

BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF APPROVING ) RESOLUTION NO. 08-3952  
THE ALLOCATION OF 2008-11 )  
METROPOLITAN TRANSPORTATION ) Introduced by Rex Burkholder  
IMPROVEMENT PROGRAM TO THE  
PORTAL ARCHIVED DATA USER  
SERVICES PROJECT AND AMENDING  
THE 2008-09 UNIFIED PLANNING  
WORK PROGRAM

WHEREAS, the Metropolitan Transportation Improvement Program (MTIP) prioritizes projects to receive transportation-related funding and the Unified Planning Work Program (UPWP) includes transportation planning activities of Metro and other area governments involved in transportation planning activities; and

WHEREAS, the Joint Policy Advisory Committee on Transportation (JPACT) and Metro Council must approve the MTIP and the UPWP and any subsequent amendments to allocate funding to projects; and

WHEREAS, the JPACT and Metro Council approved the 2008-11 MTIP on August 16, 2007 and the 2008-09 UPWP on April 17, 2008; and

WHEREAS, the 2008-11 MTIP established a \$3,000,000 program fund for Intelligent Transportation System (ITS) projects and conditioned the allocation on project recommendations by TransPort Subcommittee to the Transportation Policy Alternatives Committee (TPAC); and

WHEREAS, TPAC supports the recommendation of the TransPort Subcommittee to the TPAC to allocate \$203,000 to the PORTAL Archived User Data Service project to fund database management and enhancements; and

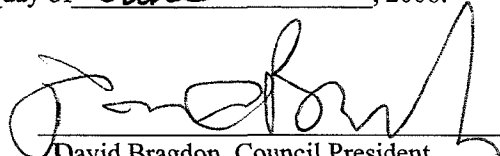
WHEREAS, JPACT approved Resolution No. 08-3952 at the June 12, 2008 meeting; and

WHEREAS, this allocation of \$203,000 is not included in the 2008-11 MTIP and the 2008-09 UPWP Regional Mobility Program budget summary; and

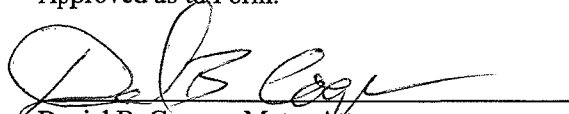
WHEREAS, this change to programming for this project is exempt by federal rule from the need for conformity determination with the State Implementation Plan for air quality; now therefore

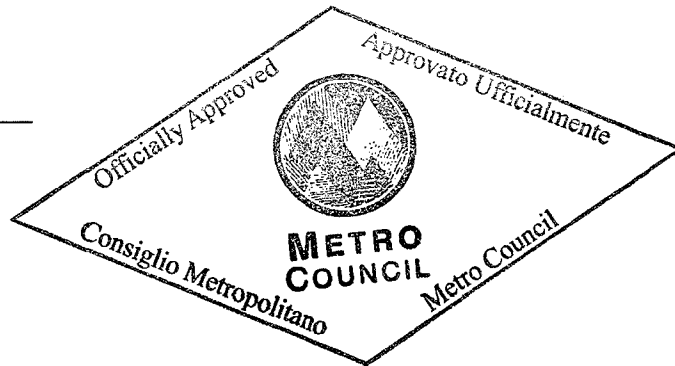
BE IT RESOLVED that the Metro Council hereby adopts the recommendation of JPACT to approved the to allocation of \$203,000 from the ITS program, adopted in the 2008-11 Metropolitan Transportation Improvement Program, for the PORTAL Archived Data User Service project and amend the 2008-09 Unified Planning Work Program.

ADOPTED by the Metro Council this 26<sup>th</sup> day of June, 2008.

  
David Bragdon, Council President

Approved as to Form:

  
Daniel B. Cooper, Metro Attorney



## STAFF REPORT

### IN CONSIDERATION OF RESOLUTION NO. 08-3952, FOR THE PURPOSE OF APPROVING THE ALLOCATION OF 2008-11 METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM TO THE PORTAL ARCHIVED DATA USER SERVICES PROJECT AND AMENDING THE 2008-09 UNIFIED PLANNING WORK PROGRAM

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Date: June 12, 2008

Prepared by: Deena Platman

#### BACKGROUND

In the 2010-2011 MTIP, JPACT and Metro Council identified \$3 million in new programmatic funding for Intelligent Transportation System (ITS) projects. The program funds were conditioned on the TransPort Subcommittee of TPAC making a recommendation on the allocation of these funds to TPAC, JPACT, and Metro Council. Further, TransPort recommendation was required to consider the following items:

- Consistency with National ITS architecture and Standards;
- First consideration to a project of similar scope to the Tualatin-Sherwood Road ATMS: I-5 to 99W;
- Consideration to projects defined in the Clackamas County ITS application
- Developed through a Regional Concept of Transportation Operations process or as part of an opportunity fund for supportive infrastructure or spot improvements
- Evaluated in the context of a regional strategy for use of programmatic ITS funding.

