



**Integrating Mobility Strategies for a
Sustainable Multi-Modal Transportation Network**

**Program Opportunity Notice No. 2618
\$1,500,000 Available**

PROPOSALS DUE: October 10, 2012 by 5:00 pm Eastern Daylight Time*

In partnership with the New York State Department of Transportation (NYSDOT), the New York State Energy Research and Development Authority (NYSERDA) seeks proposals that have the potential of reducing the energy consumption and associated greenhouse gas (GHG) emissions of the existing multi-modal transportation system in NY State. Total available NY State funding is \$1,500,000. All, or none, of the available funding may be allocated.

In funding this solicitation, the sponsors seek to support an energy-efficient, integrated, sustainable, and multi-faceted transportation system through the identification of innovative strategies, policies, emerging technologies and partnerships, and through useful demonstrations and system designs that validate underutilized commercial products in NY State. The sponsors are seeking to explore and demonstrate viable concepts that extend, leverage and integrate existing infrastructure, resources and planning beyond that of a short-term pilot project focus. Strategies and demonstrations are being sought that have the potential of offering effective transportation choices and sustainable, integrated network designs that enhance connectivity of alternative transportation options resulting in reduced reliance on personal vehicles and the achievement of economies-of-scale that support broader deployment and the maximization of energy security and efficiencies. Proposals should focus on research, results, or strategies that can be transferred and implemented throughout the State to further the objectives of improved energy efficiency and reduced GHGs.

Proposal Submission: Proposers must submit thirteen (13) paper copies and one (1) electronic media copy (CD) of the proposal in Microsoft Word format (appendices may be in PDF format) with a completed and signed Proposal Checklist (Attachment A) attached to the front of each copy, one of which must contain an original signature. Proposals must be clearly labeled and submitted to:

**Roseanne Viscusi, PON No. 2618
NYS Energy Research and Development Authority
17 Columbia Circle, Albany, NY 12203-6399**

If you have technical questions concerning this solicitation contact Joe Tario at (518) 862-1090, ext. 3215 or jdt@nyserda.org. If you have contractual questions concerning this solicitation, contact Nancy Marucci at (518) 862-1090, ext. 3335 or nsm@nyserda.org.

No communication intended to influence this procurement is permitted except by contacting Joe Tario (Designated Contact) at (518) 862-1090, ext. 3215 or jdt@nyserda.org. Contacting anyone other than this Designated Contact (either directly by the proposer or indirectly through a lobbyist or other person acting on the proposer's behalf) in an attempt to influence the procurement: (1) may result in a proposer being deemed a non-responsible offerer, and (2) may result in the proposer not being awarded a contract.

*Late proposals will be returned. Incomplete proposals may be subject to disqualification. It is the bidder's responsibility to ensure that all pages have been included in the proposal. Faxed or e-mailed proposals will not be accepted. Proposals will not be accepted at any other NYSERDA location other than the address above. If changes are made to this solicitation, notification will be posted on NYSERDA's web site at <http://www.nyserda.ny.gov/>.

I. INTRODUCTION

Within the complex and often fragmented network of transportation options, there is no single strategy or approach to energy-efficient mobility that can succeed on its own. Innovative strategies and projects have emerged from a wide array of sources to address specific aspects of this complex challenge. This Joint NYSERDA/NYS DOT Program Opportunity Notice (PON) seeks to facilitate the linking, leveraging, and integrated expansion and enhancement of the variety of innovative strategies that have been demonstrated in previous Joint PONs. The intent is to better link and optimize diverse, innovative approaches through new partnerships that provide convenient, practical, affordable, and sustainable door-to-door trips for commuters and travelers. This requires connecting and linking transportation modes, services and technologies, and bringing diverse innovations together in ways that address accessibility and mobility. Effective strategies must work together to support and reinforce transportation and development patterns that allow for energy-efficient transportation while supporting urban and regional economies, business productivity, and overall quality of life objectives.

This complex array of challenges present significant opportunities to develop and implement an integrated systems approach that addresses accessibility, mobility, energy efficiency, and other objectives by offering practical, innovative solutions to moving people and goods. The trend of innovation in transportation is characterized by the emergence of new fuel and vehicle technologies, as well as new information technologies resulting in more flexible and differentiated transportation modes, services, and products. Additionally, innovative land use and urban designs, and new business models and collaborative partnerships are providing the backdrop for emerging opportunities in the type of integrated solutions being sought by this PON. The innovations sought build on broad transportation industry and demographic trends and emerging State and Federal policy and program initiatives.

A recurring theme in State and Federal policy and in much of the innovation that has been emerging around mobility and sustainability is partnership and collaboration across traditional highway and transit agency programs, such as management and operations, intelligent transportation systems, transportation demand management, safety, and freight. Broad implementation of innovative integrated solutions requires collaboration among transportation agencies and partners concerned with land use, housing, environmental permitting, historic preservation, natural resource protection, economic development, and many other areas.

