BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF ESTABLISHING)	RESOLUTION NO. 03-3311
AN INTELLIGENT TRANSPORTATION)	
SYSTEMS (ITS) ADVISORY)	Introduced by: Councilor Rod Park
SUBCOMMITTEE OF THE)	
TRANSPORTATION POLICY)	
ALTERNATIVES COMMITTEE (TPAC))	

WHEREAS, the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) initiated federal support for deployment of Intelligent Transportation System (ITS) technology throughout the nation to harness computer and digital communication technology to improvement of surface transportation; and

WHEREAS, this federal ITS initiative was retained in the Transportation Equity Act for the 21st Century (TEA-21); and

WHEREAS, the Metro region was the recipient of an ITS early deployment grant that produced a 20-year plan (the Portland Regionwide Advanced Traffic Management System Plan, DKS, 1993) for deployment of traffic management technology throughout the region (hereafter, the ITS Plan); and

WHEREAS, the ITS Plan addresses freeway management, including ramp metering, incident detection systems, emergency dispatch and response systems (COMET Vehicles), driver communication systems and data archiving; and

WHEREAS, the ITS Plan addresses arterial surface street management, including signal system coordination, video monitoring, electronic message signs, emergency and transit vehicle signal preemption and data archiving; and

WHEREAS, the ITS Plan addresses transit system management, including computer aided vehicle tracking and dispatch, smart bus technology, on-board security systems, real-time transit-traveler information and data archive and analysis capabilities; and

WHEREAS, sub-regional implementation plans have been developed cooperatively by the Oregon Department of Transportation (ODOT), the City of Gresham, Multnomah County, the City of Portland, the City of Vancouver and Clark County Washington and additional sub-regional plans are being developed with regional funds for Clackamas and Washington Counties; and

WHEREAS, TriMet and C-TRAN and the Port of Portland have, or are preparing equivalent subregional ITS plans addressing transit, freight and airport access operations that expand the initial regional emphasis on use of ITS technology for traffic operations to the broader issues of multi-modal transportation systems management; and

WHEREAS, the technical committee convened to oversee preparation of the ITS Plan in 1992 has since continued to meet under ODOT oversight; and

WHEREAS, the committee is referred to as TransPort; and

WHEREAS, TransPort is attended by representatives from ODOT-Headquarters and ODOT-Region 1, Washington State DOT-Southwest Region, FHWA, Metro, Southwest Washington RTC, Tri-

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Met, C-TRAN, the Port of Portland, Clackamas, Multnomah and Washington Counties and Clark County Washington, the Cities of Gresham, Beaverton and Portland in Oregon and Vancouver in Washington, the City of Portland Bureau of Emergency Communication, 911 Centers, and Portland State University;

WHEREAS, TransPort has initiated development of a federally mandated Regional ITS Architecture to assure system and component level compatibility of multi-agency, multimodal ITS field devices, communications networks and computer hardware and software technologies; and

WHEREAS, TransPort has been nationally recognized as a model of interagency cooperation and resource efficiency and conforms with the concept of operations requirements mandated by U.S. DOT rules for region-scale coordination of federally funded ITS initiatives; and

WHEREAS, continuing progress to maximize efficiency of current multi-modal ITS investments will increasingly require investment in communication and computer system enhancements that do not primarily benefit any single agency; and

WHEREAS, TransPort is well positioned to evaluate regional ITS initiatives and prioritize cross jurisdictional investment priorities; and

WHEREAS, Metro, acting as the Portland-area Metropolitan Planning Organization is responsible for planning the region's transportation system and for allocating significant sums of federal transportation funds; and

WHEREAS, ITS systems provide policy makers with rapidly evolving technological and policy options with respect to increasing efficiency of freeway, arterial and transit operations; and

WHEREAS, specific categories of federal funds are targeted for ITS implementation from time to time; and

