NEW YORK STATE DEPARTMENT OF TRANSPORTATION

F.A. NO.: SPR1(183)  P.I.N.: P110.83.881

COMPTROLLER'S CONTRACT NO. C030710

PROJECT: Integrated New York Commuter & Traveler Assistance Program Services for NYSDOT (Statewide)

This Agreement made this __________ day of ___________________, 200___ pursuant to Section 14 of the Transportation Law, by and between THE PEOPLE OF THE STATE OF NEW YORK (hereinafter referred to as the "STATE") acting by and through the New York State Department of Transportation (hereinafter referred to as "STATE" or @DEPARTMENT®) whose Main Office is located at 50 Wolf Road in the County of Albany, State of New York 12232, and

ICF Incorporated, LLC
9300 Lee Highway
Fairfax, VA 22031

(hereinafter referred to as "CONSULTANT")

WITNESSETH:

WHEREAS, the STATE desires the CONSULTANT because of its ability and reputation, to perform the services hereinafter mentioned upon the PROJECT which is fully described in SCHEDULES A and B and the CONSULTANT agrees to provide these services.

NOW, THEREFORE, the parties hereto, for the consideration hereinafter named, do agree as follows:

ARTICLE 1. PERFORMANCE OF WORK.

Subject to the provision of ARTICLE 14 hereof, the CONSULTANT shall perform all of the work described in SCHEDULE A generally in accordance with the CONSULTANT'S PROPOSAL and cause such work to be performed in an efficient and expeditious manner and in accordance with all of the terms and provisions of this CONTRACT. The CONSULTANT shall perform the work in accordance with professional standards and with the diligence and skill expected of a company with extensive experience in the performance of work of the type described in SCHEDULE A. The CONSULTANT shall furnish such materials, machinery, supplies, tools, equipment and other items as may reasonably be necessary or appropriate to perform the work in accordance with this AGREEMENT. It is understood and agreed that Michael Grant shall serve as the CONSULTANT's Project Manager and as such shall have the responsibility for the overall supervision and conduct of the work on behalf of the
CONSULTANT and that the persons described in SCHEDULES A and B shall serve in the capacities described therein. Any change of key project personnel by the CONSULTANT shall be subject to the prior written approval of the STATE. The STATE reserves the option to extend the terms and conditions of this CONTRACT to any other state agency in New York subject to the approval, of all necessary state officials.

The CONSULTANT will commence work no later than ten (10) days after receiving notice to proceed from the STATE.

ARTICLE 2. DOCUMENTS FORMING THE CONTRACT.

The contract documents shall be deemed to include this AGREEMENT, APPENDIX A, EXHIBIT A, SCHEDULE A, SCHEDULE B, and EXHIBIT B, the provisions required by law to be inserted in the AGREEMENT as set forth in APPENDIX A attached.

ARTICLE 3. INSPECTION.

The duly authorized representatives of the STATE, and on Federally aided projects, representatives of the Federal Highway Administration, shall have the right at all times to inspect the work of the CONSULTANT.

ARTICLE 4. TERM OF THE AGREEMENT.

The CONSULTANT agrees that the base term of the AGREEMENT shall be 36 months from January 1, 2010 to December 31, 2012. Additionally, this AGREEMENT may be extended for up to two one-year periods based on need and performance as determined by the STATE and approved by the Office of the State Comptroller.

ARTICLE 5. MAXIMUM AMOUNT.

Item I The maximum aggregate amount payable by the State to the CONSULTANT hereunder for the performance and completion of the work is $1,500,000 unless increased by a supplemental agreement. It is understood and agreed that the STATE is under no obligation to make a minimum number of work assignments and will only reimburse the CONSULTANT for approved costs incurred in the performance of authorized project assignments.

Item II The CONSULTANT specifically agrees that the AGREEMENT shall be deemed executory only to the extent of the monies available, and no liability shall be incurred by the STATE beyond the monies available for the purpose.

ARTICLE 6. PROVISION FOR PAYMENT.

The STATE shall pay to the CONSULTANT, and the CONSULTANT agrees to accept as full compensation for his services under this agreement:
Item I  Specific Hourly rates of pay shown in SCHEDULE B for employees assigned to this PROJECT. The Specific Hourly rates are not subject to audit, however, the number of hours charged is subject to audit. If the AGREEMENT is extended beyond December 31, 2012, then the Specific Hourly Rates of pay shown in SCHEDULE B will be increased annually by the lower of either the percent change for the Producer Price Index – Architectural, Engineering and Related Services (Series ID: PCU5413--5413--) for the most recent 12 month period as calculated by the U.S. Department of Labor - Bureau of Labor Statistics, or 3%.

Item II  Actual Direct Non-Salary Costs incurred in fulfilling the terms of this AGREEMENT are subject to audit. Such costs may include, but are not necessarily limited to those shown in SCHEDULE B. All reimbursement for travel, meals and lodging shall be made at actual cost paid but such reimbursement shall not exceed the prevailing maximum rates established by the State Comptroller.

Item III Lump Sum Task Assignment provision for payment shown in to-be added SCHEDULE B-1 for Task Assignment Number One (B-2 for Task Assignment Number Two, etc) under this PROJECT – based upon not to exceed Specific Hourly Rates of pay shown in SCHEDULE B for employees assigned to this PROJECT and the agreed-upon third party service contracts, and shall be agreed to by the STATE and the CONSULTANT.

Items purchased under this PROJECT shall become the property of the STATE at the completion of the work, or at the option of the STATE, appropriate value shall be established as a credit to the STATE.

ARTICLE 7. PARTIAL PAYMENTS.

The CONSULTANT shall be paid in monthly progress payments based on actual allowable costs incurred during the period in accordance with ARTICLE 6 of this AGREEMENT. Bills are subject to the approval of the State's Project Director, or their successor as identified by the STATE. Payments shall not be withheld unreasonably.

The CONSULTANT shall inform the STATE and all Subcontractors and Subconsultants of the Consultants schedule for submitting monthly vouchers to the STATE, said schedule shall be strictly adhered to by the CONSULTANT.

All Subcontractor and Subconsultant vouchers received by the CONSULTANT at least ten (10) calendar days prior to a scheduled billing, shall be included in that billing, even if the CONSULTANT does not have other costs to be billed for that period. The CONSULTANT shall inform the Subcontractor or Subconsultant of the date the voucher was submitted to the STATE and the amount included for the Subcontractor or Subconsultant.

The CONSULTANT will not include any provisions in their subcontracts that would circumvent the intent of 49 CFR 26.29 to require the CONSULTANT to make partial payments to all Subcontractors and Subconsultants within ten (10) calendar days of receipt of payment from the STATE.
Accounts of the CONSULTANT shall clearly identify the costs of the work performed under this AGREEMENT and shall be subject to periodic and final audit by the STATE and, on Federally aided Projects, by the Federal Highway Administration. Such audit shall not be a condition of partial payment.

ARTICLE 8. FINAL PAYMENT.

a) Section 179 of the State Finance Law requires the STATE to make final payment within thirty (30) calendar days after receipt of an invoice which is properly prepared and submitted. The STATE in accordance with the provisions of the State Finance Law has determined that the STATE will require a 60 calendar day audit period for final payments at which time the 30 calendar day interest-free period will commence. The CONSULTANT is required to make final payment to all Subcontractors and Subconsultants within ten (10) calendar days of receipt of final payment from the STATE.

The CONSULTANT is required, if it is a "foreign" (Out of State) corporation or entity, to obtain and submit the required "Tax Clearance" certificate to the STATE at the time of contract signing and again before processing the final payment. It should be noted that any time taken to satisfy or furnish this Tax Clearance certificate shall extend the required payment date by an equal period of time. The Tax Clearance certificate can be obtained by mailing a request to:

New York State Department of Taxation and Finance
Tax Status Unit
Building 8, Room 938
State Office Building Campus
Albany, NY 12227

Alternatively, it may be obtained by phoning the Corporation Tax Information Center at 1-888-698-2908 and making the request there. The certificate content is public information and the certificate is free of charge.

The acceptance by the CONSULTANT of the final payment shall operate as and shall be a release to the STATE from all claims and liability to the CONSULTANT, its representatives and assigns for any and all things done, furnished for or relating to the services rendered by the CONSULTANT under or in connection with this Agreement or for any part thereof except as otherwise provided in ARTICLE 9(b).

b) The CONSULTANT shall maintain all books, documents, papers, accounting records and other evidence pertaining to cost incurred and make such materials available at its office at all reasonable times during the period of this Agreement and for the period of time specified in Clause No. 10, "Records" on page 21 of APPENDIX A, for inspection by the STATE, Federal Highway Administration, or any authorized representatives of the Federal Government and copies thereof shall be furnished if requested.

ARTICLE 9. EXTRA WORK.

a) If the CONSULTANT believes that any work is or may be beyond the scope of the Agreement (extra work), or that additional work is necessary, the CONSULTANT shall notify
the STATE, in writing, of this fact prior to beginning any of the work. The notification shall include all information required by the Department. The STATE shall be the sole judge as to whether or not such work is in fact beyond the scope of this Agreement and constitutes extra work. No extra or additional work shall be started prior to written authorization from the STATE. The STATE shall be under no obligation to reimburse the CONSULTANT for any extra or additional work performed without the prescribed notification and authorization. The STATE will not allow fixed fee for any extra work undertaken without prescribed notification and authorization. In the event that the STATE determines that such work does constitute extra work, the STATE shall provide extra compensation to the CONSULTANT in a fair and equitable manner. If necessary, a Supplemental Agreement providing the compensation and describing the work authorized shall be issued by the STATE to the CONSULTANT for execution after approvals have been obtained from necessary State officials and if required, from the Federal Highway Administration.

b) In the event of any claims being made or any actions being brought in connection with the PROJECT, the CONSULTANT agrees to render to the STATE all assistance required by the STATE. Compensation for work performed and costs incurred in connection with this requirement shall be made in a fair and equitable manner. In all cases provided for in this AGREEMENT for the additional services above described, the STATE’s directions shall be exercised by the issuance of a separate Agreement, if necessary.

ARTICLE 10. CONSULTANT LIABILITY.

The CONSULTANT shall be responsible for all damage to life and property due to negligent acts, errors or omissions of the CONSULTANT, its subcontractors, agents or employees, in the performance of its service under this AGREEMENT. Further, it is expressly understood that the CONSULTANT shall indemnify and save harmless the STATE from claims, suits, actions, damages and costs of every name and description, resulting from the negligent performance of the services of the CONSULTANT under this AGREEMENT, and such indemnity shall not be limited by reasons of enumeration of any insurance coverage herein provided. Negligent performance of service, within the meaning of this Article, shall include, in addition to negligence founded upon tort, negligence based upon the CONSULTANT’s failure to meet professional standards and resulting in obvious or patent errors in the progression of his work. Nothing in this Article or in this Agreement shall create or give to third parties any claim or right of action against the CONSULTANT or the STATE beyond such as may legally exist irrespective of this Article or this Agreement.

ARTICLE 11. WORKER'S COMPENSATION AND LIABILITY INSURANCE.

The CONSULTANT agrees to procure and maintain without direct cost to the STATE except as noted, until final acceptance by the STATE, of the services covered by this AGREEMENT, insurance of the kinds and in amounts hereinafter provided in insurance companies authorized to do business in the State of New York, covering all operations under this AGREEMENT whether performed by the CONSULTANT or its subcontractors. Before commencing the work, the CONSULTANT shall furnish to the STATE a certificate or certificates, in form satisfactory to the STATE, showing that they has complied with this Article,
which certificate or certificates, shall provide that the policies shall not be changed or canceled until thirty (30) days written notice has been given to the STATE. The kinds and amounts of insurance required are as follows:

(a) policy covering the obligations of the CONSULTANT in accordance with the provisions of Chapter 41, Laws of 1914, as amended, known as the Worker's Compensation Law, and also by the provisions of ARTICLE 9 of the Worker's Compensation Law known as the Disability Benefits Law, and this AGREEMENT shall be void and of no effect unless the CONSULTANT procures such policy and maintains it until acceptance of the work;

(b) policies of bodily injury liability insurance of the types herein-after specified, each with limits of liability of not less than $100,000 for all damages arising out of bodily injury, including death at any time resulting therefrom, sustained by one person in any one accident and, subject to that limit for each person, not less than $300,000 for all damage arising out of bodily injury, including death at any time resulting therefrom, sustained by two or more persons in any one accident, and not less than $100,000 damages arising out of injury to or destruction of property in any one accident and, subject to that limit per accident, not less than $300,000 for all damages arising out of injury to or destruction of property during the policy period.

(c) Professional liability insurance, if the CONSULTANT is a licensed professional, issued to and covering the liability of the CONSULTANT with respect to all work performed by him under this AGREEMENT.

ARTICLE 12. INTERCHANGE OF DATA.

All technical data in regard to the PROJECT existing in the office of the STATE or existing in the offices of the CONSULTANT shall be made available to the other party to this Agreement without expense to such other party.

ARTICLE 13. DISPOSITION OF DATA.

At the time of completion of the work, the CONSULTANT shall make available to the STATE all documents and data pertaining to the work or to the PROJECT which materials at all times shall be the property of the STATE. It is agreed that the CONSULTANT may maintain copies of all documents and data. Or in the event that this Agreement is terminated for any reason, then, within ten (10) days after such termination, the CONSULTANT shall make available to the STATE the aforementioned data and material.

ARTICLE 14. DAMAGES AND DELAYS.

The CONSULTANT agrees that no charges or claim for damages shall be made by them for any delays or hindrances from any cause whatsoever during the progress of any portion of the services specified in this AGREEMENT. Such delays or hindrances, if any, shall be compensated for by an extension of time for such reasonable period as the STATE may decide, it being understood however, that the permitting of the CONSULTANT to proceed to complete any services or any part of them after the date of completion or after the date to which the time of
completion may have been extended, shall in no way operate as a waiver on the part of the STATE of any of its rights herein. Nothing in this ARTICLE will prevent the CONSULTANT from exercising its rights under ARTICLE 9 of this AGREEMENT.

ARTICLE 15. NOTICE OF BANKRUPTCY, VENUE, AUDITS.

If, prior to final audit, CONSULTANT files for relief pursuant to Title 11 of the United States Code under the Bankruptcy Laws or a successor statute, this contract shall be treated as an executory contract under 11 USC S365 of the Bankruptcy Laws or successor statute, and subject to assumption or rejection by the debtor within the time permitted by law.

The CONSULTANT must immediately send written notice to Contract Management of the New York State Department of Transportation at its main office in Albany and send all relevant pleading of the voluntary or involuntary filing of a Bankruptcy proceeding by the CONSULTANT, its subsidiary, its principals and officers or a related entity whether or not the CONSULTANT believes that any debt is owed to the State by final audit or otherwise.