Some examples of mobility strategies that offer potential opportunities for improved energy efficiency through better system-wide integration include:

- ***Examples of new strategies, products, and modes:***
 - Innovative automobile-based transportation (e.g., corporate and privately-based carsharing business models)
 - Bus rapid transit technologies, including advanced vehicle tracking and reporting
 - Non-motorized modes for moving people and goods (e.g., bicycle/pedestrian innovations and pedicab applications)
 - Innovative freight vehicles and vehicle/transportation system connectivity strategies
- ***Integrated technologies and emerging innovations and opportunities*** -- while fuel and vehicle related improvements have been a technological focus of transportation innovation, transformative shifts in information and telecommunications technology offer significant opportunities for integration of transportation networks, modes, and systems that were not previously possible or practical. Examples include:
 - Journey planning, wayfinding, and information dissemination including open source and open data approaches to build on the resources of 511NY (<http://www.511NY.org>)
 - Fare collection and various road pricing strategies
 - Traffic management that makes use of increasingly widespread wireless and cloud computing platforms to facilitate considerably greater availability of real time information for improved operations and information to travelers

I. INTRODUCTION, continued

- Active Transportation and Complete Street designs that facilitate seamless mobility and multi-modal operations (e.g., bus priority signalization in conjunction with bicycle and pedestrian improvement prioritization)
- Telecommuting and telecommunication options that reduce or eliminate trips altogether
- **Services** that result in significant increases in transport efficiency including:
 - Fixed route and on-demand shuttles
 - Shared-use strategies such as carsharing, shared bike programs
 - Innovative modal choice solutions that enhance commuter and freight services mobility (e.g. home and business delivery, freight rickshaw, senior chauffeur, and communal van/pedicab)
 - Use of social networking tools and marketing methods to support transportation demand management programs

To support and reinforce the theme of this solicitation, four focus areas have been defined and are described below. Benefits that cut across all four include:

- Promotion of integrated strategies across organizations/modes
- Ability of other agencies or communities to replicate project concepts (i.e. applying innovative approaches to leverage existing resources or assets)
- Promotion of non-proprietary, open source and open data principles to support broader implementation and integration
- Support customization and enhancement of existing best practice applications or standards targeted to specific local or community settings

Focus Area 1: Transportation System Management and Operations (M&O). Transportation System M&O strategies can relieve congestion, optimize infrastructure investments, and promote travel options, which reduce energy consumption and GHG emissions. M&O approaches seek to improve the operation of the transportation system through reduced vehicle travel time, improved traffic flow, and decreased idling. Approaches range from commercial truck idle reduction, reducing congestion through Intelligent Transportation Systems and other innovative forms of traffic management, and advanced connected vehicle (wireless communication) technologies for vehicle-to-infrastructure and vehicle-to-vehicle applications.

Proposals may address passenger and/or freight traffic and vehicles and/or infrastructure. Transportation System M&O strategies and technologies could also include techniques that lower NYSDOT operating costs, such as use of more reflective materials and lighting during nighttime construction as well as efficient maintenance and fleet management strategies. Also eligible are proposals to improve the utilization and/or cost economics of inherently efficient modes of transportation (e.g. mass transit, freight rail).

Focus Area 2: Transportation Demand Management (TDM). The objective of this focus area is to reduce travel demand, to redistribute the demand in space or time, or to eliminate vehicle trips altogether. There are a number of proven TDM strategies available to reduce or eliminate vehicle trips. The effectiveness of the strategies will vary depending on the types of land uses and travelers they are targeting. TDM emphasizes the movement of people and goods, rather than motor vehicles, and gives priority to walking, cycling, ridesharing, public transit, and telecommuting, particularly under congested conditions. It prioritizes travel based on the value and costs of each trip, giving higher value trips and lower cost modes priority over lower value, higher cost travel, thus increasing overall system efficiency.

TDM strategies reduce energy consumption and GHG emissions primarily by decreasing vehicle trips and vehicle miles travelled which can occur in several ways, including: shifts from single vehicle travel to other modes, increasing vehicle occupancy, eliminating vehicle trips, reducing vehicle trip lengths and trip chaining or linking vehicle trips. In addition, some TDM strategies can encourage shifts from peak periods to less congested periods, thereby reducing travel delay and idling.

I. INTRODUCTION, continued

Focus Area 3: Transportation Sustainability. The objective of this focus area is to evaluate sustainable transportation concepts for NY State and to estimate their potential impact. As defined in FHWA's Livability in Transportation Guidebook (http://www.fhwa.dot.gov/livability/case_studies/guidebook/livabilitygb10.pdf), sustainable transportation provides exceptional mobility and access to meet development needs without compromising the quality of life of future generations. A sustainable transportation system is safe, healthy, and affordable, while limiting emissions and use of new and nonrenewable resources. It meets the needs of the present without depleting resources or harming the environment. It also considers the long-term economic health and equity of a community.

The United States does not have a national sustainable transportation strategy to guide policy development; however individual states and metropolitan areas have begun to develop their own policies, programs, and methodologies for improving transportation system sustainability. Case studies, performance measures, and best practices have recently been highlighted in FHWA's Transportation Planning for Sustainability Guidebook and serve as good examples for this Focus Area.

