The New York State Department of Transportation (NYSDOT) and the New York State Energy Research and Development Authority (NYSERDA) have jointly announced funding for a dozen transportation sector proposals that seek to reduce greenhouse gas emissions and the use of petroleum fuel products. The Sustainable Transportation Systems solicitation attracted a variety of proposals that reduce vehicle miles traveled (VMT) and enhance the State’s economy and quality of life.

The research gained through this effort will complement Gov. David Paterson’s Renewable Energy Taskforce recommendations to promote the efficient use of petroleum in the transportation sector. Specifically, that report calls for a 10 percent reduction in VMT from projected levels in 10 years. An interagency team, including NYSERDA, NYSDOT, and New York State Department of Environmental Conservation is considering technologies and strategies to be demonstrated through the contractors participating in this joint funding program.

From east to west, they include (with total project cost noted):

**Town of Riverhead, Riverhead, NY (Suffolk) ($88,000)** Study the rehabilitation of the abandoned Calverton rail spur as a modern truck-rail intermodal freight terminal for Eastern Long Island. Establishing such a facility should reduce heavy-vehicle miles traveled and support economic growth.

**NYU Wagner Rudin Center, New York, NY (NY Metro) ($80,390)** Study the potential for NYC Metro Urban Distribution Centers (UDCs) to streamline deliveries through splitting and recombining loads based on destination, improved communication and coordination among the carriers and distribution networks and by increasing the load factor per truck.

**VPSI, Inc., Troy, MI (Capital District) ($223,830)** Study the prospects for a Capital District (4 county) vanpool service using 7-15 passenger vehicles, including coordination with large employers, the Capital District Transportation Authority (CDTA), the Capital District Transportation Committee (CDTC) and the Albany Business Improvement District (BID).

**SUNY Albany, Albany, NY (Capital District) ($97,290)** Evaluate transportation to the University and adjacent State offices, using tools like GIS to identify patterns, research alternative modes and test with GPS tracking, commuter surveys and development of new transit recommendations; SUNY Albany issues 15,000 parking permits annually, 85% of which are for solo drivers. The adjacent State Office Campus houses 7,300 workers, also with a significant proportion as solo drivers.
Goodban Belt, LLC, Buffalo, NY (NYS Canal Corridors) ($86,400) Evaluates freight revitalization for the Erie Barge Canal, including use of self- or remotely guided barges. 40% of internal European trade is water-borne and several transportation and manufacturing parties have expressed interest in the analysis of New York factors and trends.

New West Technologies, Utica, NY (Statewide) ($103,102) Assesses the technical and economic viability of a Hybrid Truck/Trailer (HYMO) system by quantifying VMT reduction and fuel use of the HYMO system as compared to the conventional tractor-trailers that comprise a high volume of highway traffic and fuel consumption.

CuseCar, Syracuse, NY (Onondaga) ($260,000) Collects data to verify potential reductions of VMT in central New York by offering an hourly rate car-share program, featuring on-demand access to vehicles. The data will also be analyzed for incorporating battery electric vehicles and plug-in electric hybrid vehicles into the car-share program.

C&S Engineers, Inc., Syracuse, NY (Tompkins) ($95,717) Study Personal Rapid Transit (PRT) including technical and operational feasibility, and combining PRT development with transit development policies and assess its viability in Ithaca and in New York’s small and mid-sized cities.

Calmar Telematics, LLC, Cato, NY (Statewide) ($132,388) Analyze truck movement to minimize empty VMT through data collected from a previous NYSERDA contract, allowing a study showing the potential savings through double-long loads, higher automation in truck tracking and planning, reduction of VMT for trucks on the road.

Buffalo CarShare, Buffalo, NY (Erie) ($224,879) Collect data to verify expected reductions of VMT in western New York by offering a car share program, where members have on-demand access to vehicles and are charged an hourly rate. Analysis of incorporating battery electric vehicles and plug-in electric hybrid vehicles into the car share program is included.

Ecology & Environment, Buffalo, NY (Statewide) ($224,481) Implement web-based GreenRide vanpooling in New York by performing studies, cooperating with businesses/groups with the goal of reducing more than 100 billion miles of single-occupancy vehicle travel in NY annually-- responsible for about half the State’s air pollution. Proposer is a successful NY-based carpooling company with hundreds of cooperating organizations and years of experience.

