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# **APPENDIX G**

## **WASATCH FRONT URBAN AREA LONG RANGE TRANSPORTATION PLAN UPDATE**

**2004-2030**

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# APPENDIX G - Proposed Advanced Traffic Management System Projects

No.	Type	Project Title	Description	Linkage	Status	Priority	Estimated Cost	Data Source	Remarks
1	ATMS	Canyon Traveler Information / Parking Management for Park & Ride lots	Provide appropriate traveler information technologies for Big and Little Cottonwood Canyons. Provide parking management at two Salt Lake County parking facilities located at the mouths of Big & Little Cottonwood Canyons. This project addresses expansion of the ATMS on I-15 (VMS, CCTV, TMS & Communications) from Farmington to Farr West and also includes a connection with UDOT Region 1 in Ogden. This project includes and builds from Roy and Layton signal coordination. It also builds from existing Ogden ATMS. Expansion will include signal coordination, as well as CCTV, VMS, and TMS as appropriate. This project is aimed at evaluating photo detection of red light runners. The initial effort should be a pilot project to demonstrate feasibility and functionality.	Canyon Traveler Information for UTA; Project 25	Not programmed	High	\$4,400,000	Agency Interview/ATMS Expansion Plan (E4)	
2	ATMS	I-15 ATMS Expansion		Project 8	Partially programmed	High	\$6,330,000	UDOT ATMS Expansion Plan (N2) / Agency Interviews	
3	ATMS	Weber/Davis Surface Street ATMS Expansion		Projects 8, 2 and CommuterLink	Partially programmed	High	\$8,727,250	STIP CM-9999(233) / Agency Interviews	
4	ATMS	Prototype Automated Red Light Running Detection		CommuterLink	Not programmed	High	\$450,000	Agency Interview	In support of law enforcement, this project was rated as a priority for safety reasons.
5	ATMS	Salt Lake Valley Surface Street ATMS Expansion	The expansion of the Salt Lake Valley Surface street ATMS entails geographic expansion of the system as well as the addition of new ATMS devices within the Salt Lake Valley, including communications, CCTV and Trailblazer Signs	CommuterLink	Partially programmed	High	\$7,700,000	Agency interviews, ATMS Expansion Plan (SLC-3, SLC-4, SLC-5 and SLC-6), "E" Center Expansion Plan, CBD Expansion Plan	
6	ATMS	Freeway Incident Management	Initiate Incident Management in Region 1 and expansion in Region 2 as outlined in the UDOT Incident Management Plan.	Projects 17, 8, 2, 18, 15	Programmed	High	\$3,600,000	Incident Management Expansion Plan/STIP	Referenced in STIP Project CM9999(188) FY '00 thru '02

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7	ATMS	Agency Inter-ties	Agency Inter-ties will provide ATMS connections and allow interested agencies to have access to ATMS data and video and create a link for agencies to share their local traffic information. This will facilitate monitoring of traffic conditions and/or support response to traffic incidents.	CommuterLink	Partially programmed	High	\$503,000 + TBD	Agency Interviews	May include connections outside of the state or region.
8	ATMS	I-84 East ATMS Expansion	Provide CCTV Surveillance, RWIS, TMS and freeway VMS at key locations along the I-84 Corridor from I-15 to I-80. This project will also include U.S. 89 from Farmington to South Weber.	Project 3	Partially programmed	Medium	\$5,900,000	Agency Interview/ UDOT ATMS Expansion Plan (N2, N4)	
9	ATMS	ATMS Mobile Access Study	Investigate needs for mobile access to ATMS data with local law enforcement and transportation agencies, assess institutional and technical requirements and provide high level concept plan.	CommuterLink	Not programmed	Medium	\$75,000	Agency Interviews	
10	ATMS	Spot ATMS Expansion East	This project addresses the need for spot CCTV coverage at Echo Junction on I-80 and at the intersection of U.S. 40 and S.R. 32. It also provides for VMS and a HAR installation, also at Echo Junction.	Project 18	Not programmed	Medium	\$700,000	UDOT ATMS Expansion Plan (E2)	Support for MAG Activities
11	ATMS	Automatic Lane Control Facility	Develop bi-directional 6-8 mile freeway section, possibly on I-80, utilizing lane control signs at 1/4 mile increments to automatically convey lane closure, incident information, and speed control information.	CommuterLink	Not programmed	Medium	\$3,000,000	ITS Strategic Deployment Plan (ST-ATMS-8) / ATMS Expansion Plan (E3) / ITS Strategic Deployment Plan (LT-ATMS-5)	Shared funding, UDOT, Olympic

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12	ATMS	Railroad Crossing Upgrade	Install advance warning at key highway/rail crossings	CommuterLink	Partially programmed	Medium	\$450,000	ITS Strategic Deployment Plan (LT-RR-2)/ Agency Interviews	
13	ATMS	Portable VMS for Incident Management and Special Event Support	Portable Variable Message Signs are needed to support extended duration incidents (those requiring more than two hours to clear) and special events. It is anticipated that a reserve of up to fifteen signs should be maintained at the region headquarters. Ramp metering is needed on I-215 in conjunction with the ATMS deployment on I-15 as part of the valley-wide ITS strategy. This project address the need to deploy ramp metering at eight key locations	Projects 6, 15	Not programmed	Medium	\$600,000	Agency Interview	
14	ATMS	Ramp Metering Deployment on I-215	While UDOT is primarily responsible for freeways, this initiative will focus on local counties and cities for provision of incident management on the arterial streets. This will provide for future development of the ATMS system software and integration associated with future system deployment.	CommuterLink	Partially programmed	Medium	\$935,000	Agency Interviews	
15	ATMS	Surface Street Incident Management	Provide CCTV Surveillance, RWIS, TMS and freeway VMS at key locations along the I-80 Corridor from 5600 West to the Nevada border.	Projects 3, 5, 6	Not programmed	Medium	\$1,476,000	WFRC Deployment Plan Workshop	
16	ATMS	TOC System Software Enhancements		CommuterLink	Not programmed	Medium	\$5,000,000	Agency Interviews	Current activities associated with I-15 ATMS Construction
17	ATMS	I-80 West ATMS Expansion		Project 19	Not Programmed	Low	\$2,615,000	Agency Interview/ATMS Expansion (W1, W2)	

