects in the Freight ITS Plan, and implemented through Phase 2B of this project, will generally improve operations and safety in these congested corridors and reduce the level of conflict for the users of the corridor.

2. Does the project help reduce air toxics or particulate matter? Please explain. The ITS project enhancements in these freight corridors will help reduce truck idling time caused by congestion which will in turn reduce air toxics or particulate matter in the industrial areas and in the neighboring residential areas. Reduced level of congestion in these freight corridors will reduce the amount of vehicle idling time for all classes of vehicles which in turn reduces local vehicle exhaust emissions. This results in a localized decrease in vehicle related air toxics and particular matter. The projects identified and then implemented through Phase 2B will help to reduce air toxins and particulate matter significantly.

3. Does the project help reduce impacts, such as noise, land use conflicts, emissions, etc. to Environmental Justice communities? Please explain. The Freight ITS project will not significantly impact land uses in the project areas and, thus, will not significantly change any existing land use conflicts that may exist. This project should marginally reduce local emissions and noise level in the vicinity of the existing congested freight corridors. These improvements will benefit the existing communities in the vicinity of Highway 212.

4. Describe how the project increases freight reliability. The Freight ITS project, and the implementation and identification of priority projects, will reduce congestion and improve travel time reliability in the existing congested freight corridors. The improved travel time reliability will produce and improve the reliability of the freight delivery system by improving the ability of freight vehicles to move from their existing distribution center to the Interstate Highway system. Some of the potential identified projects and that would be implemented

through Phase 2B of this project include signal system upgrades to improve movement through key freight corrridors, improving the ability of freight carriers to move goods and services in the area.

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. The region has an existing ITS program (TransPort) which is focused on improving general traffic flow along major highway corridors. The Freight ITS project would be consistent with the regional ITS architecture and goals of the Metro TransPort Technical Advisory Committee. The Freight ITS Project would extend the regions ITS system by adding complimentary ITS improvements to the planned ITS system that would focus on improving freight operations in congested freight corridors. The Freight ITS improvements would supplement the overall ITS system and would be unique in the region. Phase 2B of this project will implement the key ITS improvements for the overall improvement of the system.

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. The TransPort program has planned a number general ITS system improvements in the identified freight corridors. ODOT has also planned or is constructing a number of intersection specific improvements in the freight corridors covered by the Freight ITS Project. The Freight ITS project builds on the work planned or recently completed in these freight corridors to further enhance freight mobility operations on these facilities.

3. Describe how the project may help reduce the need for highway expansion. There are a number of road facility improvements planned or in process within the Freight ITS plan study area including improvements to the intersections of OR 224 and Webster Road, OR 212 and 135th Avenue, interchange improvements at I-5 and Wilsonville Road and the Sunrise JTA projects (between OR 224 and 122nd Avenue). These projects provide solutions to a number of traffic congestion problems in the congested freight corridor but they cannot solve the existing congestion problems. The purpose of Freight ITS Project is to use the existing and planned facilities within the identified freight corridors as efficiently as possible. The Freight ITS project will allow the existing and planned facilities to address congestion issues to the maximum extent feasible without additional facilities. Phase 2B of the Freight ITS project will actually implement the needed improvements to improve freight mobility and reduce the need for highway expansions.

4. Describe any multi-modal elements included in the design of your project. While the Freight ITS Plan is not specifically a multimodal project – freight priority improvement will also support improved transit (bus) operations in the freight corridors by providing the buses with the same priority operational improvements that are available to large trucks. In addition, the safety improvement associated with these projects will be available to all modes of traffic.

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) Clackamas County secured funding for the first phase of the Freight ITS plan through the previous round of Metro's flexible fund allocations. Since the Freight ITS Plan is anticipated to identify many more projects than the original funding can address, the 2016-2018 funding cycle will help continue to implement the priority list that is developed through this project. For the first phase and identification of this project. A draft of this narrative was sent to the cities of Wilsonville, Happy Valley, and Damascus, Washington County and ODOT for review and comment prior to the final submittal to Metro. There were only a couple of responses which contained minor editorial comments which have been addressed in this narrative. The public comment process generated a total of 63 comments on all of the Regional Flexible Fund project proposals- see attached. Only three of these comments address the Regional Freight ITS Project directly and no changes to the project were required to be made as a result of these comments. Clackamas County Fire District 1 supported this project. Dick VanIngen supported the project. Pat Russell stated that this project should be address through urban renewal funding and then went on to note that there is no urban renewal funding available in this area for this project.

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. This project will be continuation of Phase 2 Freight ITS Project. In this Phase 2B of the project, the County will continue with the implementation of projects identified in the priority list. These system improvements will be coordinated with ODOT, TransPort, Washington County and the Cities within Clackamas County. ODOT, as well as the cities of Wilsonville, Happy Valley, and Damascus were all included in the drafting and planning for this project and will continue to be key players in Phase 2 to identify the project list and Phase 2B as we implement the key improvements in the project area.