#### **RESOLUTION NO. 2005-246**

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ELK GROVE AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE A MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF ELK GROVE AND THE SACRAMENTO REGION INTELLIGENT TRANSPORTATION SYSTEM PARTNERSHIP REGARDING THE SACRAMENTO TRANSPORTATION AREA **NETWORK (STARNET)** 

WHEREAS, participation in the Sacramento Transportation Area Network (STARNET) by the City of Elk Grove promotes a regional approach to the transportation and air quality issues facing the Sacramento region; and

WHEREAS, the City of Elk Grove is moving forward with a Master Plan for an Intelligent Transportation System (ITS), and

WHEREAS, participation in STARNET is an important aspect of regional ITS integration for the City of Elk Grove.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Elk Grove hereby authorizes and directs the City Manager, or his designee, to execute a Memorandum of Understanding (covering the period from September 15, 2005 until STARNET is either replaced with another regional communications system or a regional communications system for the purpose of ITS operations is no longer needed, or until the MOU is terminated) between the Sacramento Region ITS Partnership and the City of Elk Grove regarding the Sacramento Area Transportation Network (STARNET).

PASSED AND ADOPTED by the City Council of the City of Elk Grove this 24<sup>th</sup> day of August 2005.

DANIEL BRIGGS, MAYOR of the

S TO FORM:

CITY OF ELK GROVE

ATTEST:

ANTHÔNY B. MANZANETTI,

CITY ATTORNEY

#### CERTIFICATION ELK GROVE CITY COUNCIL RESOLUTION NO. 2005-246

STATE OF CALIFORNIA	)	
COUNTY OF SACRAMENTO	)	SS
CITY OF ELK GROVE	)	

I, Peggy E. Jackson, City Clerk of the City of Elk Grove, California, do hereby certify that the foregoing resolution was duly introduced, approved, and adopted by the City Council of the City of Elk Grove at a regular meeting of said Council held on the 24<sup>th</sup> day of August, 2005 by the following vote:

AYES 4: COUNCILMEMBERS: Scherman, Soares, Briggs, Cooper

NOES 0: COUNCILMEMBERS:

ABSTAIN 0: COUNCILMEMBERS:

ABSENT 1: COUNCILMEMBERS: Leary

Peggy E. Jackson, Čity Clerk City of Elk Grove, California

# Sacramento Region ITS Partnership Memorandum of Understanding for Participation in the Regional ITS Deployment Strategy

This Memorandum of Understanding (MOU), executed with an effective date of October 1, 2005, is intended to coordinate the separate activities of participating transportation agencies for the deployment and operation of a regional Intelligent Transportation System (ITS). The purpose of this MOU is to document regional consensus among participating agencies regarding 1) the long-term vision and goals of an ITS deployment, 2) the structure of a regional ITS architecture, 3) the concept of the regional communications network, STARNET (Sacramento Transportation Area-wide Network), 4) responsibilities in maintaining the ITS, and 5) requests for, and use of federal funding for regional ITS integration. This MOU does not prescribe technologies for ITS deployment, but rather establishes objectives and framework within which agencies will develop and maintain ITS systems. Agreements on specific hardware or software components and equitable information cost sharing will be negotiated as necessitated by agencies that advance ITS projects to planning and construction phases.

#### I. Regional ITS Vision

Sacramento Region ITS Partnership ("Partnership") members hereby agree on the goals, and the strategies to meet those goals as articulated in the ITS vision statement (Exhibit A). The Partnership (Exhibit B) agrees that this vision will be used to guide the development of a Strategic Deployment Plan (SDP) and future revisions to the regional architecture. ITS planning and deployment by the individual agencies should be consistent with this vision and its goals.

#### II. Regional Architecture

It is hereby agreed that the development and maintenance of a regional architecture to comply with the National ITS Architecture and Standards must include all transportation stakeholders in the Sacramento region. Standards that regulate any one stakeholder (e.g., APTA standards for transit) are not covered by this MOU. The process for developing a regional architecture includes: identifying regional stakeholders, collecting stakeholder input, inventorying existing systems, determining future services and needs, mapping these findings to the national architecture standards, and building and maintaining a regional architecture as a living document. Each task is required to complete the regional architecture and member agencies will participate in updating the architecture as needed.

#### III. STARNET Regional Services

A. It is hereby agreed that STARNET, in concept, will provide participants to this MOU with:

- 1. the ability to share cross-jurisdictional signal timing data and operations to improve traffic and transit flow,
- 2. the ability to identify incidents which impact upstream/downstream traffic flow,
- 3. the ability to share video among agencies,
- 4. the ability to share traveler information, and
- 5. the ability to archive and access traffic and transit data.