(http://www.fhwa.dot.gov/environment/climate_change/sustainability/resources_and_publications/guidebook/sustain00.cfm)

As opposed to the first two focus areas, which strive to improve the efficiency and reduce the demand of current transportation operations, sustainable transportation strategies have a multi-generational perspective and tend to address larger environmental goals such as improving air quality, reducing climate impacts, increasing energy efficiency, and decreasing dependence on foreign oil.

Focus Area 4: Collaborative Partnerships. Being introduced this year, Focus Area 4 seeks to enable cross-cutting integration of strategies and efforts that address objectives common to the three previous focus areas. Its intent is to spur significant Collaborative Partnership approaches to the development of integrated, cross-disciplinary research, deployment, and policy formulation. Program or project development in the other three focus areas managed within a single agency or company can lead to significant innovation. However, this focus area seeks to support multi-agency, public-private, or multi-firm private Collaborative Partnerships that cut across traditional boundaries in developing energy-efficient sustainable transportation solutions. The rationale for a distinct focus area is the recognition that a significant partnership approach is more complex and potentially a more costly development model, but carries the potential for more effective and widespread deployment of the resulting solutions.

Improved energy-efficient accessibility can be achieved through the use of multi-disciplinary, collaborative planning of land use and transportation network designs that bring transportation demands closer together. Other possibilities include telecommunications technology that reduces or eliminates the need for certain vehicle trips and seamless, multi-modal transportation capabilities where mobility, connectivity, and proximity are the means to achieve accessibility.

Focus Area 4 stresses Collaborative Partnership projects that enable new ways of linking sustainability, engineering, and creative business thinking about the deployment of transportation alternatives as well as emerging tools and approaches for better connecting, understanding, and implementing them. They differ from individual pilot projects in that they involve larger groups and larger areas, requiring greater coordination.

Examples of eligible projects include multi-agency deployment of EV charging station infrastructure or regional control of adaptive traffic signals, where the individual signals may be owned and maintained by several municipalities or agencies. As well as municipal-private deployment of wireless mesh networks in areas where these networks can improve transportation operations and information flow.

Additional Collaborative Partnership examples might include a major deployment of State 511NY TDM tools to reduce single occupant vehicle commuting in a business park with numerous commercial entities pooling their employees, as well as larger statewide outreach and educational activities involving coalitions of interested parties, municipalities and advocacy groups.

II. PROGRAM REQUIREMENTS

Solicitation Goal. As previously stated, the goal of the solicitation is to attract proposals with the potential of reducing the energy consumption and associated GHG emissions of the existing multi-modal transportation system in NY State. Specific strategies, plans and processes, policies, products, services, technologies, and innovative collaborations are being sought that will enhance the development of the state's transportation investment priorities and help re-focus strategic regional investments within a framework of integrated and sustainable mobility transportation options and solutions that can support the state's economy and set the tone for future economic growth.

Funding Categories. Five categories of projects will be considered for funding:

1. Education and Technology Transfer. Outreach activities to advance the awareness of the general public, policy makers, and municipal planning organizations on the issues, consequences, objectives and resources, associated with the solicitation goal. Projects funded in this category will be limited to a maximum of \$25,000 per project of NY State funds.
2. Planning Research, Policy, and Feasibility Studies. Activities and research to develop plans and related planning processes, strategies, and policies for NY State that have the potential to achieve the solicitation goal. Projects funded in this category will be limited to a maximum of \$75,000 per project of NY State funds.
3. Demonstrations of Underutilized Strategies and Policies that have the potential to achieve the solicitation goal and that require only minor amounts of equipment and/or materials purchased for implementation. Projects funded in this category will be limited to a maximum of \$150,000 per project of NY State funds.
4. Integration of Existing Mobility Strategies Through Collaborative Partnerships that have the potential to achieve the solicitation goal. Projects funded in this category will be limited to a maximum of \$200,000 per project of NY State funds.
5. Demonstrations of Underutilized Commercial Technologies* that have the potential to achieve the solicitation goal and that have not been previously deployed in NY State to any significant extent. Projects funded in this category will be limited to a maximum of \$250,000 per project of NY State funds.

Category 1 will help fund outreach activities and materials, including workshops, webinars, publications, guidebooks, and brochures. Outreach may focus on implementing new strategies or technologies, as well as seek to modify the behavior of NY State residents.

Category 2 is designed to fund specific plans and studies, which may or may not include field and/or market data collection. Plans and studies may comprise feasibility assessments, engineering studies, and related analysis necessary to establish the energy, environmental, and additional benefits of a relevant policy, strategy, product or technology. Examples of additional benefits include financial impacts, as well as potential impacts in the areas of operations, maintenance, safety, reliability, mobility, and security.