WHEREAS, Metro's Joint Policy Advisory Committee on Transportation (JPACT) and the Transportation Policy Alternatives Committee (TPAC) will be addressing a number of ITS policy, program, and project issues over the coming years as a result of federal, state and local actions; now, therefore

BE IT RESOLVED by the Metro Council;

- 1. *TransPort* is recognized as the ITS Subcommittee of TPAC responsible for initial evaluations and recommendations relating to the region's ITS planning, programming and implementation activities, in particular, to those federal, state and regional actions identified above.
- 2. The primary mission of the ITS Subcommittee shall be to provide a consensus-driven forum for cooperative ITS planning and deployment to assure compatibility between currently deployed technology and new national, state, regional and jurisdictional initiatives, consistent with U.S. DOT requirements for a concept of operations program to support implementation of federally funded ITS infrastructure.
- 3. The ITS Plan and the various associated geographic and multi-modal refinement plans shall be the core policy document for implementation of multi-modal ITS transportation systems

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management applications in the region and the ITS Subcommittee shall provide input in future updates of the Regional Transportation Plan.

- 4. The ITS Subcommittee shall assure that all ITS-based transportation management projects envisioned in the Regional Transportation Plan that receive regionally allocated federal funds are compliant with the Regional ITS Architecture, as required by TEA-21.
- 5. The ITS Subcommittee is authorized to evaluate regional ITS initiatives for technical merit; evaluate projects submitted for regional, state and federal funding through the MTIP process, and propose coordination of funds authorized to implement regional ITS technology integration initiatives where no individual project sponsor has been identified.
- 6. The ITS Subcommittee may form more its own subcommittees or working groups for the purpose of exploring specific topics in more detail, including:
 - Communication Infrastructure
 - Architecture
 - Public Safety
 - Standards
 - Operations
 - Data
- 7. The ITS Subcommittee membership shall be non-exclusive and open to all jurisdictions wishing to attend except that its status as a subcommittee to TPAC shall lapse if three consecutive meetings shall be unattended by representatives of ODOT; Tri-Met; Washington, Clackamas and Multnomah Counties and the City of Portland, subject to committee bylaws. Continued attendance is urged by the Port of Portland; FHWA; Clark County, Washington; C-TRAN, Southwest Washington RTC, the City of Vancouver Washington, Washington State DOT-Southwest Region, the Cities of Gresham and Beaverton; the City of Portland Bureau of Emergency Communication and Portland State University. Outreach shall continue to encourage at least occasional attendance from other cities in the three-county urban area; representation from the regional freight industry and expanded representation from regional emergency services providers.
- 8. The ITS Subcommittee is chaired by ODOT and shall meet approximately once per month. Monthly reporting of meeting topics and committee activities shall be provided in the TPAC Monthly Progress Report by Metro staff assigned to the committee; and representatives of the Subcommittee will be dispatched to report to TPAC annually on progress implementing the region's ITS priorities and to brief TPAC on other ITS-related issues.
- 9. *TransPort* is established as TPAC's ITS Subcommittee immediately upon adoption of this resolution.

ADOPTED by the Metro Council this	day of	, 2004.
	Withdr	awn
	David Bragdon, Cou	incil President

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Approved as to Form:	
Daniel B. Cooper, Metro Attorney	

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STAFF REPORT

IN CONSIDERATION OF RESOLUTION NO. 03-3311, FOR THE PURPOSE OF ESTABLISHING AN INTELLIGENT TRANSPORTATION SYSTEMS (ITS) ADVISORY SUBCOMMITTEE OF THE TRANSPORTATION POLICY ALTERNATIVES COMMITTEE (TPAC)

