



**Region 2
University Transportation Research Center**

**COORDINATED INTELLIGENT
TRANSPORTATION SYSTEMS
DEPLOYMENT IN NEW YORK CITY**

2013 - REQUEST FOR PROPOSALS

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Background:

The FHWA through its New York Division/New York City Metropolitan office is promoting programs pertaining to urban Intelligent Transportation Systems (ITS) in the region. The NYCDOT and NYSDOT-Region 11 Planning have taken the initiative in working with FHWA to take advantage of this FHWA program. NYCDOT and NYSDOT have developed the Training Courses, Research and Development Programs for NYCDOT and NYSDOT Coordinated Intelligent Transportation Systems Deployment in New York City (CIDNY) which is a set of multi studies (task assignments) toward the fulfillment of the objectives of these programs.

The 2013 studies are to be performed by institutions of the Region 2 University Transportation Research Center (UTRC). The purpose of these multi-year UTRC studies are to provide ongoing training courses, research and development pertaining to urban Intelligent Transportation Systems (ITS) deployment. The studies focus on the following program areas: Construction Management, Traffic Demand Management, Dynamic Data Collection, Traffic Incident Management, Traffic Signal Timing and Detection Technologies, Strategic ITS Deployment Plan, Pedestrians and Cyclists Safety, Data Storage and Access Platform for MTA BusTime Data.

Introduction:

In collaboration with FHWA New York Division/New York City Metropolitan office, NYSDOT-Region 11, and NYCDOT, the Region 2 University Transportation Research Center (UTRC) is pleased to announce the 2013 CIDNY Call for Proposals. UTRC is seeking proposals in response to the task assignments as outlined below.

1. Application of Active Traffic Demand Management (ATDM) strategies along critical multimodal highway / Arterial Street corridors.
2. Develop a multi-agency/multi modal construction management tool to enhance coordination of construction projects citywide during Planning and operation phases
3. Conduct research and develop packages of dynamic data collection of vehicular movement; conversion of real time speed data for identifying traffic speeds, incident notification and O&D in ITS systems
4. Develop an introductory course on Traffic Incident Management (TIM) Response for Transportation operators, customized to address unique congested condition of NYC highways
5. Develop a comprehensive guide to traffic signal timing, new detection technologies and advanced signal timing concepts applicable in New York City
6. Strategic Intelligent Transportation Systems (ITS) Deployment Plan for New York City
7. Research on Pedestrians and Cyclists Safety using ITS Technology in New York City
8. Develop Data Storage and Access Platform for MTA BusTime Data

CIDNY Project Description and Objectives:

The CIDNY project will include the application of Active Traffic Demand Management (ATDM) strategies along critical multi-modal highway/Arterial Street corridors. The project will also develop a multiagency/ multi modal construction management tool. Research will be conducted to develop packages of dynamic data collection of vehicular movement and convert real time speed data for identifying traffic speeds. An introductory course on Traffic Incident Management (TIM) response will be developed for transportation operators, customized to address unique congested condition of NYC highways. The CIDNY project will also develop a comprehensive guide to traffic signal timing, new detection technologies and advanced signal timing concepts applicable in New York City. The Strategic 2005 Intelligent Transportation Systems (ITS) Deployment Plan for New York City will be reviewed and updated accordingly. In addition, research will be conducted on Pedestrians and Cyclists Safety using ITS Technology in New York City. A data storage and access platform for MTA BusTime data will be developed.

CIDNY Project Goals and Benefits:

- The CIDNY project will identify feasible ATDM strategies that can be deployed in NYC and develop a structural program framework/design criteria for implementation tailored for the NYC metropolitan region. A program on behalf of the NYSDOT & NYCDOT will be emphasized. In addition, it will identify ATDM applications for Emergency events and develop materials to support ATDM training and workshops for NYC metro area transportation and enforcement agencies.
- The CIDNY project will evaluate what elements of the Construction Impact Analysis (CIA) tool are applicable to the NYC metro area and create a customized Construction Management Tool for NYC metropolitan region with expanded user permissions. In addition, the project will evaluate how the customized CIA tool can be utilized to manage traffic during emergencies and provide specific recommendations on how to incorporate the use of this tool in current NYSDOT protocols.
- The CIDNY project will summarize the technologies evaluated in addition to specific recommendations to be implemented and list the “Pro & Cons” for each technology with a determination on which or what combinations of vehicle probes to be deployed in the City and evaluate the use of probe data for incident/emergency management in preparation for and during emergency events.
- The CIDNY project will report on TIM Operations in metropolitan areas across the nation. The final report will document the "Best Practices" in implementing TIM programs would be highlighted and an outline of applicability to NYC would be developed. In addition, the document will summarize recommendations outlining the advantages for implementing a TIM program to support incident/emergency operations during an emergency event, develop incident management performance measures applicable to NYC’s Operations, and develop recommendations to enhance ITS/Incident