The determination of any rights under this contract shall be adjudicated in a State or Federal Court with jurisdiction over the matter, and venue for the determination of such rights shall be in Albany, New York.

The CONSULTANT agrees that the automatic stay under 11 USC S362 or a successor statute shall be deemed inapplicable or that this agreement shall constitute consent to the lifting of the stay with respect to the State's performance of or completion of any audit pursuant to the terms of this contract.

ARTICLE 16. TERMINATION.

The STATE shall have the absolute right to terminate this Agreement, and such action shall in no event be deemed a breach of contract:

(a) If a termination is brought about for the convenience of the STATE and not as a result of unsatisfactory performance on the part of the CONSULTANT, final payment shall be made based on the actual work performed by the CONSULTANT prior to termination including, but not limited to, the number of hours and other authorized costs audited in accordance with the terms of the AGREEMENT.

(b) If the termination is brought about as a result of the unsatisfactory performance on the part of the CONSULTANT, the value of the work performed by the CONSULTANT prior to termination shall be established by the STATE.

c) The STATE reserves the right to terminate this contract in the event it is found that the certification filed by the CONSULTANT in accordance with the requirements contained in State Finance Law §139-k was intentionally false or intentionally incomplete. Upon such finding, the STATE may exercise its termination right by providing written notification to the CONSULTANT in accordance with the written notification terms of the contract.
ARTICLE 17. DEATH OR DISABILITY OF THE CONSULTANT.

In case of the death or disability of one or more but not all the persons herein referred to as CONSULTANT, the rights and duties of the CONSULTANT shall devolve upon the survivors of them, who shall be obligated to perform the services required under this AGREEMENT, and the STATE shall make all payments due to them.

In case of the death or disability of all the persons herein referred to as CONSULTANT, all data and records pertaining to the PROJECT shall be delivered within (60) days to the STATE or their duly authorized representative. In case of the failure of the CONSULTANT'S successors or personal representatives to make such delivery on demand, then in that event the representatives of the CONSULTANT shall be liable to the STATE for any damages it may sustain by reason thereof. Upon the delivery of all such data to the STATE, the STATE will pay to the representatives of the CONSULTANT all amounts due the CONSULTANT, including retained percentages to the date of the death of the last survivor.

ARTICLE 18. CODE OF ETHICS.

The CONSULTANT specifically agrees that this AGREEMENT may be canceled or terminated if any work under this AGREEMENT is in conflict with the provisions of Section 74 of the New York State Public Officer's Law, as amended, establishing a Code of Ethics for State officers and employees.

The CONSULTANT shall not engage, on a full or part-time or other basis any professional or technical personnel who are or have been at any time during the period of this AGREEMENT in the employ of the Federal Highway Administration or the highway organizations of any public employer, except regularly retired employees, without the consent of the public employer of such person.

ARTICLE 19. INDEPENDENT CONTRACTOR.

The CONSULTANT, in accordance with their status as an independent contractor, covenants and agrees that they will conduct themselves consistent with such status, that they will neither hold themselves out as, nor claim to be, an officer or employee of the STATE by reason hereof, and that they will not, be reason hereof, make any claim, demand or application to or for any right or privilege applicable to an officer or employee of the STATE, including but not limited to Worker's Compensation coverage, Unemployment Insurance benefits, Social Security coverage or Retirement membership or credit.

ARTICLE 20. COVENANT AGAINST CONTINGENT FEES.

The CONSULTANT warrants that they have not employed or retained any company or person, other than a bona fide employee working for the CONSULTANT, to solicit or secure this AGREEMENT, and that they have not paid or agreed to pay any company or person, other than
a bona fide employee, any fee, commission, percentage, brokerage fee, gift, or any other consideration, contingent upon or resulting from the award or making of this AGREEMENT. For breach or violation of this warranty, the STATE shall have the right to annul this AGREEMENT without liability, or, in its discretion, to deduct from the AGREEMENT price or consideration, or otherwise recover, the full amount of such fee, commission, percentage, brokerage fee, gift, or contingent fee.

ARTICLE 21. TRANSFER OF AGREEMENT.

The CONSULTANT specifically agrees, as required by the State Finance Law, Section 138, that they are prohibited by law from assigning, transferring, conveying, subletting or otherwise disposing of the AGREEMENT or of their right, title or interest therein, or their power to execute such AGREEMENT, to any other person, company or corporation, without the previous consent in writing of the STATE.

If this provision of the law be violated, the STATE shall revoke and annul the AGREEMENT and the STATE shall be relieved from any and all liability and obligations thereunder to the person, company or corporation to whom the CONSULTANT shall assign, transfer, convey, sublet or otherwise dispose of the AGREEMENT, and such transferee shall forfeit and lose all moneys therefore assigned under said AGREEMENT, except so much as may be required to pay his employees.

ARTICLE 22. PROPRIETARY RIGHTS.

The CONSULTANT agrees that if copyrights, patentable discoveries or inventions or rights in data should result from work described herein, all rights accruing from such discoveries or inventions shall be the sole property of the CONSULTANT. However, the CONSULTANT agrees to and does hereby grant to the United States Government and the State of New York an irrevocable, nonexclusive, nontransferable, paid-up license to reproduce, publish, make, use, and sell each subject invention throughout the world by and on behalf of the Government of the United States and States and domestic municipal governments, all in accordance with the provisions of 48 CFR 1-27, and other applicable Federal laws, rules and regulations.

ARTICLE 23. SUBCONTRACTORS/SUBCONSULTANTS.

All subcontractors and subconsultants performing work on this project shall be bound by the same required contract provisions as the prime consultant. All agreements between the prime consultant and a subcontractor or subconsultant shall include all standard required contract provisions, and such agreements shall be subject to review by the State.

ARTICLE 24. ORDER OF PRECEDENCE.

In the event of any inconsistency between or among the provisions of this AGREEMENT, APPENDIX A, Exhibit A, the contents of SCHEDULE A, SCHEDULE B, and, Exhibit B; it is agreed that such inconsistency shall be resolved in the following descending order of precedence:
ARTICLE 25. CERTIFICATION REQUIRED BY 49CFR, PART 29.

The signator to this Agreement, being duly sworn, certifies that, EXCEPT AS NOTED BELOW, its company and any person associated therewith in the capacity of owner, partner, director, officer, or major stockholder (five percent or more ownership):

1) is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any federal agency;

2) has not been suspended, debarred, voluntarily excluded or determined ineligible by any federal agency within the past three years;

3) does not have a proposed debarment pending; and

4) has not been indicted, convicted, or had a civil judgment rendered against it by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past three years.

EXCEPTIONS -

ARTICLE 26. CERTIFICATION FOR FEDERAL-AID CONTRACTS.

The prospective participant certifies, by signing this Agreement to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan or cooperative
agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed $100,000 and that all such subrecipients shall certify and disclose accordingly.

**ARTICLE 27. RESPONSIBILITY OF THE CONSULTANT.**

(a) The CONSULTANT shall be responsible for the professional quality, technical accuracy, and the coordination of all services furnished by the CONSULTANT under this contract. The CONSULTANT shall, without additional compensation, correct or revise any errors or deficiencies in its services. However, the STATE may in certain circumstances, provide compensation for such work.

(b) Neither the STATE'S review, approval or acceptance of, nor payment for, the services required under this contract shall be construed to operate as a waiver of any rights under this contract or of any cause of action arising out of the performance of this contract, and the CONSULTANT shall be and remain liable to the STATE in accordance with applicable law for all damages to the STATE caused by the CONSULTANT'S negligent performance or breach of contract of any of the services furnished under this contract.

(c) The rights and remedies of the STATE provided for under this contract are in addition to any other rights and remedies provided by law.

(d) If the CONSULTANT is comprised of more than one legal entity or any group of partners or joint venturers associated for the purposes of undertaking this agreement, each such entity acknowledges and hereby affirmatively represents and agrees that each has the power to bind the CONSULTANT and each of the others hereunder; and as such, each acts both as principal and agent of the CONSULTANT and of each of the others hereunder. Each further acknowledges and agrees that all such entities, partners or joint venturers associated for the purposes of undertaking this agreement shall be jointly and severally liable to third parties, including but not limited to the STATE, for the acts or omissions of the CONSULTANT or any other entity, partner or joint venturer hereunder.

(e) If the CONSULTANT is comprised of more than one legal entity or any group of partners or joint venturers associated for the purposes of undertaking this agreement, each such entity acknowledges and hereby affirmatively represents and agrees that the respective rights, duties and liabilities of each hereunder shall be governed by the laws of the State of New York, including but not limited to the New York Partnership Law.
ARTICLE 28. SECURITY AND CONFIDENTIALITY OF INFORMATION.

Information received as part of this contract shall be considered Confidential Information. The CONSULTANT warrants that it will take the appropriate steps as to its personnel, agents, officers and any SUBCONTRACTOR/SUBCONSULTANTS regarding the obligations arising under this clause to insure such confidentiality. The CONSULTANT shall have written policies and/or business procedures in place which will protect Confidential Information from unauthorized disclosure, use, access, loss, alteration or destruction. The CONSULTANT may disclose to other parties, as authorized by the NYSDOT Project Manager, or as described in the scope of services, only the information necessary to perform services under this contract. However, the CONSULTANT shall in no circumstance, communicate with the public or news media without prior authorization from the States designee. Neither shall the CONSULTANT disclose information deemed confidential by the State nor shall the CONSULTANT disclose any other information obtained or developed in the performance of services under this agreement without the written authorization of the State. This warranty shall survive termination of this Contract.

CONSULTANT shall comply with the provisions of the New York State Information Security Breach and Notification Act, including General Business Law Section §889-aa and State Technology Law §208 as enacted by such Act or subsequently amended. In the event of an information security breach resulting in the unauthorized disclosure of personal information, CONSULTANT shall be liable for the costs associated with such breach if caused by CONSULTANT’s negligent or willful acts or omissions, or the negligent or willful acts or omissions of the CONSULTANT’s agents, officers, employees or SUBCONSULTANTS.

ARTICLE 29. VENDOR RESPONSIBILITY.

The Department of Transportation has undertaken an affirmative review of the proposed consultant’s responsibility in accordance with the applicable standards outlined in Comptroller’s Bulletin No. G-221, and based upon such review, reasonable assurance that the proposed contractor is responsible has been determined.

ARTICLE 30. CONSULTANT DISCLOSURE LEGISLATION.

In accordance with Chapter 10 of the Laws of 2006, the CONSULTANT shall complete the “State Consultant Services Contractor’s Annual Employment Report” (Form B, Exhibit B) and submit copies to the Office of the State Comptroller, the Department of Civil Service, and the Department of Transportation on or before May15th of each year the contract is in effect. The CONSULTANT shall provide information regarding all employees providing service under this contract, whether employed by the CONSULTANT or any subconsultant or subcontractor. Annual employment reports should be submitted to the following addresses. It is recommended, however, that consultants check the agency websites annually to confirm the addresses.

By mail:
NYS Office of the State Comptroller  
Bureau of Contracts  
110 State Street, 11th Floor  
Albany, N. Y. 12236  
Attn: Consultant Reporting

NYS Department of Civil Service  
Alfred E. Smith Building  
Albany, N. Y. 12239  
Attn: Chapter 10

NYS Department of Transportation  
50 Wolf Road, Suite 1CM  
Albany, N. Y. 12232  
Attn: Chapter 10

ARTICLE 31. NOTICES.

Item 1. All notices permitted or required hereunder shall be in writing and shall be transmitted either:
(a) via certified or registered United States mail, return receipt requested;
(b) by facsimile transmission;
(c) by personal delivery;
(d) by expedited delivery service; or
(e) by e-mail.

Such notices shall be addressed as follows or to such different addresses as the parties may from time-to-time designate:

New York State Department of Transportation:  
Contact Person’s Name: Barbara Sonenberg, Contract #C030710  
Title: Contract Analyst Trainee II  
Address: NYSDOT, Contract Management, 50 Wolf Rd, Suite 1CM, Albany, NY 12232  
Telephone Number: 518-457-2600  
Facsimile Number: 518-457-8475  
E-Mail Address: bsonenberg@dot.state.ny.us

Consultant’s Name:  
Contact Person’s Name: Mr. F. Michael Gray  
Title: Vice President, Director of Contracts  
Address: ICF Incorporated, LLC., 9300 Lee Highway, Fairfax, VA 22031  
Telephone Number: 703-934-3527  
Facsimile Number: 703-218-2574  
E-Mail Address: michaelgray@icfi.com
Item 2. Any such notice shall be deemed to have been given either at the time of personal delivery or, in the case of expedited delivery service or certified or registered United States mail, as of the date of first attempted delivery at the address and in the manner provided herein, or in the case of facsimile transmission or email, upon receipt.

Item 3. The parties may, from time to time, specify any new or different address in the United States as their address for purpose of receiving notice under this Agreement by giving fifteen (15) days written notice to the other party sent in accordance herewith. The parties agree to mutually designate individuals as their respective representatives for the purposes of receiving notices under this Agreement. Additional individuals may be designated in writing by the parties for purposes of implementation and administration/billing, resolving issues and problems and/or for dispute resolution.
IN WITNESS WHEREOF, this Contract No. C030710 has been executed by the STATE, acting by and through the Commissioner of Transportation, and the CONSULTANT has duly executed this Agreement effective the day and year first above written.

In addition to the acceptance of this Agreement, the Department certifies that original copies of this signature page will be attached to all other exact copies of this Agreement.

RECOMMENDED BY FOR THE PEOPLE OF THE STATE OF NEW YORK

________________________________ By___________________________________

CONTRACT MANAGEMENT DEPARTMENT OF TRANSPORTATION

DATE: __________________________ DATE: __________________________

Consultant Certifications: I certify that all the information with respect to the “Vendor Responsibility Questionnaire” submitted by ICF Incorporated, LLC on the Eleventh day of August, 2009 pursuant to the requirements set forth in OSC Bulletin G-221 is complete, true and accurate. I additionally certify nothing has occurred since the date of that submission that would result in requiring a change or alteration to any of the answers provided on the “Vendor Responsibility Questionnaire” submitted that date.

I certify that all information provided to the STATE with respect to the requirements contained in State Finance Laws 139j & 139k is complete, true and accurate.

By __________________________________ Date: __________________________

ICF INCORPORATED, L.L.C.