Date: January 16, 2003 Prepared by: Tom Kloster

This action creates an Intelligent Transportation Systems (ITS) Subcommittee of TPAC. The subcommittee will be TransPort, an interagency technical group that has been meeting in one form or another since 1992 when it was formed to guide consultant development of the Portland Regionwide Advanced Traffic Management System (ATMS) Plan. Since forming, the committee has continued to meet regularly to evaluate and prioritize regional ITS initiatives, assure coordination of local agency efforts, maintain compatibility of traffic control devices and computer hardware, software and communication equipment and to pursue federal, state and local ITS funding sources. These roles would continue under the new status as a TPAC subcommittee. Additionally, the resolution endorses the 1992 ATMS Plan as the guiding policy for ITS implementation in the region, consistent with the Regional Transportation Plan (RTP). It provides that the ITS subcommittee will report annually to update TPAC members on progress implementing regional ITS initiatives. It charges the subcommittee to evaluate the technical merits of ITS investments and to provide input to ITS-related components of the RTP. Finally, it authorizes the Subcommittee to evaluate all investments relying on federal funding sources to assure their compatibility with the region's ITS Architecture, a federal regulation which has been informally performed by Transport since 1992.

BACKGROUND

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) initiated a national commitment to develop and implement computer and communication technologies to improve efficiency of existing freeway, surface street (arterial) and transit systems. The Portland-area was awarded early deployment funding by the federal highway administration to prepare a comprehensive technology inventory and implementation plan called an Advanced Traffic Management System (ATMS) Plan. As the concept of computer aided travel management evolved, the term ATMS was replaced at the federal level with Intelligent Transportation Systems, or ITS.

TransPort

The ATMS Plan was completed by DKS Associates in October 1993 and reflected input of an interagency technical committee that included representatives of ODOT, Metro and most of the region's major operating agencies including the City of Portland, Tri-Met, the Port of Portland, the three counties and many of the other smaller cities in the region and the City of Vancouver, Clark County Washington and Washington DOT. This group continued to meet after completion of the ATMS Plan and worked to implement Plan recommendations on a regionwide, bi-state, cooperative basis. Eventually, the ad-hoc committee adopted the name of TransPort. As sharing of operations data and communications infrastruture has expanded within the group of agencies that comprise TransPort, the group has evolved into the multi-modal ITS services coordinating body within the greater Portland-Vancouver metropolitan area. When the early deployment phase of the federal ITS initiative moved into its present emphasis on

integration of modal infrastructure systems (MDI grants), *TransPort* submitted successful applications for funding and has been cooperatively managing implementation of priority technology integration projects in the Portland-Vancouver region.

1993 ATMS Plan

The 1993 ATMS Plan identified elements of a regional, multi-modal traffic management system for the Portland-Vancouver metropolitan region and adjacent state highway corridors. It identified system components that already existed and produced a 20-year implementation program to achieve remaining regional ITS-related transportation systems management objectives. The plan estimated costs for the program and prioritized implementation actions in a set of five-year initiatives, and addressed core infrastructure components of ITS implementation: field devices (e.g., signals, message signs, ramp meters); incident detection (video cameras, loop detectors, etc.), establishment of traffic control centers and incident response capabilities (e.g., ODOT's COMET response vehicles and the ODOT and City of Portland Traffic Management Centers (TMC's); transit management systems (e.g., Tri-Met's computer-aided dispatch system, traffic signal green light extender system (Opticom), real-time arrival displays, etc.); and freight management systems, most notably the "Greenlight" weigh-in-motion sensors installed on the I-5 corridor.

The focus of ITS activity in Portland over the past ten years has largely been to install needed core field devices and communication systems and to perfect the computer hardware and software tools needed to integrate and optimize operation of the devices. These systems help operating agencies maintain field equipment more cheaply and minimize the severity of recurrent system congestion and to identify and rapidly respond to accidents. It is estimated that incidents, such as stalled cars and accidents, account for as much as 40 percent of typical freeway congestion. Similar events on surface streets also dramatically impact transit and freight operations. Early detection and response dramatically reduce delays attributable to such events and these are the strategies targeted by the ATMS Plan for earliest attention and sustained commitment of regional resources.