Category 3 seeks to demonstrate underutilized strategies, plans, and policies, which have been proven to be effective elsewhere, internationally, nationally, or perhaps elsewhere in NY State. The intent, however, is to replicate fundamental changes in system operations, which can be readily implemented without major equipment expenditures. For this category, proposed purchases of materials and equipment are limited to 30% of the total project budget. Examples of qualifying Category 3 proposals might include: park and ride programs, incident management strategies, regional transit coordination, and innovative freight delivery.

* A commercial technology is defined to be a product, such as an item, material, component, subsystem, or system, applicable to transportation and sold or traded in reasonable quantities on the open market within the course of normal business operations at prices based on established catalog or market prices with industry-standard deliveries, terms, and warranties.

II. PROGRAM REQUIREMENTS, continued

Category 4, which is also being introduced this year, is somewhat linked to Focus Area 4 and seeks to support and implement larger Collaborative Partnerships that integrate and leverage across modes, strategies, agencies, and sectors. Innovations and opportunities are rapidly evolving and encompassing numerous aspects of commuting and traveling, urban goods movement and supply chain management, telecommunications, use of wireless technologies, e-business and social media, real estate and land use patterns, and design (products, services, technologies, and community). The quality of the Collaborative Partnership is as important as the transportation issue being addressed and proposers should establish diverse, innovative collaborations exploring social and business opportunities, as well as the emerging strategies and technologies being deployed.

Category 5 is similar to Category 3, but differs in the amount of materials and equipment required to be procured for the demonstration. Category 5 is designed to fund the limited demonstration of existing underutilized commercial technologies that have been successfully deployed in other states or countries, but have not been previously deployed in NY State to any significant extent. In contrast to Category 3, it is recognized that significant procurement of material and equipment may be necessary. This category is aimed at finding new and emerging 'best practices,' which have yet to be significantly deployed in NY State. The intent is not to research the existing technology per se, but to quantify and validate potential benefits and identify specific barriers to adoption for NY State.

Category 1 and 2 proposers may propose ideas, strategies, planning processes, policies, etc that have been used elsewhere in the country or NY State. However, the proposers will be required to establish how these strategies and policies are unique and can add to broader use in the proposed scope of deployment, implementation, and operations.

Category 3 and 5 proposers will be required to establish that their proposed strategy or technology is truly underutilized in NY State. Proposers should conduct a scan of available literature, news articles, and internet sites and published studies to present a convincing case for the value in a funded NY State demonstration.

Category 5 proposers will be required to establish that the transportation technology is fully commercial and that no significant product development is required. Transportation technologies requiring additional product development should be proposed to NYSERDA's Advanced Transportation Technologies solicitation, which is issued annually and specifically targets transportation product development. (e.g. PON 2584 which is available in calendar year 2012).

Project Scope. Projects selected for funding must:

- Provide readily-quantifiable reductions in transportation energy and GHG emissions in NY State
- Emphasize the ultimate deployment of technical solutions rather than conducting basic research
- Document accessibility and sustainability, mobility and reliability, environmental, economic, safety and security benefits in NY State
- Be consistent with metropolitan transportation plans in NY State and with transportation-related regulations at the federal or state level
- Provide at least 25% of cost-sharing by the proposer or third parties in the form of cash or in-kind labor, materials, equipment, facilities, and other resources, subject to reasonable and verifiable valuation. Co-funding may be from the proposer or other private or government sources. NY State funds cannot be used to reimburse or replace normal expenses of other government organizations.

II. PROGRAM REQUIREMENTS, continued

Other Considerations. In addition, note that:

A proposal may be considered non-responsive if it fails to comply with the requirements above, the Proposal Requirements of Section III, or the General Conditions of Section V.

Projects are expected to begin within six months of the proposal due date. Generally the project schedule should not exceed 24 months, except to indicate the approximate duration of future phases (beyond the proposed phase) of a multi-phase project.

Multi-phase projects are acceptable as long as the proposal only requests funding for one clearly-defined phase and adheres to the funding limit for the appropriate project category as described under “Funding Categories” above. The proposer must accept that any contract awarded to fund one phase of a multi phase project does not in any way obligate NY State to fund later phases.

Due to the theme of this solicitation, teaming arrangements are not only encouraged but may be necessary to achieve project success. Proposal teams may include commercial firms, industry associations or research organizations, universities, government agencies, end-users, and other stakeholders. Letters of interest or commitment from each identified team member should be included in an appendix to the proposal. The lack of such letters, especially in cases where co-funding is indicated, is viewed as a very serious proposal deficiency and will be judged accordingly in the technical evaluation process

Total proposal length should ideally be 20 pages or less, plus letters of interest or commitment in an appendix. Double-sided printing is preferred and suggested page limits for each section are provided below in parentheses. If you believe proprietary information must be submitted to present an adequate proposal, please contact an individual listed at the beginning of this PON and comply with the Section V instructions for submitting proprietary material. Rigid bindings and other elaborate presentation material should not be used - a single staple in the upper left corner is preferred. Your goal as a proposer should be to concisely present the information needed to fully address the evaluation criteria (see Section IV). Proposals that grossly exceed the page limits or fail to follow the format guidelines may be rejected as non-responsive.