Management practices deployed during emergency events.

- The CIDNY project will provide a report that offers direction and guidance to all NYCDOT traffic engineers based on sound practice to proactively and comprehensively improve safety and mobility at intersections. The document to be provided should be a guideline for timing design and new detection technologies. Advanced concepts should be included in the document and each concept section should provide an overview and discuss the effects on signal timing and offer examples where applicable. The report is to include the evaluation and research of new technologies and concepts that can be implemented in the local network in NYC. In addition, the project will incorporate the use and application of the Final Strategic ITS Deployment Plan for New York City in the NYCDOT ITS project development process and provide specific recommendations to NYCDOT staff on the appropriate means to update and maintain this document.
- The CIDNY project will review and update accordingly the strategic ITS Deployment Plan for New York City that will include specific reference to three key areas required for ITS deployment in the City: NYCDOT ITS Implementation Strategy, the NYCDOT Five-Year ITS Deployment Plan and the NYC Sub-Regional ITS Architecture (NYCSRA).
- CIDNY will facilitate a report that will deliver direction and guidance to all NYCDOT traffic engineers based on a comprehensive practice to proactively improve safety and mobility of pedestrians and bicycles at intersections. The research should identify the pedestrian safety and mobility problems faced in New York City (including potential contributing factors to crashes), select the pedestrian safety countermeasures corresponding to each problem, and evaluate the effectiveness of each of the countermeasures. The research should include ITS-based technologies that would assist the City to reduce Pedestrian and Bicycle conflicts and provide specific recommendations to incorporate the use of this document in the existing NYCDOT safety and ITS programs.
- The CIDNY project will develop an appropriate data retrieval and database storage/maintenance method, to automatically download data daily from the MTA server and populate it into an accessible database. Additionally, recommendations will be developed for data sampling and long term storage and a user interface will be created that would allow access to the data, and would create custom outputs that can easily be used for planning projects. In addition, the project will provide recommendations to incorporate this task into existing NYCDOT protocols.

Task Assignments:

The following are the 8 task assignments developed for the CIDNY project. The task assignments are stand alone tasks. Proposals including more than one task assignment must clearly identify the scope and costs of each task assignment.

TASK ASSIGNMENT # 1: Application of Active Traffic Demand Management (ATDM) strategies along critical multimodal (general vehicle, HOV's, buses, taxis, trucks) highway / Arterial Street corridors.

ATDM strategies would be analyzed in corridors such as the LIE between the Van Wyck Expressway and the Mid-Town tunnel where there are a high number of high occupant vehicles such as buses, in addition to trucks and general traffic operating in the corridor. Research should review current FHWA outline of "best practices" including evaluation of the current deployment of ATDM by MinDOT in Minneapolis and WSDOT in Seattle. Evaluation should highlight the application of the advances in ATDM design / operational protocols based on operational experience as outlined by FHWA, MinDOT, WSDOT, other State DOT's and by Texas Transportation Institute (TTI) as the main ATDM research institution in America.

This task assignment will:

1. Evaluate and recommend ATDM strategies that can be deployed during an "emergency" (event) as part the NYS Emergency Preventive Mitigation program to enhance management of the transportation network to quickly implement:
 - a. Evacuation from storm impact areas and threatened public facilities.
 - b. Support priority treatment for emergency response /recover teams.
 - c. Support prioritized multi-modal (general traffic, commercial vehicles, buses, vans, taxis & HOV's) movement during an event.
2. Develop an outline of design and operation protocols for corridor level deployment of ATDM systems in NYC with a focus to LIE corridor from Van Wyck Expressway to Midtown Tunnel.
3. Organize a workshop to present ATDM strategies including "lesson learned" from other states and international community. The workshop will be hosted by NYSDOT, NYCDOT and FHWA.