- B. Priority access, control of devices, and security issues related to these regional services will be identified between each agency in a specialized agreement for access. This is an area that cannot be included in the MOU because each agency has its own security access and may desire to provide more access to one partner versus another.
- C. Agencies participating in the MOU agree that they will operate and maintain all relevant devices and software, to the best of their ability, in order to support STARNET.

#### IV. Funding and Project Qualification

Pursuant to the requirements and guidelines identified by the Federal Highway Administration for funding, insomuch as it is mutually beneficial, it is agreed herein that the agencies represented in this MOU will pursue and agree to have their lobbying or advocacy representatives pursue, federal ITS integration funding that will support a collaborative regional effort. Local projects that qualify under this MOU must be identified in the regional architecture and as components of the regional communications integration plan, STARNET. The Strategic Deployment Plan will determine project priority. Participating agencies also agree to support the Sacramento region being identified as a nationally recognized area to receive ongoing ITS earmark funds that will support the regional ITS goal of full integration between all regionally significant transportation agencies. A key Partnership objective is to obtain as much discretionary funding as possible to develop a coordinated regional approach to transportation management/operations, both on a corridor-by-corridor and a regional basis. Specific project funding decisions will be agreed upon as needed by the Partnership under a separate agreement through a local decision making process that includes MOU members who are seeking federal funding and are able to provide local matching funds.

Local ITS projects that are not part of the regional integration effort are not subject to the funding objectives and agreements established herein. Such projects may be funded with other funding sources without qualifying the project as regionally integrated. ITS Partnership approval will not be required for such projects.

#### Membership and Voting

For the purposes of improving the coordination of planning and deploying ITS throughout the region, agencies desiring to participate in the Partnership are required to execute this MOU. Each participating agency will designate one voting member. Voting will be used for decisions on broader regional integration planning and funding issues and not for specific local efforts by or between agencies. If a member agency wishes to deploy an ITS component with Partnership-controlled regional integration funding, and that project deviates from the overall goals or plans of the adopted Sacramento Region architecture and deployment effort, a 60% majority vote by the Partnership will be required. If total requested funding for all candidate projects exceeds the amount of integration funding available, members will vote to select projects to receive funding. Projects with the highest number of votes will be selected. Projects that are local in nature and paid for with non-integration funds are not subject to voting by the ITS Partnership.

#### V. Withdrawal from the MOU

Any agency participating in this MOU may withdraw from the MOU given the following:

- 1. If notification of withdrawal is received by the Partnership at least 120 days before July 1, the start of SACOG's fiscal year, withdrawal will be effective on July 1 of that year. If notification of withdrawal is received less than 120 days before July 1, withdrawal will be effective on July 1 of the following year unless the Partnership agrees to withdrawal that year.
- 2. Any ITS improvements within the agency's jurisdiction that were built with federal ITS integration funding, will be operated and maintained by that agency, to the best of its ability, as a component of the STARNET system for the term of this MOU.

#### VI. Term of the MOU

This MOU is effective until STARNET is either replaced with another regional communications system or a regional communications system for the purpose of ITS operations and is no longer needed. Members of the ITS Partnership will vote to determine if STARNET has become obsolete.

#### Exhibit A

### INTELLIGENT TRANSPORTATION SYSTEMS (ITS) VISION FOR THE SACRAMENTO REGION

#### July 1, 2005

#### Why Consider Intelligent Transportation Systems in Regional Planning?

Sacramento's population is projected to grow by over 700,000 people over the next 20 years. While this growth will generate more inter- and intra-regional travel, transportation agencies are limited in the number and scope of infrastructure projects they can undertake to accommodate the additional travel by households and businesses. Seeking a solution to this dilemma, regional transportation agencies have embraced Intelligent Transportation Systems (ITS) to help them improve the operating efficiency of our existing infrastructure. ITS helps emergency service agencies reduce response time and clear accidents sooner. Roadway technologies are available that reduce stop-and-go traffic conditions, thereby improving mobility on our roadways and reducing vehicle emissions. ITS technologies that improve timeliness and facilitate transfers are the cornerstone of efforts to expand transit operations. Traveler information, made available via the internet, telephone, or smart kiosks, will help people make better decisions about when, where, and how to travel. Safety and mobility enhancements for pedestrians and bicyclist are also available and are particularly relevant in the dense, mixed-use environments envisioned in Blueprint. Collectively, these and other ITS technologies will improve mobility, safety, air quality, and accessibility throughout the region without relying solely on major infrastructure investments.

#### ITS and the Goals of the 2025 Metropolitan Transportation Plan

The ten goals of the MTP are listed below and followed by brief descriptions of how ITS can help achieve those goals. While these goals may be updated in the 2027 MTP, they form an important basis for crafting a vision to guide the ITS program in the Sacramento region.

