

BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF ESTABLISHING)
AN INTELLIGENT TRANSPORTATION)
SYSTEMS (ITS) ADVISORY)
SUBCOMMITTEE OF THE)
TRANSPORTATION POLICY)
ALTERNATIVES COMMITTEE (TPAC))

RESOLUTION NO. 02-3244

Introduced by: Councilor Rod Monroe

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 surveillance, 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), Tri-Met, the City of Gresham, Multnomah County, the City of Portland, the City of Vancouver and Clark County and additional sub-regional plans are being developed with regional funds for Clackamas and Washington Counties and Clark County Transit; and

WHEREAS, the technical committee convened to oversee preparation of the ITS Plan in 1992 has continued to meet continuously ever since, under ODOT's auspices; and

WHEREAS, the committee is referred to as TransPort; and

WHEREAS, TransPort is attended by representatives from ODOT-Headquarters and ODOT-Region 1, Washington DOT, Metro, Clark County RTC, Tri-Met, Clark County Transit, Clackamas, Multnomah and Washington Counties and Clark County Washington, the Cities of Gresham, Portland Oregon and Vancouver Washington, the City of Portland Emergency Management Bureau, 911 Centers, the Port of Portland and FHWA; and

WHEREAS, TransPort has formulated numerous initiatives to increase and integrate deployment of ITS technology throughout the bi-state metropolitan region, including sponsorship of successful applications for federal technology deployment grants, coordination of successful agency requests for regional flexible funds distributed by Metro and Clark County RTC, general fund dollars distributed by Tri-Met and Clark County Transit and state dollars distributed by ODOT and Washington DOT; and

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

WHEREAS, TransPort has sponsored development and deployment of traveler information services that use system performance data collected by deployed ITS systems to help inform travelers of significant issues affecting their travel choices; 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 best 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, the Joint Policy Advisory Committee on Transportation (JPACT) and the Transportation Policy Alternatives Committee (TPAC) will be addressing a number 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 a TPAC Subcommittee 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 ITS Plan shall be the core policy document for implementation of ITS traffic management applications in the region and *TransPort* shall provide input in future updates of the Regional Transportation Plan.

3. *TransPort* shall assure that all ITS-based traffic 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.
4. *TransPort* will develop ITS planning and financing recommendations for TPAC consideration.
5. In accordance with procedures approved by TPAC *TransPort* shall be authorized to prioritize, nominate for regional, state and federal funding, and suballocate project funds to regional ITS technology integration initiatives where no individual project sponsor is logically identifiable.
6. *TransPort* membership shall include, at a minimum, representatives of Metro; ODOT; Tri-Met; Washington, Clackamas and Multnomah Counties; the City of Portland; the Port of Portland and FHWA; that continued representation be encouraged from Clark County, Clark County Transit, Clark County RTC, the City of Vancouver Washington, Washington DOT, the City of Gresham, the City of Portland Emergency Management Bureau and regional 911 centers; outreach shall continue to encourage at least occasional attendance from other cities in the three-county urban area, expanded representation from regional emergency services providers and representation from the regional freight industry.
7. *TransPort* shall meet approximately once per month and will be chaired by ODOT, who, upon consultation with members of the subcommittee and TPAC, shall produce meeting agendas, keep regular meeting reports and will report to TPAC semi-annually on progress implementing the region's ITS priorities.
8. *TransPort* is established as a TPAC subcommittee immediately upon adoption of this resolution.

ADOPTED by the Metro Council this _____ day of _____, 2002.

Not Acted Upon
 Carl Hosticka, Presiding Officer

Approved as to Form:

 Daniel B. Cooper, General Counsel

STAFF REPORT

IN CONSIDERATION OF RESOLUTION NO. 02-3244, FOR THE PURPOSE OF ESTABLISHING AN INTELLIGENT TRANSPORTATION SYSTEMS (ITS) ADVISORY SUBCOMMITTEE OF THE TRANSPORTATION POLICY ALTERNATIVES COMMITTEE (TPAC)

Date: October 23, 2002

Prepared by: Terry Whisler

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. The committee has continued to meet to the present day in order to prioritize and promote 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. Additionally, the Resolution approves the 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 twice annually to update TPAC members on progress implementing regional ITS initiatives. It charges the Subcommittee to recommend desirable ITS investments and to provide input to ITS-related components of the RTP. Finally, it formally authorizes the Subcommittee to screen all investments relying on federal funding sources to assure their compatibility with the region's ITS Architecture, as required by federal regulations, which is a function that *TranPort* is already performing for the region informally.