Deliverables:

1. Identify feasible ATDM strategies that can be deployed in NYC with a focus to LIE corridor
2. Develop a structural program framework/design criteria for implementation tailored for the NYC metropolitan region. A program on behalf of the NYSDOT & NYCDOT will be emphasized.
3. Identify ATDM applications for Emergency events.
4. Develop materials to support ATDM training and workshops for NYC metro area transportation and enforcement agencies.
5. Provide up to 25 color copies of the material/documents in three-ring binders and a total of 10 CDs, which will include the PowerPoint presentation and the distributed material.

TASK ASSIGNMENT # 2: Develop a multi-agency/multi modal construction management tool to enhance coordination of construction projects citywide during Planning and operation phases to improve highway mobility and drivers experience.

NYSDOT is looking to enhance coordination of planning and operations of construction within its divisions and other agencies to optimize traffic flows within the travel corridors and networks impacted by one or more construction projects. Improved coordination will enhance the safety of travelers and workers during periods of construction as a critical element of the NYSDOT Driver's First program.

This task will evaluate the effectiveness of an enhanced Construction Impact Analysis (CIA) tool designed and developed by the Washington State Department of Transportation (WSDOT) primarily in the Puget Sound Metropolitan area. The CIA will be evaluated by UTRC with University of Washington Transportation Research Center (TRAC) to determine those elements of CIA which can be deployed in a test demo in NYC.

The CIA tool is a web-based application that tracks the estimated traffic impacts of multiple years of construction, maintenance and special events (sports games, marathons, concerts, etc) at the state and local level. The ability of the CIA to identify potential resources at a construction site which could be used in response to an "emergency" (event) would be delineated along with the ability to effect modification of construction sites during an event, which would permit prioritized traffic movement during an "emergency"

An example of a few of the features of an enhanced CIA tool, which would be tested in New York:

1. Prepare the tool for use in a pilot implementation in the State of New York: The CIA tool will be customized for the NYC Region sourcing construction data from major operating agencies like NYSDOT, NYCDOT, PANYNJ, MTA etc. In preparation for a pilot implementation in New York the tool will be evaluated to determine what within the system is unique to WSDOT and modify those elements to work in New York.
2. Expand the tool's capabilities to cohesively serve both long term construction traffic planning and short-term traffic management. Add the ability to transition existing longer term construction project information to a shorter term, more detailed look at traffic impacts. This would allow more detailed information such as impacts by hour and specific lane restrictions. This enhancement will reduce duplication of effort, provide products in consistent formats as projects transition to construction and improve public information with maps showing traffic impacts from construction or special events.
3. Enhance the ability to manage user permissions in the tool. Improving the CIA tool's ability to manage user permissions will allow its use by a broader range of staff within a state DOT while maintaining the integrity of the data. Expanding access to the CIA tool

will empower project teams to input updated information on their project and review projects or events they must consider in their traffic plans. This will support the flow of construction traffic information between project offices, traffic operations, planning and communications staff.

Deliverables:

1. An evaluation on what elements of the CIA tool those are applicable to the NYC metro area. Customize the Construction Management Tool for the NYC metropolitan region with expanded user permissions.
2. Evaluation of how the customized CIA tool can be utilized to manage traffic during emergencies.
3. Provide specific recommendations on how to incorporate the use of this tool in current NYSDOT protocols.

TASK ASSIGNMENT # 3: Conduct research and develop packages of dynamic data collection of vehicular movement; conversion of real time speed data for identifying traffic speeds, incident notification and O&D in ITS systems.

This research would evaluate “best practices” in metropolitan across the nation and outline of applicability to NYC. Research should feature the work of FHWA and supportive State DOT's and research institutions such as Texas Transportation Institute (TTI). The state of art technologies such as use of probe vehicle data including tag (TRANSMIT, TRANSCORE, others) and license plate readers, INREX, Dyna Flow, Blue Tooth, etc. This task would coordinate with NJIT's (TRANSCOM's) 2012 Probe Vehicle Data Validation and Comparison Study. Present results of recommended probe vehicle systems to be deployed in NYC and an outline for a demo to be deployed and analyzed as necessary.