#### 1. OVERARCHING GOAL: QUALITY OF LIFE

Develop a fully integrated, multi-modal transportation system to serve as a catalyst to enhance the quality of life enjoyed by the current and future residents of the Sacramento region.

ITS <u>is</u> the technology needed to develop a fully integrated, multi-modal transportation system. With the ability of ITS to enhance and integrate transit services, improve safety and mobility for pedestrians and bicyclist, smooth traffic flow, and provide traveler information via 511 or other service; the region can achieve this goal by employing technologies that help improve operations and safety for every mode of travel.

#### 2. ACCESS AND MOBILITY

Improve access to goods, jobs, services, housing, and other destinations; provide mobility for people and goods throughout the region, in a safe, affordable, efficient and convenient manner.

ITS will be a critical component in achieving this goal. ITS provides the technology needed to integrate various transit services, improve transit timeliness, create new Bus Rapid Transit (BRT) trunk lines, allow for multi-modal transit transfers, and eventually makes possible neighborhood-scale paratransit services that provide virtual door-to-door access either as a stand-alone service or as a feeder service to transit trunk lines. Traffic Operations Centers (TOC) will be able to leverage this ITS infrastructure investment to increase traveler mobility using applications that will allow engineers to remotely monitor the roadway system, offer signal priority to transit vehicles, and coordinate operations and management of traffic flow across jurisdictions. These technologies can also be used to reduce conflicts between non-motorized modes and vehicles. Traveler information made available via 511 will be more reliable and will help residents choose modes and routes that best meet their needs given conditions on the region's roadways and the availability of transit.

#### 3. AIR QUALITY

Develop a transportation system and related strategies that contribute to achieving healthy air in the region.

ITS will help reduce vehicle emissions using enhancements for all modes – transit, non-motorized, and auto. For transit trips, improvements mentioned above will make bus and light rail service a more convenient and viable option for travelers in the region. With even a modest number of trips shifting from auto to transit, cold starts and VMT will be reduced thereby reducing emissions. For non-motorized trips, increasing safety of bicycle and pedestrian facilities will likely increase these types of trips, again shifting trips from auto to an alternate mode. For auto trips, ITS will improve traffic operations and management to smooth traffic flow or reduce congestion. This will reduce stop-and-go conditions, which tend to have higher rates of emissions on a per mile basis.

#### 4. TRAVEL CHOICES

Provide affordable, convenient, safe, and integrated travel choices.

As mentioned above, ITS is the technology needed to integrate the various modes of transit in the region. Not only can ITS integrate modes of transit (paratransit, bus, and rail), it can integrate service between transit districts creating a seamless system that will enable travelers to access most parts of the region with transit service. With the deployment of ITS-enhanced paratransit service, transit can become a virtual door-to-door service making it a convenient alternative to the automobile. On-board cameras and cameras at transit stops will improve the security of the transit system by making surveillance easier and uninterrupted. Advances in signal operations have the potential to help reduce vehicle conflicts with bicyclists and pedestrians making these modes more viable. Additionally, traveler information made available via 511 will help people make better decisions about mode, route, and time of travel.

#### 5. ECONOMIC VITALITY

Enhance the economic vitality of our region by efficiently and effectively connecting people to jobs, goods, and services, and by moving goods within our region and beyond with an integrated multi-modal freight system.

ITS is the technology that businesses will use to improve the efficiency of moving goods and services throughout the region and beyond. Improvements in freight movement are already being seen from weigh-in-motion sensors in the roadway to reduce delay that commercial vehicles experience at weigh stations. Real-time roadway condition information, made available via STARNET and 511, will enable businesses to re-route or re-schedule commercial vehicles according to changing conditions on the system. Not only will businesses benefit from improved freight movement and expedited deliveries, but also employees and customers will have better access to jobs by focusing initial ITS improvements on corridors that feed job centers. Access improvement will come in the form of improved transit service, as well as in the ability of TOCs to integrate operations across jurisdictional boundaries. These interconnected TOCs will be able to maintain roadway capacity during peak periods by facilitating faster accident clearing, adjusting signals to smooth traffic flow, and providing alternate routes when needed.

#### 6. EQUITY

Pursue a transportation system that addresses the needs of all people in all parts of the region and assure that impacts of transportation projects don't adversely affect particular communities disproportionately.

Focusing ITS improvements on transit, bicycling, and walking not only addresses unmet needs, but also helps balance investments made in roadway improvements. While initial ITS deployments will be in select priority corridors; they will nonetheless help expand and improve the transportation system making alternate modes more attractive for travelers, providing greater reliability, access, safety, and mobility. For those who are unable or unwilling to drive, ITS transit applications will noticeably improve the level of service in existing and new transit corridors, providing greater frequency, timeliness, and easier transfers. These ITS improvements will also help traffic engineers relieve congestion in many of the same corridors by adding functionality that will reduce stop-and-go traffic conditions. Consideration for bike and pedestrian movement can also be included making for a comprehensive corridor improvement effort.