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18	ATMS	Spot ATMS Expansion North	This project addresses the need for spot CCTV coverage at three locations and the installation of one RWIS site along S.R 39 between S.R. 203 and Pineview Reservoir, 3 VMS signs, and 1 HIR.	CommuterLink	Not programmed	Low	\$815,000	UDOT ATMS Expansion Plan (N3)	
19	ATMS	Tooele Valley ATMS	This project includes the coordination of signals on SR-36 in Tooele county and addition of new ATMS devices.	Project 17	Not programmed	Low	\$1,263,750	Agency Interviews	
20	APTS	UTA Radio Communications Upgrade	Upgrade UTA 450 MHz radio systems to 900 MHz to support voice and data communications for transit operations and traveler information services	Projects 21, 23	Partially programmed	High	\$3,500,000	UTA ITS Deployment Plan/ITS Strategic Deployment Plan (EA-TR-1)	
21	APTS	Bus/Rail Integration	Transit traveler information system to provide LRT arrival time for next train at all TRAX platform stations (using AVL). Information will support bus/rail coordination.	Projects 23, 20	Not programmed	High	\$4,000,000	Agency Interview/ITS Strategic Deployment Plan (ST-TR-2)	Olympic ITS request
22	APTS	Electronic Payment Technology	Deployment of electronic payment technologies will include registering fare boxes on buses, the use of Smartcards and associated equipment to transfer revenue information for account processing within UTA.	Transit ITS Deployment	Not programmed	High	\$6,500,000	ITS Strategic Deployment Plan (LT-TR-4)/ Agency Interviews	

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23	ACTS	Automated Vehicle Location for Buses	Provide AVL for bus transit as a foundation for improved transit service to enable accurate traveler information, bus/rail coordination, use of buses as probes for ATMS, support service to meet ADA requirements.	Projects 1, 21	Partially programmed	Medium	\$15,000,000	UTA ITS Deployment Plan / ITS Strategic Deployment Plan (LT-TR-2)	
24	APTS	Transit Passenger Information	The project will provide for Arrival/Departure information Signs at TRAX Stations, Park & Ride facilities and multimodal transfer Stations and will be tied to transit dispatch centers with links to the Slat Lake ATMS.	Projects 21, 20, 23 and CommuterLink	Not programmed	Medium	\$500,000	UTA ITS Deployment Plan	Support for Regional ATIS
25	APTS	Signal Priority for Buses	Priority at traffic signals and ramp metering bypasses implemented for bus transit.	Transit ITS Deployment / CommuterLink	Not programmed	Low	\$2,000,000	ITS Strategic Deployment Plan (ST-TR-1)/ Agency Interviews	Olympic Transportation Funds
26	ATIS	Traveler Information Systems	This initiative includes: Pre-Trip Travel Information kiosks at key transportation transfer points such as Olympic event locations, the airport, University of Utah, Winter Sports Park, and West Valley "E" Center. Kiosks would provide travel options, scheduling and real-time information for transit and shuttle buses.	Project 21, 23 and CommuterLink	Partially programmed	High	\$1,100,000 + TBD	ITS Strategic Deployment Plan (ST-TI-3) (LT-T1-2) (ST-T1-5), Agency interview	Partnering with private sector

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26	ATIS	Traveler Information Systems	<p>Urban HAR / Public Radio Advisory Station:  Install a network of HAR systems to give real-time traffic information at key locations. Also includes establishing a public radio channel for broadcast of traffic information.</p> <p>ITS Public Outreach: This project would create educational materials to be used in informing the public about the benefits of ITS, its applications and how ITS is used both practically and technically.</p> <p>TV Station:  Following on the work already accomplished to install the broadcast studio in the TOC, this project will provide for establishing TV programming for the purpose of disseminating traveler information as part of the overall ATIS plan.</p> <p>511 Traveler Information Service:  A working group will investigate the approach for establishing regional 511 traveler information services.</p>	Project 21, 23 and CommuterLink	Partially programmed	High	\$1,100,000 + TBD	ITS Strategic Deployment Plan (ST-TI-3) (LT-T1-2) (ST-T1-5), Agency interview	Partnering with private sector
27	EM	Emergency Services Communications and Coordination	<p>Install systems to handle increasing 911 calls from cell phones. Provide computer aided dispatch and agency communications.</p> <p>CVISN is focused on systems to improve commercial vehicle safety, provide electronic credentials, automated screening of carriers and data sharing among agencies.</p>	CommuterLink	Not programmed	Medium	\$2,000,000	ITS Strategic Deployment Plan LT-A-TMS-6	
28	CVO	Commercial Vehicle Information Systems and Networks (CVISN)		<ul style="list-style-type: none"> <li>- UDOT</li> <li>- Tax Commission</li> <li>- DPS</li> <li>- Law enforcement agencies</li> <li>- ITS (Information Technology Services)</li> </ul>	Partially programmed	High	\$1,500,000	Utah ITS/CVO Business Plan	<p>Completed top-level project planning w/specific projects and phasing.</p> <p>Projects will be implemented in 2-3 years</p>