Approvals:

ATTORNEY GENERAL

THOMAS P. DI NAPOLI

STATE COMPTROLLER

By

Date

____________________

____________________
Acknowledgement for Contract #C030710

For contracts signed in New York State

State of New York )
County of ) ss.:

On the__________ day of ______________ in the year 20____, before me the undersigned, personally appeared _______________________, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

___________________________________

NOTARY PUBLIC

My Commission Expires:

For contracts signed outside New York State

State of )
County of ) ss.:

On the _________ day of ______________ in the year 20____ before me, the undersigned, personally appeared ___________________________, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument, and that such individual made such appearance before the undersigned in ________________________________, (insert the city or other political subdivision and the state or country or other place the acknowledgement was taken).

___________________________________

NOTARY PUBLIC

(Signature and office of individual taking acknowledgement.)

My Commission Expires:
EXHIBIT A

It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority and women-owned business enterprises as proposers, subcontractors and suppliers on its procurement contracts.

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

New York State Department of Economic Development
Division for Small Business
One Commerce Plaza
Albany, N. Y.  12245
(518) 292-5220            Fax: (518) 292-5884

NOTE: Companies requesting lists of potential subcontractors and suppliers are encouraged to identify the SIC code, size and location of vendors.

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

New York State Department of Economic Development
Minority and Women's Business Development Division
One Commerce Plaza
Albany, N. Y.  12245
(518) 292-5250            Fax: (518) 292-5884

Proposers located in foreign countries are hereby notified that New York State may seek to obtain and assign or otherwise transfer offset credits created by this procurement contract to third parties located in New York State. The successful contractor shall agree to cooperate with the State in efforts to get foreign countries to recognize offset credits created by the procurement contract.

The Omnibus Procurement Act requires that by signing this bid proposal, contractors certify that whenever the total bid amount is greater than $1 million:

1. The successful contractor shall document efforts to encourage the participation of New York State Business Enterprises as suppliers and subcontractors on this project, and has retained the documentation of these efforts to be provided upon request to the State.

2. Documented efforts by a successful contractor shall consist of and be limited to showing that such contractor has:
   a. Solicited bids, in a timely and adequate manner, from New York State business enterprises including certified minority and women-owned business, or
b. Contacted the New York State Department of Economic Development to obtain listings of New York State business enterprises, or

c. Placed notices for subcontractors and suppliers in newspapers, journals and other trade publications distributed in New York State, or

d. Participated in bidder outreach conferences.

e. If the contractor determines that New York State business enterprises are not available to participate on the contract as subcontractors or suppliers, the contractor shall provide a statement indicating the method by which such determination was made.

f. If the contractor does not intend to use subcontractors on the contract, the contractor shall provide a statement verifying such intent.

3. The contractor has complied with the Federal Equal Opportunity Act of 1972 (P.L. 92-261), as amended;

4. The contractor agrees to make reasonable efforts to provide notification to New York State residents of employment opportunities on this project through listing any such positions with the Community Services Division of the New York State Department of Labor, or providing such notification in such manner as is consistent with existing collective bargaining contracts or agreements. The contractor agrees to document these efforts and to provide said documentation to the State upon request.

Bidders are hereby notified that if their principal place of business is located in a state that penalizes New York State vendors, and if the goods or services they offer will be substantially produced or performed outside New York State, the Omnibus Procurement Act 1994 amendments (Chapter 684, Laws of 1994) require that they be denied placement on bidders mailing lists and contracts for which they would otherwise obtain. Bidders of construction services must be denied the award of a contract if their principal place of business is located in a state that discriminates or imposes a preference against New York State firms.

A current list of states which penalize New York State firms is available from the office letting this contract, or from the Procurement Assistance Unit, NYS Department of Economic Development, Albany NY (518-292-5224).

Last Updated: Monday, April 23, 2007
APPENDIX A
STANDARD CLAUSES FOR NYS CONTRACTS

The parties to the attached contract, license, lease, amendment or other agreement of any kind (hereinafter, "the contract" or "this contract") agree to be bound by the following clauses which are hereby made a part of the contract (the word "Contractor" herein refers to any party other than the State, whether a contractor, licensor, licensee, lessor, lessee or any other party):

1. EXECUTORY CLAUSE. In accordance with Section 41 of the State Finance Law, the State shall have no liability under this contract to the Contractor or to anyone else beyond funds appropriated and available for this contract.

2. NON-ASSIGNMENT CLAUSE. In accordance with Section 138 of the State Finance Law, this contract may not be assigned by the Contractor or its right, title or interest therein assigned, transferred, conveyed, sublet or otherwise disposed of without the previous consent, in writing, of the State and any attempts to assign the contract without the State's written consent are null and void. The Contractor may, however, assign its right to receive payment without the State's prior written consent unless this contract concerns Certificates of Participation pursuant to Article 5-A of the State Finance Law.

3. COMPTROLLER'S APPROVAL. In accordance with Section 112 of the State Finance Law (or, if this contract is with the State University or City University of New York, Section 355 or Section 6218 of the Education Law), if this contract exceeds $15,000 (or the minimum thresholds agreed to by the Office of the State Comptroller for certain S.U.N.Y. and C.U.N.Y. contracts), or if this is an amendment for any amount to a contract which, as so amended, exceeds said statutory amount, or if, by this contract, the State agrees to give something other than money when the value or reasonably estimated value of such consideration exceeds $10,000, it shall not be valid, effective or binding upon the State until it has been approved by the State Comptroller and filed in his office. Comptroller's approval of contracts let by the Office of General Services is required when such contracts exceed $30,000 (State Finance Law Section 163.6.a).

4. WORKERS' COMPENSATION BENEFITS. In accordance with Section 142 of the State Finance Law, this contract shall be void and of no force and effect unless the Contractor shall provide and maintain coverage during the life of this contract for the benefit of such employees as are required to be covered by the provisions of the Workers' Compensation Law.

5. NON-DISCRIMINATION REQUIREMENTS. To the extent required by Article 15 of the Executive Law (also known as the Human Rights Law) and all other State and Federal statutory and constitutional non-discrimination provisions, the Contractor will not discriminate against any employee or applicant for employment because of race, creed, color, sex, national origin, sexual orientation, age, disability, genetic predisposition or carrier status, or marital status. Furthermore, in accordance with Section 220-e of the Labor Law, if this is a contract for the construction, alteration or repair of any public building or public work or for the manufacture, sale or distribution of materials, equipment or supplies, and to the extent that this contract shall be performed within the State of New York, Contractor agrees that neither it nor its
subcontractors shall, by reason of race, creed, color, disability, sex, or national origin: (a) discriminate in hiring against any New York State citizen who is qualified and available to perform the work; or (b) discriminate against or intimidate any employee hired for the performance of work under this contract. If this is a building service contract as defined in Section 230 of the Labor Law, then, in accordance with Section 239 thereof, Contractor agrees that neither it nor its subcontractors shall by reason of race, creed, color, national origin, age, sex or disability: (a) discriminate in hiring against any New York State citizen who is qualified and available to perform the work; or (b) discriminate against or intimidate any employee hired for the performance of work under this contract. Contractor is subject to fines of $50.00 per person per day for any violation of Section 220-e or Section 239 as well as possible termination of this contract and forfeiture of all moneys due hereunder for a second or subsequent violation.

6. **WAGE AND HOURS PROVISIONS.** If this is a public work contract covered by Article 8 of the Labor Law or a building service contract covered by Article 9 thereof, neither Contractor's employees nor the employees of its subcontractors may be required or permitted to work more than the number of hours or days stated in said statutes, except as otherwise provided in the Labor Law and as set forth in prevailing wage and supplement schedules issued by the State Labor Department. Furthermore, Contractor and its subcontractors must pay at least the prevailing wage rate and pay or provide the prevailing supplements, including the premium rates for overtime pay, as determined by the State Labor Department in accordance with the Labor Law.

7. **NON-COLLUSIVE BIDDING CERTIFICATION.** In accordance with Section 139-d of the State Finance Law, if this contract was awarded based upon the submission of bids, Contractor affirms, under penalty of perjury, that its bid was arrived at independently and without collusion aimed at restricting competition. Contractor further affirms that, at the time Contractor submitted its bid, an authorized and responsible person executed and delivered to the State a non-collusive bidding certification on Contractor's behalf.

8. **INTERNATIONAL BOYCOTT PROHIBITION.** In accordance with Section 220-f of the Labor Law and Section 139-h of the State Finance Law, if this contract exceeds $5,000, the Contractor agrees, as a material condition of the contract, that neither the Contractor nor any substantially owned or affiliated person, firm, partnership or corporation has participated, is participating, or shall participate in an international boycott in violation of the federal Export Administration Act of 1979 (50 USC App. Sections 2401 et seq.) or regulations thereunder. If such Contractor, or any of the aforesaid affiliates of Contractor, is convicted or is otherwise found to have violated said laws or regulations upon the final determination of the United States Commerce Department or any other appropriate agency of the United States subsequent to the contract's execution, such contract, amendment or modification thereto shall be rendered forfeit and void. The Contractor shall so notify the State Comptroller within five (5) business days of such conviction, determination or disposition of appeal (2NYCRR 105.4).

9. **SET-OFF RIGHTS.** The State shall have all of its common law, equitable and statutory rights of set-off. These rights shall include, but not be limited to, the State's option to withhold for the purposes of set-off any moneys due to the Contractor under this contract up to any amounts due and owing to the State with regard to this contract, any other contract with any State department or agency, including any contract for a term commencing prior to the term of this
contract, plus any amounts due and owing to the State for any other reason including, without limitation, tax delinquencies, fee delinquencies or monetary penalties relative thereto. The State shall exercise its set-off rights in accordance with normal State practices including, in cases of set-off pursuant to an audit, the finalization of such audit by the State agency, its representatives, or the State Comptroller.

**10. RECORDS.** The Contractor shall establish and maintain complete and accurate books, records, documents, accounts and other evidence directly pertinent to performance under this contract (hereinafter, collectively, "the Records"). The Records must be kept for the balance of the calendar year in which they were made and for six (6) additional years thereafter or three (3) years after final payment, whichever is later. The State Comptroller, the Attorney General and any other person or entity authorized to conduct an examination, as well as the agency or agencies involved in this contract, shall have access to the Records during normal business hours at an office of the Contractor within the State of New York or, if no such office is available, at a mutually agreeable and reasonable venue within the State, for the term specified above for the purposes of inspection, auditing and copying. The State shall take reasonable steps to protect from public disclosure any of the Records which are exempt from disclosure under Section 87 of the Public Officers Law (the "Statute") provided that: (i) the Contractor shall timely inform an appropriate State official, in writing, that said records should not be disclosed; and (ii) said records shall be sufficiently identified; and (iii) designation of said records as exempt under the Statute is reasonable. Nothing contained herein shall diminish, or in any way adversely affect, the State's right to discovery in any pending or future litigation.

**11. IDENTIFYING INFORMATION AND PRIVACY NOTIFICATION.**

(a) FEDERAL EMPLOYER IDENTIFICATION NUMBER and/or FEDERAL SOCIAL SECURITY NUMBER. All invoices or New York State standard vouchers submitted for payment for the sale of goods or services or the lease of real or personal property to a New York State agency must include the payee's identification number, i.e., the seller's or lessor's identification number. The number is either the payee's Federal employer identification number or Federal social security number, or both such numbers when the payee has both such numbers. Failure to include this number or numbers may delay payment. Where the payee does not have such number or numbers, the payee, on its invoice or New York State standard voucher, must give the reason or reasons why the payee does not have such number or numbers.

(b) PRIVACY NOTIFICATION. (1) The authority to request the above personal information from a seller of goods or services or a lessor of real or personal property, and the authority to maintain such information, is found in Section 5 of the State Tax Law. Disclosure of this information by the seller or lessor to the State is mandatory. The principal purpose for which the information is collected is to enable the State to identify individuals, businesses and others who have been delinquent in filing tax returns or may have understated their tax liabilities and to generally identify persons affected by the taxes administered by the Commissioner of Taxation and Finance. The information will be used for tax administration purposes and for any other purpose authorized by law.

(2) The personal information is requested by the purchasing unit of the agency contracting to purchase the goods or services or lease the real or personal property covered by this contract or
lease. The information is maintained in New York State’s Central Accounting System by the Director of Accounting Operations, Office of the State Comptroller, 110 State Street, Albany, New York 12236.

12. **EQUAL EMPLOYMENT OPPORTUNITIES FOR MINORITIES AND WOMEN.** In accordance with Section 312 of the Executive Law, if this contract is: (i) a written agreement or purchase order instrument, providing for a total expenditure in excess of $25,000.00, whereby a contracting agency is committed to expend or does expend funds in return for labor, services, supplies, equipment, materials or any combination of the foregoing, to be performed for, or rendered or furnished to the contracting agency; or (ii) a written agreement in excess of $100,000.00 whereby a contracting agency is committed to expend or does expend funds for the acquisition, construction, demolition, replacement, major repair or renovation of real property and improvements thereon; or (iii) a written agreement in excess of $100,000.00 whereby the owner of a State assisted housing project is committed to expend or does expend funds for the acquisition, construction, demolition, replacement, major repair or renovation of real property and improvements thereon for such project, then:

(a) The Contractor will not discriminate against employees or applicants for employment because of race, creed, color, national origin, sex, age, disability or marital status, and will undertake or continue existing programs of affirmative action to ensure that minority group members and women are afforded equal employment opportunities without discrimination. Affirmative action shall mean recruitment, employment, job assignment, promotion, upgradings, demotion, transfer, layoff, or termination and rates of pay or other forms of compensation;

(b) at the request of the contracting agency, the Contractor shall request each employment agency, labor union, or authorized representative of workers with which it has a collective bargaining or other agreement or understanding, to furnish a written statement that such employment agency, labor union or representative will not discriminate on the basis of race, creed, color, national origin, sex, age, disability or marital status and that such union or representative will affirmatively cooperate in the implementation of the contractor's obligations herein; and

(c) the Contractor shall state, in all solicitations or advertisements for employees, that, in the performance of the State contract, all qualified applicants will be afforded equal employment opportunities without discrimination because of race, creed, color, national origin, sex, age, disability or marital status.

Contractor will include the provisions of "a", "b", and "c" above, in every subcontract over $25,000.00 for the construction, demolition, replacement, major repair, renovation, planning or design of real property and improvements thereon (the "Work") except where the Work is for the beneficial use of the Contractor. Section 312 does not apply to: (i) work, goods or services unrelated to this contract; or (ii) employment outside New York State; or (iii) banking services, insurance policies or the sale of securities. The State shall consider compliance by a contractor or subcontractor with the requirements of any federal law concerning equal employment opportunity which effectuates the purpose of this section. The contracting agency shall determine whether the imposition of the requirements of the provisions hereof duplicate or
conflict with any such federal law and if such duplication or conflict exists, the contracting agency shall waive the applicability of Section 312 to the extent of such duplication or conflict. Contractor will comply with all duly promulgated and lawful rules and regulations of the Empire State Development Corporation’s Division of Minority and Women's Business Development (MWBD) pertaining hereto.