The ATMS Plan provides the most complete conception of how publicly operated, computer aided traffic management systems could best be implemented in the Portland-Vancouver metropolitan region. Refinements to the plan's vision have been developed, but it remains the core guidance document for gauging appropriate ITS investments. As such, it is recommended in the resolution that the ATMS Plan be formally endorsed as the region's guiding ITS policy document, and thus would define TransPort's latitude in evaluating and recommending ITS investments to TPAC.

The ATMS Plan anticipated refinement planning to deploy aspects of ITS technology that take the system performance data generated by the publicly operated core infrastructure systems and return it as information used by travelers and businesses in their trip planning and routing. The familiar traffic camera displays on local television newscasts is an early example of this relationship. TransPort has developed an ITS Plan that further focuses on delivery of these kinds of applications. Some of these initiatives are just beginning to yield results, such as Tri-Met's real-time bus arrival displays and ODOT sponsorship of internet access to freeway condition maps and camera displays. Other traveler information applications will become an increasing focus of investment in future years. With these core systems in place, marginal enhancements can yield dramatic public access to powerful travel trip planning and routing tools.

Regional ITS Architecture

National standards have been developed to assure that ITS hardware and software tools produced by different manufactures will all be compatible. The concept is very similar to audio equipment, where the consumer is able to purchase components of a sound system from multiple manufactures, plug them into

one another and have them all work together. These same kinds of interchangeability are facilitated by development of both national, regional and project scale architecture schemes. The Transportation Equity Act for the 21st Century (TEA-21) requires that all MPOs develop a regional ITS architecture and to assure that all ITS-related projects using federal funds must comply with the architecture. In 2000, TransPort initiated consultant development of a Draft ITS Architecture. This was necessary to secure federal funds for a variety of management system integration projects for which TransPort had applied on behalf of the state ITS program. The committee has continued refinement of the Architecture and has developed procedures for assuring project level compatibility with the information flows and standards, which are at the heart of the concept. As part of this resolution, TransPort would be formally authorized to conduct this activity as an adjunct of the MPO.

Cross-Agency Funding Applications

Local agencies participating in *TransPort* have made individual requests for regionally allocated federal funds during past MTIP allocations. These requests have been evaluated for technical merit by Metro staff, usually in consultation with ITS experts in the region. Under this Resolution, TransPort would review individual agency applications for technical merit, and advise TPAC on compatibility of such requests with the overall regional ITS program objectives. In rare cases, MTIP funding may be affected by changed technology or project assumptions, resulting in unused ITS funds. In this instance, the Subcommittee's would allocate any unused funds to like projects that satisfy the policy intent of the original MTIP allocation, in consultation with TPAC.

The resolution does not authorize TransPort to advocate its own priorities for MTIP funding outside of the technical evaluation and recommendations role as a subcommittee of TPAC. However, TransPort serve as a forum for coordination of federal, state and regional funding for projects operated by distinct jurisdictions but for which no logical project sponsor can be identified. Under this provision, the committee would not be authorized to apply for federal ITS program initiatives, but could advocate for a member agency to function as a chief sponsor for such proposals. Typically, federal ITS programs permit use of a broader array of already programmed federal, state or local funds and/or other in kind matches. TransPort would be authorized by the resolution to take the lead in coordinating development of a multiagency match agreement as part of an MTIP funding application, but would not serve as the applicant and could not nominate projects for MTIP funding.

The committee will report to TPAC annually on progress implementing the regional ITS program, including presentation of recommendations during MTIP update cycles.

Committee Membership

TransPort membership is open to all interested jurisdictions. A roster of current membership is shown in Attachment 1, and a schedule of *TransPort* meetings for 2004 is shown in Attachment 2. As primarily a coordinating body, decisions would be reached by consensus. However, the committee could also adopt bylaws and a more formal structure, if needed to facilitate decision-making. *TransPort* could also elect to form subcommittees according to topics of interest, such as:

- Communication Infrastructure
- Architecture
- Public Safety
- Standards
- Operations
- Data

Absent such bylaws ODOT will continue to serve as the informal chair and provide the staffing to the group that it has over the past decade. The resolution also establishes minimal participation requirements as an advisory body to TPAC, including representation by key operating agencies (ODOT, TriMet, Clackamas, Multnomah and Washington Counties and the City of Portland) at no less than one of every three meetings without an excused absence. Metro will serve in the federal reporting role for TransPort activities, with monthly progress reports, federal quarterly reports and meeting notices through Metro's public information service.