III. PROPOSAL REQUIREMENTS

Proposers must submit the appropriate number of copies of the completed proposal to the attention of Roseanne Viscusi at the address on the front of this Program Opportunity Notice/Request for Proposal. A completed and signed Proposal Checklist must be attached as the front cover of your proposal, one of which must contain an original signature. **Late proposals will be returned and proposals lacking the appropriate completed and signed Proposal Checklist will be returned. Faxed or e-mailed copies will not be accepted.**

Proposals should not be excessively long or submitted in an elaborate format that includes expensive binders or graphics. Unnecessary attachments beyond those sufficient to present a complete, comprehensive, and effective response will not influence the evaluation of the proposal. Each page of the proposal should state the name of the proposer, the PON number, and the page number. The proposal must be in the following format and should present the items in the sequence indicated below.

Proposal Sections. Sections of your proposal should be as follows and assembled in the order indicated:

1. Proposal Checklist. Complete the specific Proposal Checklist attached as part of this PON (Attachment A), and include it as the front cover of the original and each copy of the proposal. Note the following:

- Indicate whether you accept the standard terms and conditions as contained in the attached Sample Agreement. If you do not accept the standard terms and conditions, provide alternate terms with justification based on the risk and benefit to NY State. NYSERDA reserves the right to consider only exceptions to terms that are specifically included with the proposal. Any negotiation of terms will be at NYSERDA's sole discretion.

Do not leave any blanks. If a specific question is not applicable, indicate N/A.

- Be sure the individual signing the Proposal Checklist is authorized to commit the proposer's organization to the proposal as submitted.

2. Procurement Lobbying Requirements - State Finance Law sections 139-j and 139-k. Procurement lobbying requirements contained in State Finance Law sections 139-j and 139-k became effective on January 1, 2006. (The text of the laws is available at: <http://www.ogs.ny.gov/aboutogs/regulations/advisoryCouncil/StatutoryReferences.html>).

In compliance with §139-j and §139-k of the State Finance Law, for proposals submitted in response to this solicitation that could result in agreements with an annual estimated value in excess of \$15,000, additional forms must be completed and filed with proposals: (1) a signed copy of the Proposal Checklist including required certifications under the State Finance Law and (2) a completed Disclosure of Prior Findings of Non-Responsibility form. Failure to include a signed copy of the Proposal Checklist referenced in this solicitation will disqualify your proposal.

3. Executive Summary (one page maximum). Indicate the Focus Area (1, 2, 3, or 4) and the Funding Category (1, 2, 3, 4, or 5) to which your proposal is being submitted. Briefly summarize the team members, the related problem or opportunity, the proposed solution and its innovative characteristics, and the potential for energy and GHG reductions in NY State. Strictly limit the Executive Summary to one page and use the following outline:

- Team Members
- Background
- Objective and Scope of Proposed Project
- Project Benefits

4. Background and Proposed Approach (three to four pages). Provide a narrative of the transportation sector being impacted, how it currently operates and what opportunities exist for improvement. Explain fully how the transportation energy and GHG emissions will be reduced and how the efficiency of the existing NY State transportation system will be enhanced. If applicable, discuss your solution's relevance to any metropolitan transportation plan or transportation-related regulation.

III. PROPOSAL REQUIREMENTS, continued

For Category 3 funding, proposers must include a proposal section documenting the NY State underutilization of their strategy. This should include the results of literature reviews and internet scans as previously discussed and contrast NY State to other areas where higher utilization has been achieved.

For Category 5 funding, proposers must include a proposal section documenting the commercial availability and NY State underutilization of their technology. This should include previous sales and deployments, and include client references and contact information. As previously discussed, this solicitation seeks to demonstrate Underutilized Commercial Technologies. Pre-commercial prototypes, requiring additional product development, should be proposed to NYSERDA's *Advanced Transportation Technologies* solicitation, PON 2584, which specifically targets transportation product development.

5. Proposed Statement of Work and Schedule (three to four pages). The Statement of Work (SOW) is the primary contractual document that outlines work activities and specifies deliverables. It delineates each step required to accomplish the project objectives. Therefore, each action needs to be identified, indicating who will perform it, how it will be performed and its intended result. At the end of each task description, specific task deliverable(s) must be listed. Be sure to identify the task deliverable, as this will be a measure of your performance. Be clear and specific: concentrate on "how" and not "why". Use "active voice" sentence structure to make clear who is responsible for specific actions. Use the following phrase to start the description of every task and subtask ("The Contractor shall..."). The SOW structure should include:

Task 1.0 Project Management.

Subtask 1.1 Subcontracts. The Contractor shall enter into the following agreements. Describe all required subcontracts, even if the subcontractor is yet to be defined.

Subtask 1.2 Meetings. The Contractor shall hold a Kick-Off Meeting, Interim Review Meetings (as warranted), and a Wrap-Up Meeting at the end of the project.