#### 7. TRANSPORTATION AND LAND USE

Influence land use policies to improve access to jobs, services and housing to everyone in the region by using market forces and the regulatory process.

With the adoption of the Blueprint Preferred Alternative, the region will likely see an increase in higher density mixed-use developments. Such urban form fosters walking, bicycling, and transit use and ITS can be used to the increase the viability of these modes. ITS solutions for Bus Rapid Transit (BRT) and paratransit, improve the operations and integration of these modes and help expand transit trunk lines into areas without light rail service. BRT trunk lines can be targeted for Transit-Oriented Development as stops become activity centers similar to those envisioned

for many of the light rail stations in the region. Safety and mobility for pedestrians and bicyclist in denser mixed-use areas will be improved by ITS through the use of detection and signal timing technologies that cater to these non-motorized travelers.

#### 8. FUNDING AND REVENUE

In order to adequately fund the Plan, develop appropriate, innovative, equitable, and stable funding sources (both short- and long-term) and identify cost-reduction measures.

While ITS will have to compete with other projects in the Transportation Improvement Program for funding, there is anticipation that federal transportation bills will have some form of discretionary funding for ITS integration. In an effort to mainstream ITS in the planning and funding process, many capital improvement projects will be encouraged to included ITS technologies where applicable. Beyond specific ITS funding, other funding sources such as Homeland Security, Bicycle Transportation Account, Safe Routes to School, and Federal Transit Authority could provide opportunities to include ITS as part of other non-ITS projects.

#### 9. HEALTH AND SAFETY

Improve the health of our residents by developing systems that would encourage walking and biking, and improve the safety and security of people on all modes in all areas.

An outcome of increasing transit service and improving safety and mobility for pedestrians and bicyclists will likely be an increase in walking and biking activities. Transit-oriented development and other forms of high density mixed-use also create urban designs conducive to walking and biking. Such land use designs coupled with signal timing that accommodates pedestrian and bike movement will create a much safer environment for non-motorized modes and encourage people to consider these as viable and safe alternates.

Improvements in transit safety will result from monitoring technologies at transit stops and on vehicles. Cameras on roadways, emergency vehicle signal preemption, and other improvements that coordinate traffic management and emergency services will accelerate the detection of emergencies and reduce the response time of fire, police, and ambulance personnel. Additionally, an ITS enhanced transportation system can help reduce vehicle emissions and resultant respiratory distress by encouraging alternate modes and by smoothing traffic flow.

#### 10. ENVIRONMENTAL SUSTAINABILITY

Develop the transportation system to promote and enhance environmental quality for present and future generations.

An ITS-enhanced transportation network will support smart growth land use designs, which reduce pressure to convert agriculture and other open space for future development. Smart growth developments also promote the use of transit, walking, bicycling, which, when enhanced with ITS, become more viable options and help reduce automobile emissions. Real-time information on ride-sharing and transit trip planning will provide people with information that can lead to the use of alternate transportation modes, again helping to reduce emissions from automobile use.

#### Exhibit B

#### Sacramento Region ITS Partnership

July 1, 2005

#### Members participating in the MOU

Caltrans District 3

City of Citrus Heights

City of Elk Grove

City of Folsom

City of Rancho Cordova

City of Roseville

City of Sacramento

City of West Sacramento

Paratransit, Inc.

Sacramento Area Council of Governments

Sacramento County

Sacramento Regional Transit District

Yolo County Transportation District

#### Members not participating in the MOU

California Highway Patrol
Federal Highway Administration
El Dorado County Transportation Commission
Placer County Transportation Planning Agency

## Sacramento Region ITS Partnership Memorandum of Understanding for Participation in the Regional ITS Deployment Strategy

**Dr. Beverly Scott** 

General Manager

Sacramento Regional Transit District

John Danielson

City Manager

City of Elk Grove

Terry Bassett

**Executive Director** 

Yolo County Transportation District

Martha Clark Lofgran

City Manager

City of Folsom

Bill Durant

**Executive Director** 

Paratransit Incorporated

Cyrus Abhar

Public Works Director

City of Rancho Cordova

Jody Jones

Director, District 3

California Department of Transportation

W. Craig Robinson

City Manager

City of Roseville

Tom Zlotkowski

Director of Transportation

County of Sacramento

Marty Hanneman

Director of Transportation

City of Sacramento

Henry Tingle

City Manager

City of Citrus Heights

**Toby Ross** 

City Manager

City of West Sacramento

Mike McKeever

**Executive Director** 

Sacramento Area Council of Governments