Evaluate the use of probe data to determine impact on transportation facilities during disruption to traffic patterns generated by an “emergency” (event).

Deliverables:

1. A report summarizing the technologies evaluated in addition to specific recommendations to be implemented. The “Pro & Cons” for each technology with a determination on which or what combinations of vehicle probes to be optimally deployed in the City.
2. An evaluation of the use of probe data for incident/emergency management in preparation for and during emergency events.
3. Provide up to 25 color copies of the material/documents in three-ring binders and a total of 10 CDs which will include the PowerPoint presentation and the distributed material.

TASK ASSIGNMENT # 4: Develop an introductory course on Traffic Incident Management (TIM) Response for Transportation operators, customized to address unique congested condition of NYC highways.

Research other Metropolitan areas TIM programs and evaluate their protocols. Prepare the recommendations applicable to NYC TIM operation. Develop an emergency management introductory course designed for transportation responders, Operational and Management staff and to devise coordinated traffic management response during an incident.

The course should focus on familiarizing the participants with the roles, procedures and responsibilities during an emergency event. It should cover the types of major disasters and the emergency management phases to manage resources during emergencies, as well as defining requirements for internal and external coordination, individual and agency roles and responsibilities and standard operation procedures. Scenarios should be discussed that reflect varying degree of emergency and corresponding issues. Initiatives to expand ongoing programs should be presented.

The evacuation component in a natural disaster scenario should be addressed and resource management requirements involving transportation modes should be delineated.

Previous NYC incidents that occurred in the Metropolitan Area should be demonstrated and the roles and responsibilities of each participating agency should be defined. Also review if the Metropolitan Area has an “additional” cross-agency communication need or if the existing multi-agency cooperation is adequate. Development of the protocols of an operation of the TIM group in NYC would involve setting up a TIM group as a demo including an evaluation of the TIM group to effectiveness of incident management for a limited period in NYC.

Coordinate with the recently formed statewide TIM committee in addition to the NYSDOT Region 11 TIM Committee, as necessary.

Deliverables:

1. Report of TIM Operations in metropolitan areas across the nation. The final report will document:
 - a. "Best Practices" in implementing TIM programs would be highlighted and an outline of applicability to NYC would be developed
 - b. Set of recommendations outlining the advantages for implementing a TIM program to support incident/emergency operations during an emergency event.
 - c. Develop incident management performance measures applicable to NYC's Operations.
 - d. Develop recommendations to enhance ITS/Incident Management practices deployed during emergency events.
2. Provide up to 25 color copies of the material/documents in three-ring binders and a total of 10 CDs, which will include PowerPoint presentation and the distributed material.

TASK ASSIGNMENT # 5: Develop a comprehensive guide to traffic signal timing, new detection technologies and advanced signal timing concepts applicable in New York City

The focus of this document is on traffic signal control principles, practices and procedures. This document should represent a synthesis of traffic signal timing concepts, their application and focus on the use of detection, new technologies and advanced concepts.

The guide should include research of the latest vehicle detection technologies. The various detection devices should be compared and the strengths and weaknesses of each device should be described.

Example of concepts should include but not limited to:

- Transit Signal Priority (TSP)
- Traffic Responsive Overview
- Adaptive Traffic Signal Control Overview

Deliverables:

This Report will provide direction and guidance to all NYCDOT traffic engineers based on sound practice to proactively and comprehensively improve safety and mobility at intersections.

The document to be provided should be a guideline for timing design and new detection technologies.

Advanced concepts should be included in this document and each concept section should provide an overview and discuss the effects on signal timing and offer examples where applicable. The report is to include the evaluation and research of new technologies and concepts that can be implemented in the local network in NYC.

Provide up to 30 color copies of the document (bind) and a total of 10 CDs, which will include the PowerPoint presentation and the distributed material.

TASK ASSIGNMENT # 6: Strategic Intelligent Transportation Systems (ITS) Deployment Plan for New York City

The New York City region has invested significant resources on ITS deployment in the past decades. It has involved the deployment of an advanced controller (the ASTC), a wireless communication infrastructure (NYCWiN), detectors, and the overall data management system to process information and to communicate the control settings.