13. **CONFLICTING TERMS.** In the event of a conflict between the terms of the contract (including any and all attachments thereto and amendments thereof) and the terms of this Appendix A, the terms of this Appendix A shall control.

14. **GOVERNING LAW.** This contract shall be governed by the laws of the State of New York except where the Federal supremacy clause requires otherwise.

15. **LATE PAYMENT.** Timeliness of payment and any interest to be paid to Contractor for late payment shall be governed by Article 11-A of the State Finance Law to the extent required by law.

16. **NO ARBITRATION.** Disputes involving this contract, including the breach or alleged breach thereof, may not be submitted to binding arbitration (except where statutorily authorized), but must, instead, be heard in a court of competent jurisdiction of the State of New York.

17. **SERVICE OF PROCESS.** In addition to the methods of service allowed by the State Civil Practice Law & Rules (“CPLR”), Contractor hereby consents to service of process upon it by registered or certified mail, return receipt requested. Service hereunder shall be complete upon Contractor's actual receipt of process or upon the State's receipt of the return thereof by the United States Postal Service as refused or undeliverable. Contractor must promptly notify the State, in writing, of each and every change of address to which service of process can be made. Service by the State to the last known address shall be sufficient. Contractor will have thirty (30) calendar days after service hereunder is complete in which to respond.

18. **PROHIBITION ON PURCHASE OF TROPICAL HARDWOODS.** The Contractor certifies and warrants that all wood products to be used under this contract award will be in accordance with, but not limited to, the specifications and provisions of State Finance Law §165. (Use of Tropical Hardwoods) which prohibits purchase and use of tropical hardwoods, unless specifically exempted, by the State or any governmental agency or political subdivision or public benefit corporation. Qualification for an exemption under this law will be the responsibility of the contractor to establish to meet with the approval of the State.

In addition, when any portion of this contract involving the use of woods, whether supply or installation, is to be performed by any subcontractor, the prime Contractor will indicate and certify in the submitted bid proposal that the subcontractor has been informed and is in compliance with specifications and provisions regarding use of tropical hardwoods as detailed in §165 State Finance Law. Any such use must meet with the approval of the State; otherwise, the bid may not be considered responsive. Under bidder certifications, proof of qualification for exemption will be the responsibility of the Contractor to meet with the approval of the State.
19. MACBRIE FAIR EMPLOYMENT PRINCIPLES (APPLICABLE ONLY IN NON-FEDERAL AID NEW YORK STATE CONTRACTS). In accordance with the MacBride Fair Employment Principles (Chapter 807 of the Laws of 1992), the Contractor hereby stipulates that the Contractor either (a) has no business operations in Northern Ireland, or (b) shall take lawful steps in good faith to conduct any business operations in Northern Ireland in accordance with the MacBride Fair Employment Principles (as described in Section 165 of the New York State Finance Law), and shall permit independent monitoring of compliance with such principles.

20. OMNIBUS PROCUREMENT ACT OF 1992 (APPLICABLE ONLY IN NON-FEDERAL AID NEW YORK STATE CONTRACTS). It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority and women-owned business enterprises as bidders, subcontractors and suppliers on its procurement contracts.

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

NYS Department of Economic Development
Division for Small Business
30 South Pearl St -- 7th Floor
Albany, New York 12245
Telephone: 518-292-5220

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

NYS Department of Economic Development
Division of Minority and Women's Business Development
30 South Pearl St -- 2nd Floor
Albany, New York 12245
http://www.empire.state.ny.us

The Omnibus Procurement Act of 1992 requires that by signing this bid proposal or contract, as applicable, Contractors certify that whenever the total bid amount is greater than $1 million:

(a) The Contractor has made reasonable efforts to encourage the participation of New York State Business Enterprises as suppliers and subcontractors, including certified minority and women-owned business enterprises, on this project, and has retained the documentation of these efforts to be provided upon request to the State;

(b) The Contractor has complied with the Federal Equal Opportunity Act of 1972 (P.L. 92-261), as amended;

(c) The Contractor agrees to make reasonable efforts to provide notification to New York State residents of employment opportunities on this project through listing any such positions with the Job Service Division of the New York State Department of Labor, or providing such notification in such manner as is consistent with existing collective bargaining contracts or agreements. The
Contractor agrees to document these efforts and to provide said documentation to the State upon request; and

(d) The Contractor acknowledges notice that the State may seek to obtain offset credits from foreign countries as a result of this contract and agrees to cooperate with the State in these efforts.

21. RECIPROCITY AND SANCTIONS PROVISIONS (APPLICABLE ONLY IN NON-FEDERAL AID NEW YORK STATE CONTRACTS). Bidders are hereby notified that if their principal place of business is located in a country, nation, province, state or political subdivision that penalizes New York State vendors, and if the goods or services they offer will be substantially produced or performed outside New York State, the Omnibus Procurement Act 1994 and 2000 amendments (Chapter 684 and Chapter 383, respectively) require that they be denied contracts which they would otherwise obtain. NOTE: As of May 15, 2002, the list of discriminatory jurisdictions subject to this provision includes the states of South Carolina, Alaska, West Virginia, Wyoming, Louisiana and Hawaii. Contact NYS Department of Economic Development for a current list of jurisdictions subject to this provision.

22. PURCHASES OF APPAREL. In accordance with State Finance Law 162 (4-a), the State shall not purchase any apparel from any vendor unable or unwilling to certify that: (i) such apparel was manufactured in compliance with all applicable labor and occupational safety laws, including, but not limited to, child labor laws, wage and hours laws and workplace safety laws, and (ii) vendor will supply, with its bid (or, if not a bid situation, prior to or at the time of signing a contract with the State), if known, the names and addresses of each subcontractor and a list of all manufacturing plants to be utilized by the bidder.

SPECIAL EQUAL EMPLOYMENT OPPORTUNITY PROVISIONS

Specific Equal Employment Opportunity Responsibilities

1. GENERAL

(a) Equal employment opportunity requirements not to discriminate and to take affirmative action to assure equal employment opportunity, as required by Federal Executive Order 11246, Federal Executive Order 11375, and NYS Executive Order 45, are set forth in required Contract Provisions (Form PR-1273 or 1316, as appropriate) and those Special Provisions which are imposed pursuant to Section 140 of Title 23, U.S.C., as established by Section 22 of the Federal Aid Highway Act of 1968. Non-discrimination and affirmative action are also required by the State Labor Law, Section 220-e, as amended, and the Regulations of the NYS Department of Transportation relative to federally-assisted programs (Title 49, Code of Federal Regulations, Part 21 and Section 21.5), including employment practices when the agreement covers a program set forth in Appendix B of the Regulations. The requirements set forth in these Special Provisions shall constitute the specific affirmative action requirements for projects activities under this contract.
(b) The CONSULTANT will work with the STATE and the Federal Government in carrying out equal employment opportunity obligations and in their review of their activities under this contract.

(c) The CONSULTANT and all their sub-consultants and/or sub-contractors holding sub-contracts of $10,000 or more will comply with the following minimum specific requirements of equal employment opportunity: (The equal employment opportunity requirements of Executive Order 11246, as set forth in Volume 6, Chapter 4, Section 1, Subsection 1 of the Federal-Aid Highway Program Manual, are applicable to contractors and sub-contractors.) The CONSULTANT will include these requirements in every sub-contract with such modification of language as is necessary to make them binding on the sub-contractor.

2. EQUAL EMPLOYMENT OPPORTUNITY POLICY

The CONSULTANT, their sub-consultant and/or sub-contractor or any person acting on behalf of the CONSULTANT or sub-consultant and/or sub-contractor will accept as their operating policy the following statement which is designed to further the provision of equal employment opportunity to all persons without regard to their race, color, religion, sex, national origin, age, disability or marital status, and to promote the full realization of equal employment opportunity through a positive continuing program.

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, or during consideration for employment, without regard to their race, religion, sex, or color, national origin, age, disability or marital status. Such non-discriminatory action shall include, but not be limited to: employment, job assignment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

3. EQUAL EMPLOYMENT OPPORTUNITY OFFICER

The CONSULTANT will designate and make known to the New York State Department of Transportation contracting officers an Equal Employment Opportunity Officer and a Minority Business Enterprise officer (hereinafter referred to as the EEO Officer and M.B.E. Officer) who will have the responsibility for and must be capable of effectively administering and promoting an active equal employment opportunity program and who must be assigned adequate authority and responsibility to do so.

4. DISSEMINATION OF POLICY

(a) All members of the CONSULTANT's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the CONSULTANT's equal employment opportunity policy and contractual
responsibilities to provide equal employment opportunity in each grade and classification of employment. To insure that the above agreement will be met, the following actions will be taken as a minimum:

(1) Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less than once every six months, at which time the CONSULTANT's equal employment opportunity policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer or other knowledgeable company official.

(2) All new supervisory (first level of supervision and above) or personnel office employees will be given a thorough indoctrination by the EEO Officer or other knowledgeable company official covering all major aspects of the CONSULTANT's equal employment opportunity obligations within thirty days following their reporting for duty with the CONSULTANT.

(3) All personnel who are engaged in direct recruitment for the project will be instructed in the CONSULTANT's procedures for locating and hiring minority group employees by the EEO Officer or appropriate company official. (Minority group referred to herein shall mean Black, Hispanic, Asian/Pacific Islander, American Indian/Alaskan.)

(b) In order to make the CONSULTANT's equal employment opportunity policy known to all employees, prospective employees and potential sources or employees, i.e., schools, employment agencies, labor unions (where appropriate), college placement officers, etc., the CONSULTANT will take the following actions:

(1) Notices and posters setting forth the CONSULTANT'S equal employment opportunity policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

(2) The CONSULTANT's equal employment opportunity policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

(c) In all solicitations either by competitive bidding or negotiation made by the CONSULTANT for work to be performed under a sub-contract, including procurements of materials or equipment, each potential sub-contractor or supplier shall be notified by the CONSULTANT of the CONSULTANT's obligations under this agreement and the Regulations relative to non-discrimination.

5. RECRUITMENT

(a) When advertising for employees, the CONSULTANT will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be published in newspapers or other publications having a large circulation among minority groups in the area from which the project work force would normally be derived. These advertisements shall state that all qualified applicants will be
afforded equal employment opportunity without regard to race, religion, sex, color, national origin, age, disability or marital status.

(b) The CONSULTANT will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minority group applicants, including, but not limited to, State employment agencies, schools, colleges and minority group organizations. To meet this requirement, the CONSULTANT's EEO Officer will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority group applicants may be referred to the CONSULTANT for employment consideration.

In the event the CONSULTANT has a valid bargaining agreement providing for exclusive hiring hall referrals, the CONSULTANT is expected to observe the provisions of that agreement to the extent that the system permits the CONSULTANT's compliance with equal employment opportunity contract provisions. (The U.S. Department of Labor has held that where implementation of such agreements have the effect of discriminating against minorities or women, or obligates the CONSULTANT to do the same, such implementation violates Executive Order 11246.

(c) The CONSULTANT will encourage present employees to refer minority group applicants for employment by posting appropriate notices or bulletins in areas accessible to all such employees. In addition, information and procedures with regard to referring minority group applicants will be discussed with employees.

6. PERSONNEL ACTIONS

Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age, disability or marital status. The following procedures shall be followed:

(a) The CONSULTANT will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

(b) The CONSULTANT will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory practices.

(c) The CONSULTANT will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the CONSULTANT will promptly take corrective action. If the review indicated that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
(d) The CONSULTANT will promptly investigate all complaints of alleged discrimination made in connection with obligations under this agreement, will attempt to resolve such complaints, and will take appropriate corrective action within 15 days. All subsequent corrective actions or decisions will also be documented and forwarded to the NYS Department of Transportation Compliance Officer within 7 days after such action has taken place. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the CONSULTANT will inform every complainant of the results and all of their avenues of appeal should the complaint be denied.

7. TRAINING AND PROMOTION

(a) The CONSULTANT will assist in locating, qualifying and increasing the skills of minority group and women employees, and applicants for employment.

(b) Consistent with the CONSULTANT's work force requirements and as permissible under the Federal and State regulations, the CONSULTANT shall make full use of training programs; i.e., apprenticeship and on-the-job training programs for the geographical area of contract performance. In the event the Training Special Provision is provided under this contract, this subparagraph is superseded thereby.

(c) The CONSULTANT will advise employees and applicants for employment of available training programs and entrance requirements for each.

(d) The CONSULTANT will periodically review the training and promotion potential of minority group and women employees and will encourage eligible employees to apply for such training and promotion.

8. UNIONS

If the CONSULTANT relies in whole or in part upon unions as a source of employees, the CONSULTANT will use their best effort to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and, to effect referrals by such unions of minority and female employees. The CONSULTANT will send to each labor union or representative of workers with which he has or is bound by a collective bargaining or other agreement or understanding, a notice to be provided by the State Division of Human Rights, advising such labor union or representative of the CONSULTANT's compliance and with the non-discrimination clauses. Actions by the CONSULTANT, either directly or through a CONSULTANT's association acting as agent, will include the procedures set forth below:

(a) The CONSULTANT will use their best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.
(b) The CONSULTANT will use their best efforts to incorporate an equal employment opportunity clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age, disability or marital status.

(c) The CONSULTANT is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union, and such labor union refuses to furnish such information to the CONSULTANT. The CONSULTANT shall so certify to the STATE and shall set forth what efforts have been made to obtain such information. Further, if the CONSULTANT was directed to do so by the contracting agency as part of the bid or negotiations of this contract, the CONSULTANT shall request such labor union or representative to furnish him with a written statement that such labor union or representative accepts the non-discrimination clauses and will affirmatively cooperate, within the limits of its legal and contractual authority, in the implementation of the policy and provisions of these non-discrimination clauses or that it consents and agrees that recruitment, employment and the terms and conditions of employment under this contract shall be in accordance with the purposes and provisions of these non-discrimination clauses. If such labor union or representative fails or refuses to comply with such a request that it furnish such a statement, the CONSULTANT shall promptly notify the State Division of Human Rights and set forth what efforts have been made to obtain such information.