Subtask 1.3 Progress Reports. NYSERDA and NYSDOT will expect to receive written monthly or quarterly progress reports, as part of the project management task. These activities should be considered when developing your cost proposal. Such reports shall describe any difficulties encountered during the reporting period and shall include a statement of the Project Director setting forth the cost of the work during the reporting period. The progress reports should be submitted to the NY State Project Managers no later than the 10th of the following month.

Subtask 1.4 Data Collection and Benefit Reporting. For Category 1 and 2 Outreach/Study Projects, NYSERDA will require two brief annual updates on the effectiveness of the information dissemination (e.g. conference presentations, workshops, publications, citations, etc.). A simple, web-based pdf form will be provided for electronic filing (Attachment E2).

For Category 3, 4, and 5 Implementation/Demonstration Projects, the proposal should include a detailed plan to collect data and provide reporting to validate the claimed transportation benefits. Depending on the project, this may require periodic data collection and reporting activities, conducted by the proposer or subcontracted to an unbiased third party. This is an important aspect of a properly-crafted project and it will benefit the proposer and NY State if done properly.

For Category 3, 4, and 5 Implementation/Demonstration Projects, NYSERDA will also require five brief annual updates on the effectiveness and additional replication of the Strategy/Technology. A simple, web-based pdf form will be provided for electronic filing (Attachment E1).

Subtask 1.5 Final Report. The Final Report is a significant project deliverable and should detail all of the work performed and task deliverables, but exclude proprietary information. The comprehensive Final Report shall cover all aspects of the project and shall merge together, and build further on, the previously generated monthly progress and benefit reports. Although not onerous, NYSERDA, NYSDOT and FHWA each have elements of required report formats, which need to be satisfied and which will be provided to successful proposers at the start of the project.

III. PROPOSAL REQUIREMENTS, continued

Task 2.0, 3.0, 4.0, etc. Project-specific Work Scope Tasks. Add as many tasks and subtasks as necessary to cover all actions needed to achieve the goals and objectives of the project. These will be action steps. Each task should include a concise narrative description of the work that will be performed and how the work will be performed and specific deliverables to be provided. Typical tasks may include, but are not limited to, requirements definition, preliminary design, prototype construction, testing, final design, and demonstration.

Schedule. Present a work schedule with a starting point and duration for each task and subtask. Presentation of the schedule in a table or bar chart is preferred starting with "Month 1," "Month 2," etc. along the top horizontally with tasks and subtasks running vertically down the left hand side.

6. Proposer Qualifications (two to four pages, depending on team size). Provide an overview of the relevant qualifications of the proposer, other team members and major subcontractors. Note that subcontracts of \$50,000 or more are subject to competitive bid procedures except where the proposal identifies a specific subcontractor as an integral participant in the proposed work (see Att. D: Sample Agreement). Resumes, facility qualifications, and data sheets do not belong in the body of the proposal, but should be included in the appendix. Key individuals identified in the proposal need to be available to commit to the project in the time frame proposed and subsequent personnel substitutions will require NY State approval. Additionally, discuss any NYSDOT and/or NYSERDA contracts awarded to the proposer in the past five years and identify NY State project managers associated with those contracts.

To the extent that proposed Category 5 activities include the use of any existing intellectual property (IP) assets, the proposer must describe the IP and provide details that would identify any granted patents or pending applications related to the IP. If the proposer does not own the relevant IP, but is a licensee of the IP, then the proposal must specifically identify and describe any relevant license agreements. Proposers are encouraged to provide copies of relevant IP license agreement(s) and/or letter(s) of support from licensors as attachments to the proposal. To the extent any of the above represents non-public information, please refer to the "Proprietary Information" section in Article V below.

7. Project Benefits (two to three pages). Discuss how the proposed project will reduce transportation energy and GHG emissions in NY State and provide estimates of the potential improvement. Quantify any additional project benefits to the extent possible: mobility and reliability benefits (e.g., congestion reduction, number of people or goods shifting to more efficient transportation modes, amount of travel variability reduced, etc.), environmental benefits (e.g., emission reductions, elimination of hazardous materials, etc.), economic benefits (e.g., jobs created or retained, reduced transportation system life-cycle costs, enhanced viability of NY State businesses, etc.), safety and security benefits (e.g., reduction in deaths, injuries and real property losses, etc.), and other benefits (e.g., lowering the cost of compliance with State or Federal regulations, enhanced quality of life issues, etc.)

8. Budget. A Contract Pricing Proposal Form (CPPF), with associated instructions, is provided as Attachment C to this PON. Each proposal must include a completed CPPF and also a cost-sharing table (see example below) identifying the allocation of funding by task. The net cost to NY State is one of the evaluation criteria and will be closely considered. The value of NY State funds could be reduced through greater efficiencies or through cost sharing where other funds substitute for NY State funds.

Cost Sharing. The proposal should show non-NYS funding of at least 25% of the total cost of the project and the amount of cost sharing will be an important consideration in the proposal evaluation process. Cost sharing can be from the proposer, other team members, and other government or private sources. The proposer or proposing team cannot claim as cost-share any expenses that have already been incurred. NY State funds cannot be used to reimburse or replace normal expenses of other government organizations.