Over the past several years, NYC has designed and implemented a master plan for a total

modernization of the entire ITS infrastructure, with the design concept driven by (a) cost-effective procurement and operation, (b) attention to using and advancing national ITS standards, helping to define the state of the practice when needed, (c) development of a system capable of addressing a multi-modal environment that includes Bus Rapid Transit (BRT), Transit Signal Priority (TSP), adaptive control (ACDSS) in select locations, delivering vehicular capacity while improving the pedestrian and urban environment.

This Task will assist the City to place all pieces of ITS together to improve operational efficiency and capabilities needed for better coordination among agencies within the City and in the region. The challenge for NYCDOT and its many contractors and consultants is to effectively address the systems integration issues that arise in such large scale designs, with so many subsystems and interface requirements.

This Task will review and update the Strategic Intelligent Transportation Systems (ITS) Deployment Plan for New York City (2005).

Deliverables:

The strategic ITS Deployment Plan for New York City will include specific reference to three key areas required for ITS deployment in the City:

1. **NYCDOT ITS Implementation Strategy:** Outlines steps NYCDOT must take to implement large scale ITS functions and services in five boroughs.
2. **NYCDOT Five-Year ITS Deployment Plan:** Provide an overall analysis of all existing and planned ITS projects at various stages of project development.
3. **NYC Sub-Regional ITS Architecture (NYCSRA):** This product has been developed for all local agencies (NYCDOT – NYSDOT – MTA – PANYNJ) and provides a set of NYCDOT-specific market packages available for deployment. It also provides a pathway to other agencies and functions for interconnectivity among systems and agencies.
4. Incorporate the use and application of the Final Strategic ITS Deployment Plan for New York City in the NYCDOT ITS project development process.

Provide specific recommendations to NYCDOT staff on the appropriate means to update and maintain this document.

Provide up to 30 color copies of a report that will describe the Strategic Deployment Plan for the City in individually bound booklets/binders, and a total of 10 CD/DVD with the PowerPoint presentation

TASK ASSIGNMENT # 7: Research on Pedestrians and Cyclists Safety using ITS Technology in New York City

Perform research on ITS-based countermeasures for reducing pedestrian injuries, conflicts and fatalities in the City, including but not limited to traffic signs, pavement markings, signals and signal timing, physical separations and street lighting.

Pedestrian Countdown Signals in the City help pedestrians safely cross intersections with a history of pedestrian crashes, while Accessible Pedestrian Signals assist blind or low vision pedestrians in crossing the street. This research should cover the importance of Accessible Pedestrian Signals (APS's) and Pedestrian Countdown Signals in pedestrian safety.

The countermeasures should be categorized and classified according to their positive impact on pedestrian safety as highly effective, moderately effective, etc. The research should also outline the possible causes for changes in the deployment of the countermeasures. With the increase of bike-lanes within the City, countermeasures and mitigations should be recommended

Deliverables:

Provide a Report that will deliver direction and guidance to all NYCDOT traffic engineers based on a comprehensive practice to proactively improve safety and mobility of pedestrians and bicycles at intersections.

The research should identify the pedestrian safety and mobility problems faced in New York City (including potential contributing factors to crashes), select the pedestrian safety countermeasures corresponding to each problem, and evaluate the effectiveness of each of the countermeasures.

The research should include ITS-based technologies that would assist the City to reduce Pedestrian and Bicycle conflicts.

Provide specific recommendations to incorporate the use of this document in the existing NYCDOT safety and ITS programs.

Provide 20 hard copies of the Final Report and 10 CD's, which will include the PowerPoint presentation and the Final Report.

TASK ASSIGNMENT # 8: Develop Data Storage and Access Platform for MTA BusTime Data

NYCDOT has used GPS information from yellow taxis and other vehicles to monitor changing traffic conditions around the city, and to perform before and after studies of projects. As the city's public buses are equipped with GPS location devices, NYCDOT seeks to use this data in a similar way to support the agency's strategic goals. This project would develop a database system for storing the bus GPS data, as well as a user interface for accessing the data and providing basic analysis.

The Metropolitan Transportation Authority (MTA) has recently introduced the BusTime program, which provides real-time location information for buses around the city. The primary purpose of the program is to provide information to bus customers and to transit supervisors about the location of buses. The BusTime system uses GPS and dead reckoning to monitor the location of all buses on the system at 30 second intervals, as well as other information about the bus (such as the route, and whether the bus is in or out of service). As of May 2012, BusTime is active on all Staten Island local and express bus routes, as well as on the B63 and M34/A SBS routes.