(d) In the event the union is unable to provide the CONSULTANT with a reasonable flow of minority and women referrals within the time limit set forth in the collective bargaining agreement, the CONSULTANT will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age, disability or marital status, making full efforts to obtain qualified and/or qualifiable minority group persons and women. (The U.S. Department of Labor has held that it shall be no excuse that the union with which the CONSULTANT has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.) In the event the union referral practice prevents the CONSULTANT from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such CONSULTANT shall immediately notify the New York State Department of Transportation.

9. AFFIRMATIVE ACTION IN SUBCONTRACTING

(a) The CONSULTANT will not discriminate on the grounds of race, religion, sex, color, national origin, age, disability or marital status in the selection of subcontractors, including procurements and leases of equipment.

(b) If the CONSULTANT determines to use a subcontractor as part of this agreement, affirmative action shall be taken to increase the participation of minority business firms in that work. As part of that affirmative action, the CONSULTANT will identify and
contact minority business firms and solicit proposals for the work to be subcontracted. The STATE will provide a list of names of minority business firms to the CONSULTANT. Another source that should be contacted for a list of minority business firms is the Governor's Office of Minority & Women's Business Development (GOMWBD).

(c) The CONSULTANT will document the affirmative action steps taken to comply with paragraph 9b. Such documentation will be provided at the time or submittal of a formal proposal to the State's Contracts Bureau.

(d) By execution of this agreement, the CONSULTANT certifies that the affirmative action steps in 9a, 9b & 9c above were taken when soliciting proposals for the work in this agreement indicated to be subcontracted and that these steps will be taken should any work be subcontracted in the future.

(e) The CONSULTANT will insure binding subcontractor and vendor compliance with their EEO obligations. The CONSULTANT will take such actions in enforcing such provisions of such subcontract or purchase order as the contracting agency may direct, including sanctions or remedies for non-compliance. If the CONSULTANT becomes involved in or is threatened with litigation with a subcontractor or a vendor as a result of such direction by the contracting agency, the CONSULTANT shall promptly so notify the Attorney General, requesting him to intervene and protect the interest of the State of New York.

10. RECORDS AND REPORTS

(a) The CONSULTANT will keep such records as are necessary to determine compliance with the CONSULTANT's equal employment opportunity obligations. The records kept by the CONSULTANT will be designed to indicate:

   (1) The number of minority and non-minority group members and women employed in each work classification on the project, where required by the NYS D.O.T Compliance Officer.

   (2) The progress and efforts being made in cooperation with unions to increase employment opportunities for minorities and women (applicable only to CONSULTANTS who rely in whole or in part on unions as a source of their work force).

   (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees.

   (4) The progress and efforts being made in securing the services of minority group subcontractors or subcontractors with meaningful minority and female representation among their employees.
(5) Compliance with all other requirements in these provisions such as meetings, instructions, employment efforts, etc.

(b) The CONSULTANT will comply with Sections 291-299 of the Executive Law and Civil Rights Law and will provide all information and reports required by the Regulations, or orders and instructions issued pursuant thereto, and will permit access to its books, records, accounts other sources of information, and its facilities as may be determined by State or Federal officials to be pertinent to ascertain compliance with such Regulations, orders and instructions. All such records must be retained for a period of three years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the State and the Federal Highway Administration.

(c) The CONSULTANT will submit to the New York State Department of Transportation, a monthly report Form (AAP-46) for the first three months after beginning work, thereafter upon request, indicating the number of minority, women and non-minority group employees currently engaged in each work classification required by the contract work.

(d) Failure to comply with these Special EEO Provisions may be considered unsatisfactory performance and may subject the agreement to termination under the termination article of this agreement. Non-compliance may result in the CONSULTANT's being declared ineligible for future agreements made by or on behalf of the STATE or a public authority or agency of the STATE, until he satisfies the State Commissioner of Human Rights that he has established and is carrying out a program in conformity with the provisions of these non-discrimination clauses. Such finding shall be made by the State Commissioner of Human Rights after conciliation efforts by the State Division of Human Rights have failed to achieve compliance with these non-discrimination clauses and after a verified complaint has been filed with the State Division of Human Rights, notice thereof has been given to the CONSULTANT and an opportunity has been afforded them to be heard publicly before the State Commissioner of Human Rights or official designee. Such sanctions may be imposed and remedies invoked independently of or in addition to sanctions and remedies otherwise provided for by law. These may include, but are not limited to:

(1) withholding of payments to the CONSULTANT under the agreement until the CONSULTANT complies, and/or

(2) cancellation, termination or suspensions of the agreement in whole or in part.

11. TRAINING SPECIAL PROVISIONS

This Training Special Provision supersedes paragraph 7.b above and is in implementation of 23 CFR Subpart A, Section 230.111 & Executive Order 11246.
As part of the CONSULTANT's equal employment opportunity affirmative action program training shall be provided as follows:

The CONSULTANT shall provide on-the-job training aimed at developing full competence in the job classification involved.

The number of months of training to be provided under these special provisions is previously stated in Article II.

In the event that the CONSULTANT subcontracts a portion of the contract work, it shall be determined how many, if any, of the trainees are to be trained by the subcontractor, provided however, that the CONSULTANT shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The CONSULTANT shall also insure that this training special provision is made applicable to such subcontract.

The number of trainees shall be distributed among the work classifications on the basis of the CONSULTANT's needs. Along with their proposal, the CONSULTANT shall submit to the New York State Department of Transportation for approval the proposed number of trainees to be trained in each selected classification, their estimated salaries and a training schedule. The salaries to be paid trainees shall not be less that 75 percent of the average hourly rate approved in the agreement for the classification to be trained. During the period from the beginning of the project to its completion, the trainee shall receive reasonable salary increases commensurate to the abilities and effort exerted by the trainee. The training schedule required should indicate the start of work and appropriate incremental salary steps in accord with the above.

Training and upgrading the proficiency of minorities and women is a primary objective of this Training Special Provision. Accordingly, the CONSULTANT shall make every effort to enroll minority trainees and women (e.g., by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent that such persons are available within a reasonable area of recruitment. The CONSULTANT will be responsible for demonstrating the steps that have been taken in pursuance thereof, prior to a determination as to whether the CONSULTANT is in compliance with this Training Special Provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

No employee shall be employed as a trainee in any classification in which they have successfully completed a training program or in a classification in which they have been employed. The CONSULTANT should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used, the CONSULTANT’s records should document the findings in each case.

The minimum length and type of training for each classification will be as established in the training schedule developed by the CONSULTANT and approved by the State and Federal Highway Administration.
shall approve a program if it reasonably calculated to meet the equal employment opportunity obligations of the CONSULTANT and to assist in qualifying the average trainee toward proficiency in the classification concerned by the end of the training period. Approval of a training program shall be obtained from the State prior to commencing work on the classification covered by the program. Training is permissible in lower level management positions. Some offsite training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

The CONSULTANT will be reimbursed for the cost of any and all training under the payment terms of this agreement. This can include offsite training cost as discussed above. All offsite training must be defined in the training schedule. All costs claimed or calculated for training must be directly related to the work defined in the scope of this agreement and/or added by supplemental agreement.

The CONSULTANT must demonstrate their best efforts and evidence good faith in hiring trainees for positions in the classification in which they have completed training.

The CONSULTANT shall furnish the trainee a copy of the program they will follow in the training. The CONSULTANT shall provide each trainee with a certification showing the type and length of training satisfactorily completed.

The CONSULTANT will provide for the maintenance of records and furnish periodic reports documenting their performance under this Training Special Provision.
SCHEDULE A

Integrated New York Commuter and Traveler Assistance
Services For NYSDOT (Statewide)
Contract #C030710

SCOPE OF SERVICES
A. Management, Organization & Resources

The ICF Team comprises multiple companies, each with specific areas of expertise; all committed to working together as one seamless and integrated team to ensure NYSDOT receives the best support in all tasks. The ICF Team offers complete “one-stop” coverage of all expertise required to successfully accomplish the 16 objectives for TDM, Commuter Choice, and Traveler Assistance products and services. The Team strives to help NYDOT achieve its DBE participation goal of 18% through significant DBE participation in the form of three NY–certified DBE’s and an additional two Team members who are DBEs and who have agreed to seek New York state certification.

Each ICF Team member brings particular expertise to support this effort as illustrated in the following paragraphs. As detailed in Section 5, Experience, Members were purposely selected to provide the necessary coverage of expertise and contacts with a minimum of overlap to best ensure relevant participation by our DBE partners.

ICF International, will serve as the prime contractor for the NYSDOT statewide effort. We provide nationally recognized expertise in developing, implementing, and evaluating TDM. We have a proven ability to partner with TMAs on air quality and strategic communications. As a global professional services firm that delivers solutions in transportation, energy, the environment, housing, and social programs, ICF brings insights and perspectives that place TDM programs in the broader context of helping regions address a range of critical goals, including congestion management, enhancing transportation choices, improving air quality, reducing greenhouse gas emissions, and enhancing overall quality of life.

The ICF staff members bring national expertise in addressing the challenges associated with achieving behavioral change and providing incentives that motivate participation in voluntary programs such as recycling. Add to this our national leadership in the areas of climate change and energy conservation, and NYSDOT can have a prime contractor that offers experience and fully understands the current drivers for this program as well as how they could change over the next five years.

UrbanTrans Consultants, Inc. is the largest U.S. firm focused exclusively on TDM and related sustainable transportation practices. In existence for more than 15 years, their mission is simple: UrbanTrans creates sustainable environments by developing and advancing innovative transportation solutions. UrbanTrans believes that increasing the availability and viability of convenient travel choices for all travelers benefits communities, employers, developers, and citizens by reducing transportation infrastructure spending, alleviating congestion, and improving air quality.

With some of the best talent in the TDM industry, UrbanTrans has unique skills and experience that allows them to provide tailored and collaborative client assistance with a strong focus on measurable results. They have North American offices in Denver, Atlanta, Seattle, Toronto, and Washington, D.C., with international offices in Dubai, UAE, and Melbourne, Australia. These offices work collaboratively and cross-pollinate to create innovative TDM solutions with a holistic, measurable perspective that takes into consideration planning and program development as well as marketing, outreach, and implementation.

Arch Street Communications (a NY-certified DBE), founded in 1992, is a full-service public relations, public affairs and media relations consultancy. Arch Street’s work in social marketing
includes a focus on environmental and transportation issues and provides strategic and media planning, education programs, community presentations, and related PR materials. Arch Street is located in Pawling, New York.

The KFH Group, Inc. (a NY-certified DBE) is an experienced firm of transportation professionals, dedicated to providing assistance to local, state and federal organizations to improve public transit and human service transportation. Founded in 1995 with a primary goal of providing high-quality and responsive consulting assistance, the KFH Group is the nation’s leader in bus stop assessments and is built upon the extensive experience of the firm’s three Principals, who bring a total of over 90 years of public transportation experience (of all kinds) to the firm. They have conducted assessments of systems in the Washington D.C. metropolitan area, Corpus Christi, Texas, and Maui, Hawaii.

Michael R. Kodama Planning Consultants (MK) (a NY-certified DBE) has provided federal, state, regional and local government agencies with transportation planning, policy, funding, and land use services for more than 16 years. MK is nationally recognized for its ability to develop solutions to solve complex parking management problems involving the public and private sectors. MK creates parking management programs that maximize the use of parking and transportation resources, and which balance access and economic vitality issues with a need to better manage parking resources. To accomplish this, MK combines the use of transportation options with the price, location, supply and demand of parking.

KT Analytics, Inc. (DBE, in process of NY-certification) is a minority-owned, small disadvantaged business specializing transportation consulting. Incorporated in 1984, the firm is headed by two Principals combining more than 75 years of experience in transportation policy, planning, and finance. KT Analytics has served more than 100 clients including federal, state, and local transportation, as well as air quality and legislative agencies. The Principals are recognized as leading experts and analysts in transportation policy and financing, highway and environmental policy assessments, congestion management and pricing, ITS effectiveness assessments, automobile use and parking management, cost-effectiveness evaluations and program analysis, and international transportation institutional and finance issues. Additionally, the company has prepared policy instruments for public decision-makers and implemented transportation programs in localities.

TransAction Associates (DBE, in process of NY-certification) is a Massachusetts-certified disadvantaged and woman-owned (DBE/WBE) transportation consulting firm located in Waltham, MA. TransAction specializes in the design and implementation of customized onsite employer commuting programs by uniquely crafting every program to fit the culture, needs, and budgets of the client; and by offering employees a range of commuting options or incentives to help them access to the most efficient, cost-effective commuting methods, including Bike-to-Work initiatives.

Alta Planning + Design is one of North America’s leading firms specializing in bicycle, pedestrian, park, and trail planning, design, and implementation. They focus on multi-modal solutions, particularly bicycle, pedestrian and trail corridors and systems. Alta has branches throughout the U.S. including offices in Saratoga Springs, NY; Oregon, California, Virginia, Montana, Wisconsin, and Nevada. They have experience working in all size communities, from a few thousand to millions, from rural to suburban and urbanized areas. They strive to tailor
each project to the community’s unique setting, history, and culture through an active public participation process.

M&J Engineering, P.C. (a NY-certified DBE) is a diversified engineering firm that specializes in Intelligent Transportation Systems. Based in Queens (NYSDOT Region 11) with offices in Valley Stream (Region 10), Albany and the Hudson Valley (Region 8), M & J Engineering is a full-service engineering firm serving the northeast U.S. region and has built a reputation based on the application of innovative, state-of-the-art solutions. In addition to Data Entry & Analysis and System Integration, M & J Engineering’s services include: Intelligent Transportation Systems, Legacy Custom Software Upgrades/Special Interfaces, Advanced Traffic Management Systems (Highways and Bridges/Tunnels)/Software, Bus AVL/CAD and Transportation Signal Priority, Traffic Management Centers/Traffic Operations Centers, and E-ZPass/Toll/Smart-Card and Plaza Design.

Elham Shirazi is a sole-proprietor, woman-based enterprise (DBE/WBE in California and Massachusetts) with expertise in transportation planning, TDM program design, marketing, implementation, and evaluation. Ms Shirazi co-chairs the Association for Commuter Transportation’s Telework and Alternative Work Hours Council and currently serves as Secretary to the National Board. In 2005, she was awarded the Association for Commuter Transportation’s Cathy Cole Telework Memorial Award for her achievements in the field of teleworking.

ESTC (Eric Schreffler, Transportation Consultant) is an independent TDM consulting firm specializing in TDM program planning and evaluation. ESTC has extensive experience in researching, identifying, implementing, and evaluating innovative transportation management solutions to address congestion, air quality and mobility issues. ESTC specializes in the research and evaluation of transportation management strategies, including the quantification of program impacts, in terms of trip, VMT and emission reduction. Mr. Schreffler has developed evaluation methods and approaches for NYSDOT’s Clean Air New York program, the New Jersey DOT, Washington Metro COG, and TDM and air quality programs in Los Angeles, San Francisco, Atlanta, Houston, Charlotte, and others. He also has advised state DOTs on TDM planning and evaluation in California, Arizona, Illinois, Montana, Florida, Massachusetts, and Pennsylvania.