BACKGROUND

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) made 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, it adopted the name of *TransPort*. *TransPort* is more than simply an interagency coordination committee. As sharing of operations data and communications infrastructure has expanded within the group of agencies that comprise *TransPort*, the group has grown into a de facto purveyor of integrated, multi-modal ITS services 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 multi-jurisdictional, multimodal traffic management system desired in the Portland-Vancouver metropolitan region and proximate rural areas such as the Mt. Hood recreation areas. It identified system components that already existed and produced a 20-year implementation program to achieve remaining regional ITS-related traffic management objectives. It estimated costs for the program and prioritized implementation actions in a set of five-year initiatives. The plan addressed all the fundamental aspects of ITS implementation referred to as "core infrastructure" components: 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:" stalled cars and accidents, account for as much as 40 percent of typical freeway congestion. Similar events on surface streets also dramatically impact transit 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 should best be implemented in the Portland-Vancouver metropolitan region. Refinements have been developed to this Plan vision, but it remains the core guidance document for gauging appropriate technology investments. As such, it is recommended in the Resolution that it be formally acknowledged as the region is guiding ITS policy document for purposes of defining *TransPort's* latitude in developing 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 ubiquity of traffic camera displays on commercial television newscasts is an early example of this kind of leveraging. *TransPort* has developed a more purely "end-user" oriented ITS Plan focussing on needs for delivery of these kinds of applications. Some of these initiatives are just now beginning to yield results *ala* Tri-Met's real-time bus arrival displays and internet access to freeway condition maps and camera displays. Other traveler information applications will become an increasing focus of investment recommendations during the next five years as deployment of the core monitoring and management systems becomes more robust. With the core systems in place, marginal enhancements can yield rather 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 (T-21) requires that all MPO’s 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 on behalf 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. This practice would not change. However, the Resolution authorizes *TransPort* to formulate its own set of priorities and apply for regional funds for projects that it deems to be critical for integration of ITS infrastructure operated by distinct jurisdictions but for which no logical project sponsor can be identified. Such applications might be quite specific, or they might mirror those authorized for submission by the TDM subcommittee, where specific project concepts may not yet be finalized (since funds are allocated four years into the future) but categories of need can be clearly anticipated (e.g., a pot of regional funds for fiber-optic linkage of multi-agency signal systems not yet designed but for which funds are allocated in capital plans). In most instances, ODOT or another agency, acting on behalf of the *TransPort* membership, would provide match and administer such funds. *TransPort* would also review individual agency applications and advise TPAC regarding compatibility of such requests with the overall regional ITS program objectives. *TransPort* would report to TPAC twice annually on progress implementing the regional ITS program.

Committee Membership

TransPort membership shall include, at a minimum, representatives of Metro; ODOT; Tri-Met; Washington, Clackamas and Multnomah Counties; the City of Portland; the Port of Portland and FHWA. This is the membership that has provided faithful attendance the past 10 years and represents sufficiently broad facility ownership to warrant vesting of the authority conveyed by this resolution. Though most all decisions by this group are consensus based, a quorum would be established by a majority of the above-mentioned members in attendance at any vote of *TransPort* on any item enumerated in the resolution.

More recently, steady attendance has occurred by representatives from the City of Gresham, Clark County, Clark County Transit, Clark County RTC, the City of Vancouver Washington, Washington DOT, the City of Portland Emergency Management Bureau and regional 911 centers. Nothing in this resolution should be interpreted to discourage this attendance. On matters relating solely to allocation of Portland-area metropolitan funds, agencies outside the Portland-area would not vote. On matters of bi-state significance (e.g., federal ITS grants for bi-state projects) all members in attendance would vote. Outreach would continue to encourage occasional attendance from other cities in the three-county urban area, however non-represented local jurisdictions should be apprised monthly of subcommittee activities through their respective county coordinating committee. Expanded representation from regional emergency services providers and representation from the regional freight industry is encouraged with due regard for avoidance of conflict of interest in matters of potential direct benefit to any private parties.

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 change very little that is not already occurring but rather would formalize activities presently being provided *de facto* by *TransPort's* membership. It would result in probable application by *TransPort* for regional funds over and above ITS project applications that have historically been submitted by local jurisdictions.
4. **Budget Impacts.** This function exists and is ongoing within the Regional Transportation Plan Implementation work plan. Therefore, this action would have no additional effect on Metro's budget from adoption of this Resolution.



METRO

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October 25, 2002

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Re: Signature Authority

Dear Katie, Marv and Lisa:

In my absence from the office for the period of October 28, 2002 through November 4, 2002, you have signature authority to sign payroll, purchase orders, and any other documents that require my signature on my behalf.

Yours very truly,

Daniel B. Cooper
General Counsel

DBC/sm

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Senior Assistant Counsel

Marvin D. Fjordbeck
Senior Assistant Counsel

Lisa M. Umscheid
Senior Assistant Counsel

cc: Pete Sandrock
Jennifer Sims
Payroll