NYCDOT has an agreement with the MTA to download and store the bus location information provided by the BusTime system. MTA provides the data in an agreed-on format overnight for the previous calendar day's bus trips.

The Transportation Management Center (TMC) will benefit both from having excellent historical data on travel patterns on major corridors around the city, and eventually real time updates using buses as probe data. After the database is accessed, data will be analyzed both to understand traffic patterns, as well as before and after analysis of specific projects.

MTA uses this data to monitor buses in real time, and adjust schedules. NYCDOT would use the data as a proxy for traffic flow with buses as probe data, and to monitor the effects of our projects on buses and on general traffic flow.

Deliverables:

- Develop an appropriate data retrieval and database storage/maintenance method, to automatically download data daily from the MTA server and populate it into an accessible database. Additionally, develop recommendations for data sampling and long term storage.
- Create a user interface that would allow access to the data, and would create custom outputs that can easily be used for planning projects.
- Provide recommendations to incorporate this task into existing NYCDOT protocols.
- Provide 30 color copies of the report and the PowerPoint presentation and the information available in 10 CDs/DVDs.

How to Apply:

Only faculty at institutions of the UTRC consortium are eligible to submit a proposal. Proposals will be based on the merit of the information contained in the proposal. Final awards will be subject to the governing requirements of the U.S. DOT University Transportation Centers

Program, the NYCDOT and NYSDOT agreement provisions, and the Research Foundation of the City University of New York.

The above task assignments are stand alone tasks. Proposers can respond for only an individual task assignment or for many task assignments. Proposals including more than one task assignment must clearly identify the scope, costs, and duration of each task assignment.

Proposals must be submitted *electronically in Microsoft Word, .rtf, or pdf format* and **Budgets** in *Microsoft Excel format*, through the [UTRC Online Submission System](http://www.utrc2.org) (visit www.utrc2.org).

For more information, please contact:

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Phone: (212) 650-8074

or

Ellen Thorson, Ph.D., Senior Research Fellow

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Phone: (212) 650-8144

Project Period and Funding:

The CIDNY program duration is for 3 years (2013-2015). Up to \$500,000 per year for a total of \$1,500,000 will be available for the CIDNY project, inclusive of administrative fees. NYCDOT and NYSDOT believe the available amount of funds is a reasonable estimate for the total cost of the work being requested. The net cost to NYCDOT and NYSDOT is one of the selection criteria. When compared to competing proposals, a proposal that requires fewer NYCDOT/NYSDOT dollars will receive a higher score on the cost component of the selection criteria. The value of NYCDOT/NYSDOT funds required could be reduced through efficiencies (fewer hours per task and / or lower cost per hour) or through cost-sharing where other funds substitute for NYCDOT/NYSDOT funds. (Note: Cost-sharing funds may increase the total project cost further.) If a sufficient number of potential Principal Investigators indicate in writing that they believe the research cannot be reasonably conducted within these funding constraints and there are only a limited number of proposals submitted within the funding constraints, NYCDOT/NYSDOT reserve the option of not proceeding with the work or revising the budget estimate and issuing a new Request for Proposals.

Potential Principal Investigators who believe the budget estimate is unreasonable should write to: Ernest Athanailos, P.E., Director of Signals and ITS Engineering, NYC Department of Transportation, Division of Traffic Operations, 34-02 Queens Blvd, 2nd Floor, L.I.C, New York 11101.

Proposal Requirements:

In addition to a complete technical proposal with a detailed proposed work plan by task, each submission must also include the following elements:

1. A cover page, following the form in the Template for Technical Proposals on the UTRC website (<http://www.utrc2.org/research/resourcesforpis.php>). A lead institution and Principal Investigator (PI) should be clearly identified. The Principal Investigator must be a faculty member of a member institution of the UTRC consortium. The task assignment (s) should be clearly indicated in the cover page. As stated earlier, a proposal including more than one task assignment is acceptable. However, the scope, cost, budget, and duration of each task assignment must be clearly identified.

Proposals involving well-structured teams from two or more institutions are encouraged. Such proposals should be submitted as a single entry with appropriate budget.