Our Team also includes regional TMA’s CommuterLink and MetroPool to provide additional expertise needed on tasks that require collaboration with the Integrated New York Commuter and Traveler Assistance Program within each Region.

CommuterLink is a non-profit organization in New York City, established in 1989, that helps people improve their commute by encouraging the use of carpooling, mass transit, and other alternatives to driving alone. As the only “alternative transportation management” organization in New York City, CommuterLink provides a broad range of free services to businesses and commuters in the five boroughs (Region 11), including online ridematching service for carpoolers, mass transit itineraries, customized Commuter Benefits programs for companies like pre-tax subsidies, and more.

MetroPool Inc. delivers TDM solutions to improve mobility and ease the movement of people for enhanced workplace effectiveness, economic well-being and quality of life. As a private, non-profit 501(c)(3) corporation founded in 1980, MetroPool provides free commuter services with support from the New York State and Connecticut Departments of Transportation.
MetroPool currently serves more than 1,000 employers reaching more than 350,000 commuters, helping them make the best commute choices.

B. Key Personnel

Organization of Key Personnel

The ICF Team functions as one integrated organization; we are structured to ensure that NYSDOT has direct access to all required personnel and resources, regardless of Team members’ corporate affiliation. The Project Management Team (Management Team), comprised of various members of the ICF Team, has direct access to corporate support in the key areas of HR, finance and accounting, contracts, security, and quality. Our organization chart, shown at Chart 4-1, illustrates the seamless connection between ICF and the ICF Team dedicated to this NYSDOT statewide program.

A key factor in our success on other relevant IDIQs has been our ability to clearly define roles and responsibilities. Chart 4-2 presents the responsibilities assigned to each component in the Management Team.

Chart 4-2. The ICF Team Features Clear Lines of Responsibility and Accountability

<table>
<thead>
<tr>
<th>Position</th>
<th>Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Manager</td>
<td>Direct all activities, meet all contractual requirements, and marshal resources to meet NYSDOT’s needs; has authority to address all technical, staff, budgeting, and contractual issues.</td>
</tr>
<tr>
<td>Michael Grant</td>
<td>Primary contract point-of-contact for the NYSDOT Contract Officer (CO) and Mobility</td>
</tr>
</tbody>
</table>
# Chart 4-2. The ICF Team Features Clear Lines of Responsibility and Accountability

<table>
<thead>
<tr>
<th>Position</th>
<th>Responsibilities</th>
</tr>
</thead>
</table>
| Managers.                     | - Primary responsibility for providing on-time, quality support on all TOs, including monitoring of any corrective actions.  
   - Facilitate effective communication strategies within the ICF Team and with NYSDOT.                                                                                                           |
| Officer in Charge             | - Corporate oversight, ensuring that the ICF Project Manager (PM) is engaged fully with NYSDOT and that they receive the resources needed to help NYSDOT achieve its mission.  
   - Periodic quality reviews with the ICF PM and through selection of project reports.  
   - Review with NYSDOT to confirm issues have been satisfactorily addressed.  
   - Assist in development and full implementation of any required corrective action.  
   - Provide guidance to the PM and ICF Team Task Leads.                                                                                          |
| ICF Contract Specialist       | - Work with the ICF PM on contract/finance administration and reporting requirements.  
   - Develop cost proposals and budgets for TOs; process TOs and contract modifications.  
   - Prepare monthly invoices, financial reports, and subcontracting reports.  
   - Prepare and issue subcontractor and consultant agreements.  
   - Respond to NYSDOT inquiries on contract or financial matters.  
   - Analyze and track contract trends.  
   - Ensure full compliance with contracting requirements.                                                                                      |
| Task Leads:                   | - Provide day-to-day management of TOs, including personnel management and technical, schedule, and cost monitoring.  
   - Identify project trends and any variance from the baseline.  
   - Communicate with NYSDOT Mobility Managers, ensuring full understanding of goals and objectives from kickoff through completion.  
   - Respond to Technical Directives from NYSDOT Mobility Managers.  
   - Work with the ICF PM to identify appropriate staff from the ICF Team (including subcontractors and consultants).  
   - Work with the ICF PM and contract specialist to prepare schedules and budget.  
   - Manage subcontractors supporting assigned TO (including regular communication and systematic review of deliverables and work products).  
   - Provide ICF PM with weekly and monthly reporting on TO progress.                                                                               |
| Subcontractor Points of Contact | - Provide input to ICF to support preparation of TO proposals.  
   - Provide single point of accountability, to the ICF PM, for work performed by his/her firm.  
   - Oversee performance of his/her organization in terms of quality, cost control, and scheduling.  
   - Report directly to the ICF Task Leads on a regular basis for TOs that they support.                                                                                                                                  |

**Experience of Key Personnel**
The ICF Team views the following types of personnel as key to success in meeting the overall objectives of NYSDOT’s statewide program. As required expertise will vary depending on the task, specific key personnel will be assigned in response to individual task orders.

C. Approach, Scope of Services and Schedule

The following summarizes the ICF Team’s overall approach to managing the Statewide Integrated New Commuter and Traveler Assistance Program Services contract, and also includes a discussion of the Consultant’s approach for addressing each task identified in Attachment 9 of the RFP.

This task order-based contract is designed to permit NYSDOT to rapidly scope tasks to address identified issues and needs, and individual tasks and activities will be determined in the future. Consequently, the approach is generalized to the anticipated task areas that have been identified in the RFP. This section begins with a contract overview, followed by a description of key issues, anticipated approaches that might be used, and specialized capabilities and experience that will help to inform the approach for each of the identified tasks.

1. Overall Approach to this Task Order Contract

The Consultant Team’s approach to each task order is to determine who within the ICF Team is best qualified to undertake the work.

On-going Communication – There will be multiple tasks orders addressing a range of different issues and potentially different NYSDOT Task Managers moving forward simultaneously. Consequently, communication among the NYSDOT Task Managers, the ICF Project Manager, and the ICF Team Task Managers is critical. The ICF Project Manager shall maintain frequent contact with ICF Team Task Managers, who in turn are in direct contact and on-going coordination with NYSDOT Task Managers, to ensure all parties are mutually aware of progress toward Task Order objectives and any changing needs or expectations.

Innovative Approaches and Solutions – Each Task Order offers an opportunity for creative problem-solving, and the Consultant will actively look for high impact challenges to build on lessons learned and cutting edge research and analysis to advance new ways of doing business and to move beyond traditional models.

Quality control, Reporting, and Evaluation – ICF procedures shall ensure that the performance of every project is reviewed by senior staff. The consultant shall build quality control into all forms of data collection and analysis, modeling, and reporting, provide regular (at least monthly) reports of progress, and seek out client feedback and evaluation of their performance.

2. Required Tasks for Strategic TDM Commuter and Commuter Choice Service Planning
This section discusses the ICF Team’s approach to required tasks identified in Attachment 9 of the RFP and is divided into five broad categories:

- Strategic TDM Planning
- Climate Change/Energy Efficiency Initiatives
- Promotion, Marketing, and Outreach
- Integrating TDM Strategies in Project Development
- Departmental Educational Training and Development

The consultant recognizes that this list may be expanded as other needs arise, and shall provide the requisite expertise for any additional task areas that may be determined in the future.

2.1 Strategic TDM Planning (Task 1)

Strategic TDM planning encompasses a wide range of analyses that support enhanced and newly implemented TDM programs and address the linkages between TDM and land use, urban design, parking policies, and pricing. Strategic TDM planning activities are critical to developing TDM policies, programs, and initiatives that will lead to enhanced multimodal mobility, reduced SOV use and VMT, reduced traffic congestion, improved air quality, and reduced energy consumption and greenhouse gas emissions. The conducted work includes both advisory services (e.g., policy and legislative analyses, market assessments, best practices reviews, forecasting, benefit-cost analyses, alternatives evaluation) and efforts to improve programs (e.g., through program evaluation activities, benchmarking, and performance management). The consultant addresses each of the 14 subtask areas identified in the RFP with the following:

TDM Enhancement Strategies to Reduce SOV and VMT

Issues

Despite making great strides in TDM and congestion relief efforts over the past twenty years, residents of New York have seen traffic congestion continue to grow. Residents of the New York City metro area face some of the worst traffic congestion and have some of the longest commutes in the nation. According to the Texas Transportation Institute, drivers in the New York metro area experienced over 384 million hours stuck in traffic congestion in 2005, up from 204 million hours in 1995. While other urban areas of the state (e.g., Albany, Rochester, Buffalo) have relatively limited traffic congestion and generally have seen much slower growth in traffic congestion compared to their peers in size across the country, traffic congestion has grown even in these metropolitan areas. Throughout the state, limitations in transportation funding, concern about climate change, and interest in urban revitalization and economic development have created more interest in efforts to reduce SOV travel and VMT while enhancing accessibility and economic vitality.

Consequently, while there are a wide range of efforts in place within New York State to promote alternatives to driving alone, there is a continuing need to develop more effective TDM enhancement strategies that contribute to reductions in SOV use and VMT, particularly within congested travel corridors and regions. Developing these enhancement strategies will require going beyond the traditional focus of TDM programs on promotional and educational activities to encourage ridesharing and transit for commute trips. It requires new ways of thinking about TDM that address:
Not only mode choice, but changes in travel times, routes, and locations of travel; not only a focus on commute trips at the employer end, but efforts targeted at the residential end (e.g., homeowners association, apartment buildings, coops) and toward non-traditional markets that have high potential for reducing VMT, such as school trips, sporting events, and other special events; innovative approaches to support travel options through more integrated planning for transportation, land use, parking, site design, and pricing strategies (discussed further in sub-tasks below); and partnerships between a wide range of public, private, and non-profit agencies and organizations to leverage communications networks and coordinate service delivery (discussed further in subtask 1.b below).

Moreover, TDM enhancement strategies are needed at multiple levels, including:

- The regional or metropolitan area level, to effectively address VMT reduction as part of the metropolitan transportation planning process, and in development of the Congestion Management Process (CMP), where required;
- Travel corridors and sub-areas (e.g., downtowns, business districts, suburban activity centers), to effectively address VMT reduction in heavily traveled and congested areas; and
- The employer or site-level, to address the specific needs of individual businesses, buildings, or developments.

Approach

TDM strategies vary in their effectiveness at reducing VMT and SOV growth in different circumstances. The package of strategies that may be most applicable in New York City with its wide range of transit and multimodal options and high parking costs will not be the same as those applied in the Albany region. But even within each of those regions there may be varying degrees of intensity among TDM program packages that would be effective in specific locations and corridors.

Developing effective TDM enhancement strategies requires:

- Understanding the unique characteristics associated with the region, corridor, sub-area, or site;
- Assessing existing programs (with an understanding of both the local programs and best practices nationally that are being implemented or tried in comparable conditions);
- Determining the most appropriate solutions tailored to the area;
- Estimating program costs; and
- Prioritizing strategies based on cost-effectiveness or ability to meet overall objectives, to ensure that emphasis is being placed on developing and implementing the strategies that are most critical to the success of the package.

Specific work to be undertaken under this task shall include:

- Developing regional TDM strategies for metropolitan areas across the state;
Developing a “toolbox” of TDM strategies that MPOs may be able to pick and choose from in crafting their own regional strategies as part of a CMP or metropolitan transportation plan;

Developing recommendations for specific travel corridors, sub-regions, or types of sub-areas (e.g., suburban office parks);

Assisting individual large employers of statewide importance, including state government agencies and large private sector businesses, in developing specific TDM plans.

For these efforts, the Consultant shall conduct research and technical analyses to forecast the mode shift and VMT reduction potential of alternative traditional and innovative TDM strategies. This work shall rely upon a review of best practices and quantitative assessments and modeling of TDM strategies. The Consultant shall use tools such as EPA’s Commuter Model, the Center for Urban Transportation Research’s TRIMMS model, and FHWA’s TDM Model in analyses to forecast the potential effects of TDM strategies, building on local data on regional mode shares, average trip lengths, and parking costs. The Consultant shall also make adjustments based on research and analyses of travel response and select the most appropriate tools for credible analysis. For instance, ICF is currently using the TRIMMS model as part of a scenario analysis for EPA examining the potential criteria pollutant and greenhouse gas (GHG) reductions associated with implementing TDM strategies in a sample of metropolitan areas. TRIMMS was selected for its ability to use outputs from regional travel demand models, including travel time elasticities, and data suggesting that it may provide more realistic results for some types of strategies than EPA’s Commuter Model.

Developing, analyzing, and recommending effective strategies requires more than an analytic process; it also requires consideration of implementation mechanisms, partners and stakeholders that play a role and likelihood of meeting public support or resistance. For instance, in supporting the development of the TDM component of the Southern California Association of Governments’ (SCAG) Regional Transportation Plan, ICF identified and documented experience with a wide range of potential TDM strategies, and then assessed their potential to reduce VMT using EPA’s Commuter Model, combined with local employment and commute trip data, as well as quantitative analyses based on surveys. Conducting quantitative analyses of costs and effectiveness was important to ensure recommendations would meet the plan’s objectives and fiscal constraints, but facilitating a series of stakeholder workshops was the critical element to prioritizing strategies and developing consensus on a path forward. In New York State, this consideration of partner roles and stakeholder perspectives is particularly important, and the technical analysis is somewhat more complex, given the nature of commuting sheds and wide range of agencies and organizations. The approaches applied at a sub-area or site level are similar to those at a regional level, but require an even deeper understanding of the specific land use, location characteristics, and operating characteristics of the road and transit network, parking availability, and other considerations. For instance, at a sub-regional level, ICF and KFH are currently working together to develop recommendations for TDM initiatives appropriate to the Ft. Meade area in central Maryland, which is expected to receive a large influx of employees due to Base Realignment and Consolidation (BRAC). The circumstances of this area are unique in that the commuting shed encompasses both the Baltimore metro area and the Washington DC metro area, and TDM program elements differ between the two metro areas; moreover, the security issues associated with the military base limit transit service access and create barriers to sharing employee data for ridematching. By meeting with the various TDM
agencies serving the region, as well as the major employers, to understand their specific needs, the Consultant was able to recommend strategies that will effectively work for this area.