ANALYSIS/INFORMATION

- 1. **Known Opposition.** There is no known opposition to this proposal.
- 2. **Legal Antecedents.** Metro is charged by TEA-21 with assuring compliance of all federally funded ITS activities with federal and regional ITS Architecture protocols and this responsibility would be delegated to the subcommittee.
- 3. **Anticipated Effects.** Establishment of this Subcommittee would formalize activities presently being provided informally by TransPort's membership, as described in this staff report. Additionally, reporting of committee activity would be the responsibility of Metro staff.
- 4. **Budget Impacts.** This function exists and is ongoing within the Regional Transportation Plan Implementation work plan. Therefore, no additional effect on Metro's budget would result from adoption of this Resolution.

Resolution No. 03-3311, Attachment 1 Current TransPort Committee Roster

First Name	Last Name	Agency
Robert	Bertini	Portland State University
Craig	Bleckinger	Washington County
Chris	Christopher	Washington DOT
Kathie	Condon	Bureau of Emergency Communications
David	Crout	Tri-Met
John	Cullerton	METRO
Ali	Eghtedari	City of Vancouver
Bill	Graham	City of Portland
Michael	Haggerty	CTRAN
Chad	Hancock	Washington DOT
Bob	Hart	Regional Transportation Council
Larry	Hatch	WCCA 911
Tu	Но	Washington DOT
Dwayne	Hofstetter	David Evans and Associates, Inc.
Erin	Janssens	Portland Office of Emergency Management
Marty	Jensvold	ODOT
Patrick	Jones	Bureau of Emergency Communications
Dennis	Jorgenson	ODOT
Scott	King	Port of Portland
Bill	Kloos	City of Portland
Peter	Koonce	Kittelson & Associates, Inc.
Chuck	Larsen	ODOT
Howard	Long	City of Vancouver
Pamela	Maki	City of Beaverton
Jack	Marchant	ODOT
Joe	Marek	Clackamas County
Stan	Markuson	Washington DOT
Jay	McCoy	City of Gresham
Galen	McGill	ODOT
Ray	McKenna	ODOT
Dale	Miller	CTRAN
Dennis	Mitchell	ODOT
Bob	Morast	Washington County
Adrian	Pearmine	IBI Group
Jim	Peters	DKS Associates
Nathaniel	Price	FHWA
Willie	Rotich	City of Portland
Richard	SantaAna	ODOT
Ken	Turner	Tri-Met
Pete	Van Wyhe	CTRAN
Ron	Weinman	Clackamas County
Ron	White	Tri-Met
William	Wright	Clark County Washington

Resolution No. 03-3311, Attachment 2

TransPort Committee 2004 Meeting Schedule

Wednesday, January 14	1:30-3:30 PM
Wednesday, February 11	1:30-3:30 PM
Wednesday, March 10	1:30-3:30 PM
Wednesday, April 14	1:30-3:30 PM
Wednesday, May 12	1:30-3:30 PM
Wednesday, June 9	1:30-3:30 PM
Wednesday, July 14	1:30-3:30 PM
Wednesday, August 11	1:30-3:30 PM
Wednesday, September 8	1:30-3:30 PM
Wednesday, October 13	1:30-3:30 PM
Wednesday, November 10	1:30-3:30 PM
Wednesday, December 8	1:30-3:30 PM

All meetings are held at the ODOT Region 1 office, 123 NW Flanders, Portland, 97209 To receive meeting notices, e-mail Jack Marchant at: Jack.MARCHANT@odot.state.or.us