Contributions of direct labor (for which the laborer is paid as an employee) and purchased materials may be considered "cash" contributions. Unpaid labor, indirect labor, or other general overhead may be considered "in-kind" contributions. For example, labor may be provided at discount rates, while products for commercial demonstration may be provided at a significant discount or at cost to the project.

III. PROPOSAL REQUIREMENTS, continued

It is the responsibility of the proposer to adequately document the level of cost share being provided from all sources. If funded, the proposer will also need to provide cost share documentation with each invoice submitted. NY State funds will not pay for efforts that have already been undertaken. The proposer or proposing team cannot claim as cost-share any expenses that have already been incurred. Show the cost sharing plan in the following format within your proposal (expand as needed).

PROPOSAL COST SHARING TABLE						
Proposed Funding By Task (Cash and In-Kind)					Project Total	
Funding Source	Task 1 (\$)	Task 2 (\$)	Task 3 (\$)	...	Cash (\$)	In-Kind (\$)
NY State						
Proposer						
Co-Funder (identify)						
Co-Funder (identify)						
Task Total (\$)						

Indirect Costs. Attach supporting documentation to support indirect cost (overhead) rate(s) included in your proposal as follows:

- Describe the basis for the rates proposed (i.e., based on prior period actual results; based on projections; based on federal government or other independently-approved rates).
- If rate(s) is approved by an independent organization, such as the federal government, provide a copy of such approval.
- If rate(s) is based on estimated costs or prior period actual results, include calculations to support proposed rate(s). Calculation should provide enough information for NYSERDA to evaluate and confirm that the rate(s) are consistent with generally accepted accounting principles for indirect costs.

NYSERDA reserves the right to audit any indirect rate presented in the proposal and to make adjustment for such difference. Requests for financial statements or other needed financial information may be made if deemed necessary.

9. Annual Metrics Reports. If awarded, the proposer will be required to submit to NYSERDA's Project Manager on an annual basis, a prepared analysis and summary of metrics addressing the anticipated energy, environmental and economic benefits that are realized by the project. All estimates shall reference credible sources and estimating procedures, and all assumptions shall be documented. Reporting shall commence the first calendar year after the contract is executed. Reports shall be submitted by January 31st for the previous calendar years activities (i.e. reporting period). Please see Attachment E1/E2: Sample Metrics Reporting Guides for the metrics that you will be expected to provide and the reporting duration. NYSERDA may decline to contract with awardees that are delinquent with respect to metrics reporting for any previous or active NYSERDA agreement.

10. Appendices. Include any resumes, company qualifications, or ancillary information which is deemed necessary to support your proposal. If appropriate, also include:

Letters of Interest or Commitment. If you are relying on any other organization to provide services, equipment or cost share, include a letter from that organization describing their planned participation. Where appropriate, proposed field demonstrations should include letters of commitment from the host site or vehicle fleet owner. However, due to their active sponsorship of this solicitation, Letters of Interest or Commitment should not be solicited from NYSDOT or NYSERDA personnel.

Also include letters of interest or commitment from team members, businesses or other organizations critical to the success of the project. Absence of letters of interest or commitment will be interpreted as the proposer not having support from the identified parties.

IV. PROPOSAL EVALUATION

Requirements. A negative response to any one of the questions identified below may eliminate the proposal from further consideration. Does the proposal:

- ✓ Have the potential to reduce transportation energy and GHG emissions in NY State?
- ✓ Adequately document the commercial availability and/or underutilization of the technology/strategy to be demonstrated?
- ✓ Provide at least 25% cost sharing by the proposer or third parties?
- ✓ Provide additional mobility and reliability, environmental, economic, safety and security benefits in NY State?
- ✓ Provide Letters of Commitment from all co-funders and key team members?

Proposals will be reviewed by a Technical Evaluation Panel (TEP) and will be scored and ranked according to the following criteria. All five funding categories will be evaluated together. After the proposals are reviewed, NYSERDA will issue a letter to each proposer indicating the proposal evaluation results. Proposers receiving favorable evaluations will be invited to enter into contract negotiations with NYSERDA. The proposer will be required to submit a detailed statement of work, budget, and schedule, and may also be asked to address specific questions or recommendations of the TEP before contract award.

Evaluation Criteria.