Implementation Strategies for TDM Coalition Building

Issues

Throughout New York State, there are a wide range of public and private sector organizations that can play a role in TDM. These include MPOs, transit agencies, transportation management associations (TMAs), and city and county governments, as well as environmental agencies, public health agencies, and public safety/emergency management organizations. Although all these organization have an interest in the success of TDM efforts, they have different missions, goals and objectives, along with different constituencies. They may not always recognize the opportunities for working together to create synergies in programs that lead to greater effectiveness. Coalition building among TDM partners offers the potential to facilitate stronger, more coordinated, and more cost-effective programs than has been realized in the past.

Moreover, in addition to the public sector, private sector businesses, nonprofits, universities and colleges, developers, and other groups can play an important role in implementing TDM strategies, and are important to engage as partners. These entities often do not have transportation issues as core to their mission, although parking, traffic congestion, and employee and customer access may be issues. Engaging these partners takes specific efforts in TDM coalition building to develop effective networks of participants, partners, and champions.

Approach

Developing consensus among public and private sector TDM partners is challenging, but can be catalyzed by focusing on what they have in common and developing the appropriate institutional structure for sharing of information and coordinating programs, effective coalition building can lead to consensus on regional and multi-stakeholder initiatives, and in some cases, in resource sharing to better leverage limited public dollars.

Activities that the ICF Team shall undertake as part of this task include:

- Identifying stakeholders within different regions of the state and across the full spectrum of potential partners;
- Identifying common interests in TDM programs, and determining ways to most effectively engage these partners and leverage resources, including developing messages appropriate to these partners;
- Developing forums for communication and collaboration;
- Facilitating meetings and sessions specifically to gain consensus on TDM strategies, campaigns, and other approaches.

Listening to and engaging stakeholders in collaborative discussion is an important first step to understand common concerns and needs. This can then be built upon through the establishment of more formal channels of communication and partnership. For instance, in the downstate region, the Metropolitan Mobility Network has taken on a role of bringing together a diverse group of organizations, including the NYSDOT regions, NYMTC, and local governments, not only across the NYMTC area but as well with partner organizations outside of New York State (e.g., New Jersey Transit, New Jersey TMAs). Given the benefits of increased coordination
between TDM programs, Commuter Choice efforts, Clean Air NY, and 511 across New York State, the importance of coalitions like this will be increasingly important.

Developing ways to coordinate and come to consensus on campaigns and programs to get the most bang for the buck is challenging. The ICF Team will rely upon the substantial expertise of its team members, including staff from ICF, Urban Trans Consultants, and Trans Action with expertise in facilitation and TDM coalition building, as well as Commuter Link and Metro Pool, given their history of partnerships across the New York metro area.

An example of ICF’s successful approach to collaboration and building consensus comes through ICF’s work on the Clean Air NY Program. Working with NYSDOT, ICF has built a very strong coalition of partners with a Program Advisory Committee (PAC) that consists of representatives of NYSDOT headquarters and regions, the New York State Department of Environmental Quality (NYSDEQ), New York State Department of Health (NYSDOH), New York City Transit, and NYMTC. Within the program, ICF has worked with the three regional TDM service providers – Commuter Link, Metropool, and Long Island Transportation Management, Inc. (LITM) – to leverage existing relationship and programs. The Consultant has also developed marketing specific to other stakeholders, working to expand partnerships with employers, college campuses, community organizations, and non-profit “champions.”

Similarly, as part of a TMA feasibility study, UrbanTrans is currently in the process of building a TDM coalition amongst public and private sector TDM partners in the Washington Avenue Corridor of Albany, New York. Success to date in developing this TDM coalition has come through understanding what the perceived issues and needs are of the stakeholders along that corridor. Through public and private sector employer stakeholder interviews as well as employee surveys, UrbanTrans was able to identify that pedestrian and bicycle access and safety along the Washington Avenue Corridor was a common concern across all businesses.

Understanding their common concern allowed UrbanTrans to quickly gain consensus that this was a reason for them to pool their human and financial resources together and that a TMA was the best organizational outlet for them to do so. Correspondingly, in putting together a successful seven year Regional TDM Strategic Plan for the Triangle Region of North Carolina, Urban Trans Consultants found that the key to success in garnering buy-in and commitment was tying efforts to North Carolina’s statewide goal of a 25 percent reduction in growth of VMT by 2015. This allowed the stakeholder group to identify how much they could collectively contribute toward achieving that goal through TDM strategies, and refine their efforts to determine which region-wide and local TDM strategies would be most critical to achieve that collective contribution.

These proven approaches of involving stakeholders including local governments, non-profits, and other stakeholders from the business community to identify shared transportation needs and concerns will be at the core of the TDM coalition building process that The Consultant shall involve stakeholders including local governments, non-profits and other stakeholders from the business community to identify shared transportation needs and concerns and will be the core for the TDM coalition building process which the Consultant will use to facilitate consensus among public and private sector TDM partners throughout New York State.

Integration of TDM and Commuter Choice Alternatives with Land Use Planning and Design Issues
When it comes to TDM/Commut Choice activities, the key word is “choice.” While promoting options is one ingredient in TDM success, the likelihood that people will use options like transit, ridesharing, and biking and walking depends in large part on the convenience and access to these options, which is greatly influenced by land use patterns, site design, and highway design. Studies clearly demonstrate that “Smart Growth” development – designing for more mixed use, dense land use patterns that facilitate transit and bicycle and walk access – makes a huge difference in the travel decisions that individuals make. Moreover, it is not just regional patterns of development but also site-specific design considerations, such as the setbacks of buildings from the street, the width of sidewalks, and the design of streets in ways that calm traffic and enhance non-motorized mode use.

Therefore, for the long-term success of demand management, it is important not simply to plan for TDM outreach and marketing programs but to improve understanding and integration of TDM options with land use planning and zoning, access management policies, highway design, employer location decisions, and site design, since these issues are vital to shaping the set of choice options that lay the foundation for TDM programs.

Traditionally, land use planning and transportation planning have not been well coordinated, and highway design standards and zoning, in fact, contributed to making driving the preferred choice for travel. For instance, site design often places emphasis on providing an abundance of parking by complying with parking policies that require a minimum number of parking spaces. In addition to creating site designs that encourage driving through these parking minimums, design policies often ignore the need to provide access and amenities that encourage the use of transit, biking and walking. Highway design has focused emphasis in the past on improving traffic flow and vehicle safety but without adequate consideration of non-motorized modes. As a “home rule” state, New York State agencies need the cooperation of local governments to promote smart growth principles, and these local governments and developers often face resistance to smart growth strategies like transit oriented development due to concerns about increased density and traffic. Moreover, employers and other businesses have spent the last 30 years making decisions on where to locate based on ease of auto access and reduced land and space costs instead of locating where a variety of transportation choices are optimal.

Approach

To more effectively integrate TDM considerations in land use planning and design, the Consultant shall develop information resources to highlight the benefits of this integration and to conduct technical assistance and training to support these efforts. The ICF Team’s approach draws on the provided experience of supporting EPA’s Smart Growth technical assistance program and in developing resource materials to communicate these benefits, as well as the experience of team members Urban Trans Consultants, Alta Planning, Kodama Associates, and others on the various aspects of land use planning, urban design, and highway design. Areas of support the Consultant shall provide include:

Technical assistance and development of information resources to support improved land use planning that integrates TDM considerations, including support in developing zoning and TDM ordinances;

Support in developing local and site-based TDM plans and design recommendations;
Development of resource materials to highlight the multiple benefits associated with site location decisions and design that encourages reduced driving; and

Development of information on highway design and access management policies.

In all of these efforts, technical analysis to demonstrate the benefits of integration of TDM considerations is important. Technical analysis creates the basis to quantitatively define the positive attributes of changes to existing plans or policies, and communicate these benefits using specific performance metrics, such as VMT per capita and congestion levels. ICF has experience using tools, such as the INDEX benchmarking and evaluation tool, an interactive GIS-based system that measures existing conditions, evaluates alternative plans, and supports implementation of adopted plans, using a process which typically involves: designing alternatives, visualizing outcomes, analyzing the results across identified performance metrics, scoring the alternatives, and comparing trade-offs in order to help support informed decision-making about urban form and design that supports public objectives. Another key element is communicating how changes in site design, land use patterns, and zoning can be good for various stakeholders, recognizing that TDM can often help with various needs. For example local governments looking to quell citizen concern about increased density bringing increased traffic congestion can be provided information about how incorporating TDM programs into new developments can help reduce it. Transportation engineers that manage development of highway standards and are looking to minimize traffic congestion during construction of their projects and extend the life of them can be educated about the quantifiable benefits of TDM on their projects prior to, during and after construction. Employers who think the only cost of their location decision is the cost of rent and parking can be educated on the costs of labor force access, recruitment and retention. Local governments and developers are often concerned about the cost of constructing and maintaining automobile parking. They can be informed about how incorporating bike racks and showers, pedestrian connections to and covered waiting areas for transit, as well as carpool spaces into their site designs will create more traveler choice, reduce the number of auto trips to the site, and minimize the need to construct as much parking. Over time, educating the aforementioned (and other) policy decision makers about the value of TDM in helping them achieve their goals will allow them to identify opportunities to change or supplement current policies. This will ensure that infrastructure and development decisions are part of the long term solution to create new travel choices.

Analyzing Proposals to Increase Efficiency of Transit Services

Issues

Just as land use patterns and urban form are vital to creating convenient alternatives to driving, efficient transit connections from the perspective of the traveler must be in place for “choice” transit users to select this option. There are a variety of innovative transit operating services that can be developed or connected to standard fixed route bus and rail services in order to improve connectivity and the convenience and flexibility of using transit for the traveling public. For instance, frequent circulator services can help to connect people efficiently to transit hubs and rail stations. This service, therefore, might not only get people to switch from driving to transit for these short trips but can have a multiplying effect by encouraging them to avoid a much longer vehicle trip for the main portion of their commute. By providing faster, and potentially more reliable service, express buses can encourage some people to switch to transit in locations where standard bus service would be too slow to encourage a shift from driving. Vanpools,
reverse commute shuttles, and employer-supported “officepool” shuttles can also serve needs not well served by standard fixed route bus services.

At the same time, these innovative transit services must be efficient and cost-effective for agencies to operate. Frequent, convenient transit services may not be cost-effective if they do not generate sufficient ridership, and there are important tradeoffs that need to be made between improving transit services and the cost of new or enhanced services. Ridership analysis and financial evaluation, therefore, are critical to understanding the value of potential new or improved transit services, maximizing the value of transit to communities, and stretching limited operating funding.

Approach

The feasibility and cost-effectiveness of innovative transit services that are designed to increase the use of transit and ridesharing modes (e.g., vanpools and carpools) is a function of the likely ridership that will be attracted and the costs (both capital and on-going operational) of providing the service. The ICF Team will rely on staff from ICF and KFH Inc. with expertise in transit operations, ridership forecasting, and financial analysis for work in this task area. Key work that shall be conducted under this task includes:

- Identification of potential new innovative transit or paratransit operating services, based on the analysis of the circumstances of the local area, existing gaps in service, and potential for increased use of transit and ridesharing modes;
- An assessment of existing services, such as circulators and rail access shuttles;
- Analysis of potential ridership, vehicle trip reduction and VMT reduction effects of new services; and
- Financial analyses of these services.

In identifying new services, the ICF Team’s approach shall involve detailed collection of data on the context of the proposed or existing service and the intended user population (employees at a certain place, residents of a particular town, visitors to an historic area, etc.), and development of an appropriate service design in terms of needed frequency, fares, vehicles, and stops, etc. This will also involve costing that service, and comparing those costs to the anticipated ridership, revenues or other benefits.

Estimation of ridership is critical to analyzing the benefits of services, and there are a number of techniques that can be applied. In some cases use of estimated zonal interchanges from regional travel demand models can be used, but often the factors driving the potential ridership are more localized. Consequently, productivity of analogous services can be used to estimate ridership, if comparable models can be identified. In some cases survey data can also be useful, or data that relates potential usage to external factors, such as the employment at a particular site and the amount of available parking. For some kinds of services the ridership of the particular service is only part of the overall assessment—for example a free (to the user) rail shuttle that enables more usage of a commuter rail line may result in a significantly larger reduction in VMT than simply due to the ride on the shuttle itself, and would be reflected in increased commuter rail ridership.

Costs are driven by the route length, estimated vehicle speed, and frequency, which in turn determines the number vehicles required. Hourly operating costs for transit vary with the
provider and type of service, so it is important that the proposed service design take into account the cost structure of the potential operators. Vanpool service costs, for instance, are driven by the vehicle vehicle depreciation, fuel and insurance costs divided by the ridership.

The ICF Team has developed operating plans, proposals, and assessments of a wide range of innovative transit services. For instance, ICF developed the operating plan for a circulator shuttle in suburban Hoover, Alabama (outside of Birmingham), which was designed to serve a congested suburban business center. Although the direct focus of the service was on reducing mid-day lunch trips along congested roadways between office buildings, shopping centers, and the Galleria mall, the indirect effect of the circulator was intended to increase carpooling, since employees would not feel “stuck” in their offices and would have the option to take care of mid-day errands. The operating plan included a financial plan for cost-sharing among the businesses that the shuttle would serve. KFH has also developed concepts for local circulator shuttles in a number of areas and has developed proposals for a number of commuter rail feeder services for the Maryland MARC system to serve reverse commute linkages. Services were designed and costed, and compared to expected ridership in order to recommend a limited set for funding as demonstration projects. In another case reverse commuter vanpools targeted at low income workers were developed to serve the shift times at particular employers, and fares developed to take advantage of federal Job Access and Reverse Commute (JARC) funding. ICF has also examined the costs and potential of suburban “officepool” shuttles that would be largely funded by employers, and would take employees from outlying suburbs to suburban job centers that are not well serviced by traditional transit services. Applicability and Cost/Benefit Analyses of Bus Capital and Operating Concepts

Issues

Just as new innovative transit services can help to support transit and ridesharing modes, improving the operations of existing transit services in terms of reduced travel time and reliability of travel time can also help to attract riders. Increasingly transit planners and operators are realizing that attracting SOV users depends on providing reduced travel times, reliable service, and good real-time information to users on existing services. Travel times that are comparable to automobile travel are key, but in addition users must feel safe and find the service reliable and convenient (in terms of minimal transfers and walking).

Bus service can be dramatically improved by projects that improve transit operations by providing bus priority, reducing travel times, and increasing reliability. Typically these include both capital investments, such as signal controls, lane extensions, vehicle tracking, improved stops, real-time information, and additional vehicles, coupled with increased service operation (more frequency, longer span of services).