SUNY Buffalo, Buffalo, NY (Erie) ($109,417) Survey recently developed EPA models for smart land-use principles, including mixed-land use, compact building designs, multiple transportation methods, and preservation of open space and community identity. The researcher will use a newly developed tool on existing cases to prove VMT reduction and then develop a prototype land use plan to help with future development.

For more information on these projects please contact Joe Tario at jdt@nyserva.org

POOLED FUND PROJECT: TRAFFIC CONTROL DEVICE (TCD) CONSORTIUM

The Transportation Pooled Fund (TPF) Program has existed for more than 20 years. This program allows State departments of transportation and the Federal Highway Administration (FHWA) to combine their resources to research projects of mutual interest. The existence of the TPF Program not only promotes the more efficient study of an issue and more efficient dissemination of the results, but also allows for faster incorporation of the results into national guidance. Involvement in a pooled fund study enables participants to directly influence the choice of issues to be studied, thereby allowing the particular research needs of that participant’s organization to be addressed quickly, and on a national level. NYSDOT is currently participating in about 100 pooled fund studies, with another 10 pending approval.

One of the current studies in which the Department participates is TPF-5(065), Traffic Control Device (TCD)
Consortium. Established in 2003, this group comprises representatives from national (FHWA, American Traffic Safety Services Association - ATSSA), state (FL, GA, IA, IL, KS, MO, MS, NC, NE, NH, NJ, NV, NY, PA, SC, TX, WI) and local (Broward County, FL, Los Angeles, CA) organizations. The TCD Consortium has thus far completed five studies whose recommendations have been included in the proposed 2009 changes to the National Manual on Uniform Traffic Control Devices (MUTCD): Speed Reduction Markings; Roundabout Signing & Marking; Traffic Control Devices at Transponder-Controlled Tollbooth Lanes; Diagrammatic Guide Signs; and New Symbol Signs. New York played an especially important role in the studies for speed reduction markings and roundabout signing & marking, as New York test sites were among those evaluated in the study.

For information on the Traffic Control Consortium please contact Barbara Abrahamer babrahamer@dot.state.ny.us For information on the Department’s Transportation Pooled Fund program please contact Gary Frederick gfrederick@dot.state.ny.us

RECENT WORKSHOP ON SAFETY AND BEHAVIOR OF BRIDGES SUBJECTED TO BLAST IN A MULTI-HAZARD ENVIRONMENT

The significance and urgency of developing guidelines for blast resistant design of bridges has become more prominent because of increased security risks to our infrastructures. The recent collapse of the Minnesota Bridge has demonstrated the risk of loss of life, economic disruptions and other societal ramifications that the collapse of a bridge can cause. Analyzing and designing bridges to sustain blast loads effects requires the use of specialized and complicated computational tools. This task is made more complicated by the fact that bridge components must be designed to sustain different hazards, many of which have conflicting demands. Bridge owners and their staff should also be trained in analyzing and in understanding effects of blast on the structure in a multi-hazard environment. With these objectives in focus, a workshop on safety and behavior of bridges subjected to blast in a multi-hazard environment was organized in New York City on February 18-19, 2009. The workshop, co-chaired by Professor Anil K. Agrawal of the City College of New York, Dr. Sreenivas Alampalli, Director, Bridge Evaluation Services Bureau of the New York State Department of Transportation, and Dr. Mohammed Ettouney of Weidlinger Associates, has been sponsored by the Region 2 University Transportation Research Center (UTRC), Federal Highway Administration, New Jersey Department of Transportation, New York State Department of Transportation, and the City College of New York.

The workshop, by invitation only, was attended by about 80 people, from State Transportation Agencies, Federal Government, Consultants, and researchers working in this field. On the first day, the workshop sessions included presentations, from leading experts in this field, on: i) bridging the gap between state of knowledge and state of practice, ii) current status of blast analysis, design and detailing, iii) role of multi-hazard design philosophy in blast mitigation, iv) design paradigm and emergence of performance based

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For information on the Traffic Control Consortium please contact Barbara Abrahamer babrahamer@dot.state.ny.us

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