To meet the conditions for allocation of ITS programmatic funds, Metro sought and received a 2007-09 Transportation and Growth Management (TGM) grant to develop the Regional Transportation System Management and Operations (TSMO) Refinement Plan, which will result in the allocation of 2010-11 MTIP funds programmed for ITS and establish priorities for future funding. A comprehensive recommendation is expected by fall of 2009.

In advance of the a 2009 Regional TSMO Refinement Plan, TransPort is recommending allocation of \$203,000 from the ITS program fund to respond to the immediate need to support the PORTAL Archived Data User Service, hosted and managed by the Oregon Transportation Research and Education Consortium (OTREC) at Portland State University.

The memo in Attachment 1 provides a more detailed description of PORTAL, its services, and value to the region. It also describes how MTIP funding would be used. In summary, the regional partners and OTREC have made a significant investment in the development of a regional data archive. To date, the on-going management of PORTAL has been supported by a grant from the National Science Foundation (NSF). With the NSF funding now depleted, PORTAL no longer has a funding source and is not being supported or maintained. This allocation would support .5 FTE for an OTREC professional data manager and two graduate students, who will manage and enhance PORTAL.

The \$203,000 MTIP allocation would provide bridge funding for two years until the Regional TSMO Refinement Plan has been completed and a long-term strategy to support PORTAL has been determined. The requested allocation is consistent with the program considerations listed above.

The 2008-09 Unified Planning Work Program (UPWP) includes two objectives for improvements to the regional data archive under the Regional Mobility Program. This amendment provides additional funding consistent with the UPWP

## **ANALYSIS/INFORMATION**

1. **Known Opposition** There is no known opposition to the proposal.
2. **Legal Antecedents** Amends the 2008-11 Metropolitan Transportation Improvement Program adopted by Metro Council Resolution 07-3825 on August 16, 2007 (For the Purpose of Approving the 2008-11 Metropolitan Transportation Improvement Program for the Portland Metropolitan Area). Amends the 2008-09 Unified Planning Work Program adopted by Metro Council Resolution 08-3929 on April 17, 2008 (For the Purpose of Approving the 2008-09 Unified Planning Work Program for the Transportation Planning in the Portland/Vancouver Metropolitan Area).
3. **Anticipated Effects** Adoption of this resolution will allocate federal transportation funding for the maintenance and enhancement of PORTAL, the regional data archive service.
4. **Budget Impacts** None

## **RECOMMENDED ACTION**

Metro Staff recommends the approval of Resolution No. 08-3952.

M E M O R A N D U M

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DATE: June 12, 2008  
TO: Metro Council and Interested Parties  
FROM: Deena Platman, Metro  
TransPort Subcommittee of TPAC  
SUBJECT: MTIP Allocation for PORTAL Archived Data User Service

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**Action**

Approve Resolution 08-3952, for the purpose of amending the 2008-11 Metropolitan Transportation Improvement Program (MTIP) and the 2008-09 Unified Planning Work Program to allocate Intelligent Transportation System program funds to the PORTAL Archived Data User Service project.

**Background**

PORTAL is the official Archived Data User Service (ADUS) for the Portland Metropolitan region as specified in the Regional ITS Architecture. Located at Portland State University (PSU), PORTAL provides a centralized, electronic database that facilitates the collection, archiving, and sharing of information/data for public agencies within the region. The data stored in PORTAL includes loop detector data from freeways in the Portland metropolitan region, weather data, incident data, VMS message data, truck volumes, and a large sample of bus Automatic Vehicle Location (AVL) data. PORTAL receives 20-second volume, occupancy and count data for Portland-area freeways from ODOT in real-time. This data has been archived since July 2004 and the retrieval and archiving process is fully automated. Weather data is retrieved from HYDRA and METAR as available and is archived automatically. The incident and VMS data archival process is semi-automated; incident information from July 1999 through December 2007 is archived as well as VMS messages from 2006 and 2007.