2. An executive summary briefly describing the problem, proposed approach, and work effort in 400 words or fewer.

3. Brief curricula vitae of all principals responsible for the study (not to exceed two pages each).

4. A budget, using the Template for CIDNY Proposals: [CIDNY Budget Template](#)

- a. Each proposal must include a detailed estimate of the time and cost to perform the work, including the billing rate for each person.
- b. Proposals are encouraged to include funding for one graduate student researcher; higher levels of student support may be requested but must be justified in the proposal.
- c. No matching cost is required.

** Please contact Penny Eickemeyer or Ellen Thorson before you submit your proposal if you need guidance on the proposal and budget preparation or potential sources of a match.*

Other Considerations:

Generally the task assignment schedule should not exceed twelve months, except to indicate the approximate duration of future phases (beyond the proposed phase) of a multi-phase project.

Multi-phase (or multi-year) 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 NYCDOT/NYS DOT to fund later phases.

Teaming arrangements are strongly encouraged, where appropriate, to enhance the likelihood of

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 evaluation process.

Evaluation Criteria:

Proposals will be reviewed by NYCDOT/NYS DOT.

1. Expertise / Understanding / Approach (Weight: 70%)

- Expertise: What is the extent of the relevant expertise of the Principal Investigator? What is the extent of the relevant expertise of others who will be involved in the research?
- Understanding of the Problem: Does the proposal reflect an understanding of the problem and its relevance? Does the proposal reflect an understanding of existing data and the current state of knowledge?
- Approach: Is the proposed approach clear, especially in how it will build upon and enhance the state of knowledge? Will it yield the deliverables called for in the RFP? Does the approach show insight that will lead to results that will sufficiently assist NYCDOT/NYS DOT in addressing the problem? Is the proposed approach practical given the schedule and total budget? Will the proposed research draw upon all critical sources of pertinent information?

2. Investigator's Previous Experience with Similar Projects (Weight: 10%):

Successful completion of previous projects by the Investigator(s) will be considered. These projects should be in the area of expertise required for successful completion of this project.

3. Cost to NYCDOT/NYS DOT (Weight 20%)

The lower the NYCDOT/NYS DOT cost, the greater consideration a proposal will receive.

General Conditions:

Contract Award:

NYCDOT/NYS DOT anticipates making multiple awards under this solicitation. NYCDOT/NYS DOT may request additional data or material to support applications.

UTRC will use the RFCUNY Sample Agreement to contract successful proposals. UTRC 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.

Limitation:

This solicitation does not commit NYCDOT/NYS DOT to award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYCDOT/NYS DOT 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 NYCDOT/NYS DOT's best interest. NYCDOT/NYS DOT 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.

Reporting Requirements:Quarterly Progress Report:

The Principal Investigator is required to submit quarterly project status reports to the UTRC Project Manager using the template included in resources for PIs on the UTRC website. These reports should be submitted on or about March 10, June 10, September 10 and December 10 and should reflect activity undertaken within the quarter, description of any issues or problems that may lead to requests for extensions or budget revisions, and suggestions for implementation of the research.

Final Report:

In addition of the requirements included in each of the above task assignments, the Principal Investigator is required to submit a draft final report at the conclusion of the project (within one month of project completion or if this deadline can not be met, at a mutually agreeable date between the PI and NYCDOT/NYS DOT). This draft should include a disclaimer page and a completed USDOT Form 1700, which are available at <http://utrc2.org/resources>.

Research Brief:

A one-page non-technical summary of the project is due when the final report is submitted. A template will be provided by the project manager close to project completion. The brief should describe the study's work and findings and may include graphics, photos, information on implementation, publications, and any other information that the PI chooses to include to inform the public about the research.

Special Notes:

Recipients of the UTRC grant are expected to acknowledge the support provided by the UTRC and of the primary sponsors in all presentations and publications resulting from the research or program. UTRC will not knowingly support projects that are being funded or proposed for

funding in whole or in part by other agencies or organizations without a specific agreement for joint funding. Failure to disclose other proposed or in-hand research funding for a project substantially similar to a UTRC project is grounds for termination of a UTRC grant.

Graduate student contributions to research projects must be acknowledged in any publication resulting from research using UTRC funds. Acknowledgment may be by footnote or by co-authorship of reports and articles, depending upon the nature and extent of student contributions.