Survey of New York State Vehicle Infrastructure Integration (VII) Related Testbed Activities

	Research/Project Title & Description	Sponsoring Organization/ Researchers	Point of Contact	Key Applications	Communications Media	Time Frame	Status (current/ planned)	VII Arch. & Stds. Compliance	Assessment: Relevance to VII Program
11	**ATIS Implementation and Integration throughout the I-90 Phase 2 Connector/ITS Test Bed Laboratory Transportation Network:** - A fleet of Global Positioning System—equipped vehicles shared real-time data about network travel times over a wireless network and had their path choices automatically updated accordingly - Researchers assessed the behavior of these 200 vehicles during the 3-month experiment and analyzed the kind of information that can be derived from the data archive that the vehicles created including real-time traffic-responsive path choice, travel times, compliance, and more - Planners, designers, and system operators can learn much about the way a system behaves and can sharpen their ability to create systems that work effectively and efficiently under all ranges of use Project features include: -Investigating wireless communications technologies to achieve cost-effective travel data collection from various modes -Instrumenting the transportation infrastructure and collecting travel data from commuters -Analyzing collected data and producing traveler information -Integrating the traveler information with transportation modes and transportation management centers - U.S. Route 4 ATIS testbed	New York State DOT Rensselaer County/Rensselaer Polytechnic Institute and North Carolina State University	Tim Conway NYS DOT Region 1 (518) 388-0381 Brian Menyuk NYS DOT (518) 388-0360/ Rensselaer Polytechnic Institute George List, North Carolina State University, Raleigh 919-515-7212 gflist@ncsu.edu	ITS Applications: Traveler Information Emergency Management Day 1 Applications: N/A	GPS, PDA with Sprint 3G card	10/30/2002 thru 3/31/2007	Developing Final Reports	N/A	Vehicle-to-Infrastructure En-Route Path Choice

	Research/Project Title & Description	Sponsoring Organization/ Researchers	Point of Contact	Key Applications	Communications Media	Time Frame	Status (current/ planned)	VII Arch. & Stds. Compliance	Assessment: Relevance to VII Program
12	**Commercial Vehicle Infrastructure Integration Program:** **-** It is intended that the Department's CVII Program will develop, test and demonstrate commercial vehicle based data communication witht the VII roadside equipment (SE) Currently under development by USDOT. -Develop, test and demontrate the necessary and appropriate commercial vehicle on-board equipment and software for integration with the ongoing USDOT VII Initieative. - The Department and its partners desire to leverage the existing light vehicle based VII technology development to enhance commericial vehicle safety, security and mobility by partnering with one or more Entity to develop, test and demonstrate a prototype system that utilizes the VII architecture and sytem requirements as well as the SAE J1708 vehicle data bus and the standard message sets SAE J1587, SAE J1939 and SAE 2735. - 13-mile test site on the NYS Thruway Authority's Spring Valley Corridor - Development, testing and demonstration of commercial vehicle in-vehicle hardware and software to allow data message sets (DMS) to be wirelessly transmitted via DSRC provided by other sonsistent and compatible with the VII architecture and standards, including the 802.11p 5.9 GHz radio and IEEE standards - Testing of the communication of the commercial vehicle DMS to the VII 5.9 GHz roadside infrastructure and the VII network being developed by USDOT for interface with the VII system applications being developed by others	New York State Department of Transportation	Al Hasenkopf, Senior Transportation Analyst, NYSDOT, 518-457-2600	ITS Applications: Commercial Vehicle Operations Day 1 Applications: Potential applications	DSRC	RFI	About 25 responders	VII Architecture & stds. DSRC, SAE J1708 vehicle data bus and the standard message sets, SAE J1587, SAE J1939 and SAE 2735.	VII focused research

	Research/Project Title & Description	Sponsoring Organization/ Researchers	Point of Contact	Key Applications	Communications Media	Time Frame	Status (current/ planned)	VII Arch. & Stds. Compliance	Assessment: Relevance to VII Program
13	**World Congress VII Testbed:** A VII testbed is under development for the 2008 World Congress in New York City Between 20 - 22 5.9 GHz locations will be set up along I-495 North of the Long Island Expressway including some intersections in the Westburry area along Rte. 25 The VII applications will include invehicle signing, curve speed warning, transit priority, commercial vehicle operations, and school zone warning Between 10 - 12 5.9 GHz locations will also be established in Manhattan to demonstrate some traveler information applications	World VII Demo Committee: NYS DOT, NY City, US DOT, ITSA Members (equipment manufacturers, automakers and others)	Emilio Sosa, NYS DOT 631-952-6733 Mike Freitas, Connexsis	ITS Applications: Freeway Management Arterial Management Traveler Information Commercial Vehicle Operations Day 1 Applications:	DSRC CDM spread spectrum Ethernet over fibre Private cellular network similar to Japan??	Complete by WC	Completing communications Backbone Defining Applications	VII Arch. & Stds. starting point	VII Focused Demonstration Building upon VII Program