The creation of the PORTAL data archive was supported by a \$500,000 CAREER grant to Dr. Robert Bertini from the National Science Foundation (NSF). This investment has created a data archive and web interface to the archive. In addition, FHWA (through ODOT) has supported the purchase of hard disc storage, the region has invested in the development of the communications network to support the electronic transfer of data, and TransPort has previously helped select some particular enhancements (e.g. incident data and bottleneck analysis) to be funded through a 2005 ITS Integration earmark.

The PORTAL data archive is a valuable resource for both researchers and practitioners. The availability of the PORTAL archive has made research projects such as the System-Wide Adaptive Ramp Metering (SWARM) evaluation, development of arterial performance measures, and freeway travel time evaluations and improvements possible. Most recently, PORTAL provided data to support development of the Columbia River Crossing DEIS, 2035 Regional Transportation Plan, and the Regional Freight and Goods Movement Plan. Finally, PORTAL, and related research projects at PSU, increase the visibility of the Portland region and provide good "marketing" for local agencies. Looking ahead, PORTAL will be a necessary tool for implementing the region's Congestion Management Process and provide valuable

information to the development of transportation system plans, corridor planning, and system management and operations.

### **Current Status**

The NSF funding that has supported the development and maintenance of PORTAL recently concluded. While ODOT data continues to be automatically retrieved and archived, PSU can no longer provide the oversight to ensure the quality of the data nor will there be any enhancements to PORTAL. It simply withers.

PORTAL needs a sustainable source of funding to both survive and flourish as the region's data archive. The upcoming Regional Transportation System Management and Operations (TSMO) Refinement Plan process will work towards a long-term strategy for PORTAL and the region's data archive needs. The plan will be completed by Fall 2009. In the interim, a source of funding is necessary to sustain PORTAL until the TSMO Refinement Plan is completed.

### **Funding Recommendation**

TransPort, recognizing both the importance of a regional data archive service and the substantial investment to date in software development and communications infrastructure to support PORTAL, advocates for the regional financial support for on-going maintenance and enhancements.

In partnership with PSU, TransPort has developed a program and funding recommendation for PORTAL. The recommendation requests that Metro obligate \$203,000 of the \$3,000,000 in regional flexible funds allocated for the TSMO program in the 2010-11 MTIP for PORTAL. At their May 14, 2008 TransPort meeting, members approved the recommendation. TPAC unanimously approved the recommendation at their May 30, 2008 meeting.

The request would support one 0.5 FTE PSU professional staff and two graduate research assistants for a two-year period. The services provided to the region include:

- PORTAL System Maintenance - Handling of all software, hardware, and system upgrades that impact PORTAL.
- PORTAL Training and Support - Two group training sessions per year for regional agency partners. These sessions will also be used to obtain feedback on PORTAL.
- PORTAL Sustainability - In the first year, work will be required to improve the professionalism and maintainability of the PORTAL system including code maintenance, documentation, and testing.
- PORTAL Enhancements - To support its function as an active data archive, PORTAL will be enhanced with additional functionality. Possibilities include customized performance reports, incorporation of new data types. Enhancements to be determined by an advisory committee.

A PORTAL advisory committee will be established with input from TPAC and TransPort. The advisory committee will determine what features will be added to PORTAL each year. Advances in PORTAL will be communicated to the transportation community through presentations and publications. The advisory committee will also look into establishing a sustainable funding approach for the long-term management of the database.

As a condition of the TSMO program funding, TransPort's recommendation to TPAC, JPACT, and Metro Council on the allocation of these funds should consider a number of elements including:

- Consistency with National ITS architecture and Standards;
- First consideration to a project of similar scope to the Tualatin-Sherwood Road ATMS: I-5 to 99W;
- Consideration to projects defined in the Clackamas County ITS application

- Developed through a Regional Concept of Transportation Operations process or as part of an opportunity fund for supportive infrastructure or spot improvements
- Evaluated in the context of a regional strategy for use of programmatic ITS funding.

The recommendation to obligate MTIP funds for PORTAL is consistent with and/or supportive of the elements listed above. The National ITS Architecture as well as the Portland Regional ITS Architecture identified data archiving as a core user service. In addition, the Clackamas County ITS plan includes regional archived data management in its architecture. With enhancements, PORTAL will also be a valuable tool for archiving data and evaluating performance for ATMS corridors such as Tualatin-Sherwood Road. Although the recommendation to obligate funds comes in advance of the completion of Regional TSMO Refinement Plan, the Portland Regional ITS Architecture acknowledges the key role of PORTAL to provide “a centralized, electronic database that facilitates the collection, archiving, and sharing of information/data for public agencies within the region.” The data is used by many agencies for planning, design, safety, operations, and research; and with sustained investment can be made more robust into the future.