- **Proposed Solution/Scope.** How significant is the issue or opportunity for NY State? Is the proposed concept likely to be adopted and have the potential to reduce transportation energy and GHG emissions in NY State? If a demonstration, is the technology/strategy truly commercial and/or underutilized in NY State? Is the proposed work plan technically feasible, innovative, and superior to potential alternatives?
- **Project Benefits.** How significant is the statewide potential for transportation energy and GHG reductions in NY State? Are the expected benefits likely to be realized, given other constraints or barriers? Are there additional significant mobility and reliability, environmental, economic, safety and security benefits? If adopted, will there be economic benefits in NY State in the form of subsequent manufacturing or technical service activity?
- **Proposer(s).** To what degree does the team have relevant and necessary technical and business background and experience? If a Collaborative Partnership, is it truly significant? Does the team include NY State businesses, thereby providing economic benefits in the form of jobs? Does the proposal contain Letters of Commitment from all essential participants, co-funders, and related businesses and other organizations?
- **Project Outcome and Cost.** Is the overall project cost justified based on the expected benefits? Relative to the project cost, how significant are the potential benefits? Has the 25% minimum cost share requirement been met? How appropriate are the proposer's cost share contributions (sources and amounts) with respect to the degree of risk, potential to benefit from the work, and financial status of the proposing organization and project team?
- **Other Considerations.** Proposals will be reviewed to determine if they have submitted to the proper funding category and if they reflect NY State's overall objectives, including: risk/reward relationships, similar ongoing or completed projects, the general distribution of transportation research projects among industries and other organizations, and the distribution of projects within NY State.

V. GENERAL CONDITIONS

Proprietary Information. Careful consideration should be given before confidential information is submitted to NYSEDA as part of your proposal. Review should include whether it is critical for evaluating a proposal, and whether general, non-confidential information, may be adequate for review purposes. The NY State Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSEDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise." Information submitted to NYSEDA that the proposer wishes to have treated as proprietary and confidential trade secret information, should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to exempt it from disclosure, including a written statement of the reasons why the information should be exempted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501

<http://nyserda.ny.gov/~media/Files/About/Contact/NYSEDARegulations.ashx>.

However, NYSEDA cannot guarantee the confidentiality of any information submitted.

Omnibus Procurement Act of 1992. It is the policy of NY State to maximize opportunities for the participation of NY State business enterprises, including minority- and women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements.

Information on the availability of New York subcontractors and suppliers is available from:

Empire State Development
Division for Small Business
30 South Pearl Street
Albany, NY 12245

A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development
Minority and Women's Business Development Division
30 South Pearl Street
Albany, NY 12245

State Finance Law sections 139-j and 139-k. NYSEDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain procurement lobbying requirements which can be found at <http://www.ogs.ny.gov/aboutogs/regulations/advisoryCouncil/StatutoryReferences.html>

The attached Proposal Checklist calls for a signature certifying that the proposer will comply with State Finance Law sections 139-j and 139-k and the Disclosure of Prior Findings of Non-responsibility form includes a disclosure statement regarding whether the proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years.

Tax Law Section 5-a. NYSEDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with NYSEDA having a value in excess of \$100,000, to certify to the Department of Taxation and Finance (the "Department") whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the Department to collect NY State and local sales and compensating use taxes. The Department has created a form to allow a prospective contractor to readily make such certification. See, ST-220-TD (available at http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf).

Prior to contracting with NYSEDA, the prospective contractor must also certify to NYSEDA whether it has filed such certification with the Department. The Department has created a second form that must be completed by a prospective contractor prior to contacting and filed with NYSEDA. See, ST-220-CA (available at http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf). The Department has developed guidance for contractors which is available at <http://www.tax.ny.gov/pdf/publications/sales/pub223.pdf>.

V. GENERAL CONDITIONS, continued

Contract Award. NYSERDA anticipates making multiple awards under this solicitation. It may award a contract based on initial applications without discussion, or following limited discussion or negotiations pertaining to the Statement of Work. Each offer should be submitted using the most favorable cost and technical terms. NYSERDA may request additional data or material to support applications. NYSERDA will use the Sample Agreement to contract successful proposals. NYSERDA reserves the right to limit any negotiations to exceptions to standard terms and conditions in the Sample Agreement to those specifically identified in the submitted proposal (see Attachment A: Proposal Checklist). Proposers should keep in mind that acceptance of all standard terms and conditions will generally result in a more expedited contracting process. NYSERDA expects to notify proposers in approximately ten weeks from the proposal due date, whether your proposal has been selected to receive an award. NYSERDA may decline to contract with awardees that are delinquent with respect to any obligation under any previous or active NYSERDA agreement.

Limitation. This solicitation does not commit NYSERDA to award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all proposals received, to negotiate with all qualified sources, or to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest. NYSERDA reserves the right to reject proposals based on the nature and number of any exceptions taken to the standard terms and conditions of the Sample Agreement.

Disclosure Requirement. The proposer shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States, and shall describe circumstances for each. When a proposer is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSERDA after the award of a contract, NYSERDA may exercise its stop-work right pending further investigation, or terminate the agreement; the contractor may be subject to penalties for violation of any law which may apply in the particular circumstances. Proposers must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the NY State Department of Labor.

VI. ATTACHMENTS

Attachment A - Proposal Checklist

Attachment B - Disclosure of Prior Findings of Non-Responsibility Form

Attachment C - Contract Pricing Proposal Form and Instructions

Attachment D - Sample Agreement

Attachment E1 - Implementation/Demonstration Metrics Reporting Guide

Attachment E2 - Information Dissemination Metrics Reporting Guide