Approach

The ICF Team’s approach to this analysis includes relying on expert subconsultants in transit operations from ICF and KFH, Inc., who bring experience in transit system management and operations. Examples of previous work conducted by the ICF Team include developing and assessing the costs and benefits of incorporating bus rapid transit services into a High Occupancy Toll Lane project, documenting case studies of transit operational strategies, and developing a plan for skip-stop bus priority services in high usage corridors, incorporating improved stops/shelters and real-time user information.
Accurately estimating the potential for increased bus ridership is one of the key elements of examining these concepts. This estimation can be done by applying service elasticities for frequency and travel time to existing ridership, drawing on data on actual ridership, surveys, and/or experience on other similar services. Typically such projects are most appropriate where there is already significant transit service, so there is a base to work from in terms of ridership analysis. Reductions in vehicle travel are calculated based off of the ridership increase, and should account for the type of service to determine whether the new riders come from other transit services, ridesharing, or walking. In addition to ridership gains and corresponding reductions in vehicle travel, estimation of benefits can include the reduction in travel time for current transit users who will also benefit from faster and more reliable service. Other implications, such as effects on travel delay for non-transit motor vehicles, may also be important in an overall benefit/cost assessment.

As in the case of new transit services, costing of changes in bus operating concepts depends on developing service scenarios that include the capital costs of traffic engineering elements as well as vehicles, control systems, and information systems. Operating costs are driven by services hours needed to meet the frequency requirements on the proposed route.

Cost/Benefits, Logistics and Technologies Related Traveler Information and Telecommunications Systems

Issues

Traveler information – both for personal and commercial travel – has grown from just a nicety a decade ago to a necessity today. Travelers now expect to have access to up-to-the-minute conditions affecting travel throughout New York State. Traveler information via telecommunications systems and technologies enable the public to make more informed decisions regarding departure times, route choice, and mode of travel, which in turn can help to reduce vehicle travel and/or traveler delay. With enhanced communication systems, travelers can defer or delay trips, select alternate routes, or use various multimodal options to help reduce traffic congestion. Technologies can inform travelers prior to their trip or while en route. Pre-trip information includes traffic, weather, transit, and work zone information commonly posted on Internet Web sites, made available over 511 telephone systems, or broadcast on local radio and television. En route information is usually made available via roadside or in-terminal dynamic message signs or highway advisory radio.

In recent years, New York residents have come to expect reliable access to timely and detailed information about accidents, construction, road closures, special events, and weather conditions. As users’ expectations have increased over time, so has the amount of traveler information residents can now access. Today, NYSDOT offers real time status of conditions throughout its transportation system. For instance, the 511 New York system offers a range of traveler information for traffic and transit service, transit trip planning, ridesharing, and other services.

The potential for this information to encourage shifts in mode and travel time requires further exploration. According to a recent study of traveler information in the Seattle area, a substantial portion of people who accessed traveler information indicated that they changed the time they left (13 percent), took the planned route but with small changes (11 percent), or took a whole different route from the planned one (9 percent), but only a small portion delayed or cancelled at trip (2 percent) or changed travel mode (1 percent). It will be invaluable to conduct market
research or other analyses to determine how traveler information can make it more accessible to use options such as carpool.

Approach

In this subtask, if directed via a Task Order request, the Consultant shall conduct a range of analyses related to the benefits, costs, and implementation of multimodal travel information systems. These may include not only elements of the 511 system, but also potential applications of radio systems; real-time transit information at bus stops and rail stations; web-based information; and use of new and emerging technologies to guide travelers to the most efficient transit, ridesharing, and park-and-ride options, as well as potential applications as part of value pricing projects (e.g., providing real-time information on current road prices or parking prices and availability). The ICF Team will rely upon the expertise of staff from ICF, as well as M&J Engineering, which has supported ITS systems throughout the New York metro area. One of the key challenges associated with funding new traveler information and telecommunications systems is that the costs and benefits are often difficult to quantify. Cost includes the initial cost of acquisition and installation, as well as the recurring cost of maintenance and operations. Benefits of traveler information systems include improved on-time reliability, better trip planning, and reduced early and late arrivals. Some systems allow clear tracking of some kinds of benefits – for instance, it may be possible to track the number of people who access information on transit services or the number of people who sign up for carpool matches. However, it is often quite difficult to determine benefits in terms of reduced travel time waiting, increased number of transit riders due to increased access to transit information, and traffic congestion delay reduced. Although there are some analysis systems like IDAS that provide information on some elements of ITS technologies, information on transit and multimodal information in particular is currently lacking. Monitoring the effectiveness of pilot projects therefore plays an important role.

Through this subtask, the Consultant shall conduct a survey of people who accessed real-time travel information in order to understand their impressions of the information and how it changed their travel behavior. The Consultant might also explore through surveys the likelihood of individual travelers making changes in their travel patterns as a result of access to different kinds of traveler information in different formats.

Support to Legislative Initiatives that Enhance Implementation of TDM and Commuter Choice Initiatives

Issues

Although NYSDOT has some leeway to make changes to its efforts to support TDM and Commuter Choice programs, legislative action can help to support broader adoption of employer-based TDM programs and employee participation in these programs. Several states – including Connecticut, Delaware, New Jersey, and Oregon – provide tax incentives to encourage employers to adopt programs to encourage employees to commute to work without using an SOV. For instance, Connecticut legislation passed in 1994 provides that employers with 100 or more employees are eligible for a tax credit equal to 50 percent of the employer’s direct costs for implementing a traffic reduction program, up to a limit of $250 per participating employee. In New Jersey, the legislation for Smart Moves for Business Tax Credit Program passed in 1998: it provides a tax credit to eligible corporations equal to either 10 percent of the costs attributed to implementing an authorized commuter transportation benefits plan or up to $115 per
participating employee. Several other states – including Maryland, Georgia, and Minnesota – have passed tax incentive programs specifically designed to encourage employers to offer their employees transit/vanpool benefits. For instance, the Maryland Commuter Tax Credit provides employers with a state tax credit of 50 percent of the cost of providing a commuter benefit (defined as a transit benefit, vanpool benefit, parking cash out program, or guaranteed ride home) up to a maximum of $50 per month for each employee. Some states also provide telework incentives or technical assistance programs, such as the Telework!VA program, which provides employers with reduced cost leases for telework-related equipment, and free technical support in establishing a formal telework program in Virginia.

Some states also have implemented requirements on specific employers. For instance, the State of California has a parking cash out law (California Health and Safety Code section 43845, passed in 1992) that requires that certain employers offer their employees a choice between parking at work or of “cashing out” the value of the parking space. Washington State has a Commute Trip Reduction law, initially passed in 1991, that requires that certain counties implement a CTR plan and ordinance for major employers; the law was recently amended in 2006 to increase local flexibility in implementing the program. Other types of possible legislative changes might relate to addressing programs for Pay-As-You-Drive insurance (for instance, Oregon passed legislation providing incentives for this form of auto insurance), changes in insurance requirements that would facilitate ridesharing and vanpooling, or changes in liability associated with implementing ridesharing programs.

Legislative analysis will help to provide an informed basis for discussing the benefits and costs associated with alternative legislative proposals. NYSDOT may require analytical support in responding to legislative proposals, or in helping to advise on legislative proposals that would be most effective and/or cost-effective.

Approach

The type of analysis needed will vary somewhat depending on the nature of the legislation, but in general analyses of this kind answer the following types of questions:

Are there multiple legislative alternatives available? If so, what are the pros and cons of each?

Has anyone else tried this before? If so, what were the results and how relevant are those results to us?

What are the likely implementation costs of the new legislation, in terms of reduced state tax revenue, or other implications?

What are the likely benefits in terms reduced vehicle travel, traffic congestion, or motor vehicle emissions?

What other ancillary benefits, or unintended consequences, might there be?

What are likely objections, and how can we overcome or assuage their objections?

How can we build support for the legislation?

In preparing these types of analyses, the Consultant recognizes that the research must be timely, accurate, concise, and well-organized. Timeliness is essential, because legislative developments can occur quickly and unexpectedly; to be helpful, analyses must be available when needed.
Accuracy is also crucial because of the high-level decisions being made and the scrutiny to which the analysis may be subjected. Brevity and organization are also important, because the intended users of the analysis (e.g., legislators, senior agency officials) have many time demands and constraints. The resulting legislative analyses may be in the form of briefing papers and will be tailored to the specific purposes of the analysis. The Consultant shall prepare legislative analysis in a form specified by the NYSDOT. For instance, a quick-turnaround assignment might be conducted via a brief Internet search of legislation in other states and supplemented with information from a select number of phone interviews. However, when allowed more time, the Consultant approach would be more thorough and systematic. For example, ICF staff conducted an analysis of the potential VMT and emissions benefits of the Maryland Commuter Tax Credit at the time of its passage, which involved an analysis of the estimated number of the employers and employees participating. For EPA, ICF conducted a much more detailed analysis of changes in the Internal Revenue Code to allow pre-tax transit and vanpool benefits programs. In this case, ICF staff developed a more complex spreadsheet model to estimate the potential federal revenue implications as well as vehicle travel and emissions savings under various scenarios of participation. ICF has also conducted post-implementation assessments of certain programs, which could lead to future legislative changes.

Innovative VMT Reduction Value Pricing and Congesting Pricing Initiatives

Issue

Pricing strategies – including road pricing, parking pricing, and other forms of pricing, such as Pay-As-You-Drive auto insurance – are increasingly being seen as critical elements of efforts to reduce congestion, improve transportation system efficiency and provide communities with a tool that can be used to enhance the quality of life. Pricing strategies can rationalize the use of limited road capacity and reduce future investment requirements by encouraging some peak period road users to shift to off-peak periods, to high occupancy vehicle (HOV) modes, including transit, to less congested routes, and/or to make more efficient trip decisions. While the primary purpose of these initiatives is to improve efficiency and the environment, they can also have significant revenue implications.

Over the past two decades, pricing applications have been debated in numerous contexts in the State, and especially, in the Metropolitan New York City Region. These include a wide variety of concepts:

Cordon Charges: Area charges for mid- and downtown Manhattan have been studied every few years since 1970s. The most significant and comprehensive proposal was the recent congestion charging proposal that failed to receive the State Legislative support

High Occupancy Toll (HOT) Lanes: Over the past several years, agencies in the New York Metropolitan region, including The Port Authority, have carefully studied the conversions of HOV/Bus Lanes to HOT lanes on highways from New Jersey approaching Hudson River Crossings from the West and on Long Island

Time variable pricing has been explored for existing toll facilities. Peak/off-peak toll differentials have been adopted on Hudson River crossings from New Jersey and on Tappan Zee Bridge (for Trucks)

New tolls on existing free facilities have been examined for years (e.g., East River crossings in to Manhattan)
Parking pricing innovations have been explored over the past four decades in numerous localities across New York State, including Manhattan, Brooklyn and other New York City Boroughs. While parking reforms have been introduced in many places (particularly as a part of employer trip reduction and similar program mandates), innovative differential parking programs—such as parking “cash out,” differential off- and on-street parking rates, expansion of coverage of on-street parking areas and parking space taxes to manage private off-street parking—have as yet to be as widely implemented, but promise significant reduction in VMT.

These types of options, as well as potential others, such as Pay-As-You-Drive Insurance have the potential to complement TDM programs and encourage travelers to consider the full cost of driving alone before they make a decision to do so. Nearly twenty road and parking pricing projects have become operational in the United States over the last fifteen years through the FHWA Value Pricing Pilot Program (previously Congestion Pricing Pilot Program), and others are in developments. Other pricing projects have been implemented overseas. These projects provide a wealth of information, lessons and guidance for future applications. Specifically, a few of the innovative strategies that hold strong potential in New York State over the foreseeable future include:

- **Varially Priced HOT Lanes**: along major approaches and bypass routes in large urban areas in the State including, but not limited to, the New York Metropolitan Region
- **Introduction of time-variable pricing on existing toll facilities**
- **Addition of new Priced Express Lanes to existing free facilities**
- **Implementation of Pay-As-You-Drive mileage-based automobile insurance in NY State urban areas**
- **Introduction of innovative variable (differential) on- and off-street parking pricing policies and parking “cash out” in urban and suburban employment and activity centers across the State**
- **Exploration of the feasibility of introduction of VMT fees as a supplement or complement to existing transportation funding over the long term.**

Adoption of these very promising strategies has been slow, primarily because of public opposition to paying new charges, but also because of legitimate concerns about perceived adverse effects on local business and low-income groups, doubts that the concept is technically feasible, or the belief that congestion levels were not serious enough to warrant a new way of charging for road use.

**Approach**

In order to support the development and evaluation of innovative VMT Reduction, Value Pricing, and Congestion Pricing Initiatives, the ICF Team is prepared to support NYSDOT in conducting analyses to:

- Identify and describe a range of potential pricing options and their attributes;
- Document best practices, case studies, and experience from other projects and locations;
Assess the feasibility of alternative pricing systems, technologically;
Examine the potential implications of pricing systems on vehicle miles travel and usage of alternative modes;
Analyze factors that have influenced the success of road pricing pilot programs and options in other states.

The proposed ICF Team for this project has more than twenty years of hands-on experience with the development, design, assessment, implementation and evaluation of such innovative pricing projects and initiatives across the United States and overseas. In fact, K.T. Analytics developed FHWA’s Value Pricing Pilot Program Assessment and has documented the experiences and lessons learned from pricing projects across the U.S. ICF is currently working with K.T. Analytics on two studies for the National Cooperative Highway Research Program exploring communications practices related to road pricing and integrating road pricing more effectively into transportation planning and decision making. With this depth of understanding, the ICF Team is poised to develop and evaluate a range of innovative VMT reduction value pricing and congestion pricing initiatives.

Pedestrian and Bicycle Strategies and Policies

Issues
Increasing the public safety and appeal of walking and bicycling is an important component of successful reduction of drive-alone trips and VMT. It is also an important element in supporting transit services, since transit service typically starts and ends with walking or bicycling.

A key concept underlying any successful pedestrian strategy is utilizing all available tools to create a corridor that is easily understood as a pedestrian-friendly environment to drivers and pedestrians. This includes developing convenient and high-visibility crossing treatments at intuitive crossing locations; providing a buffer zone between through vehicle lanes and pedestrians (using bike lanes, parked cars, a furnishings zone, and/or planted buffers); providing visibility for pedestrians through daylighting, curb extensions, and visual sight lines; and the provision of pedestrian amenities such as benches, plantings, wayfinding signs, and public art.

A majority of potential bicyclists require greater real and perceived separation from automobile traffic in order to feel comfortable enough for the bicycle to become a primary vehicle for short trips. This separation can come in many forms, using many tools, on facility types including fully separated multi-use pathways, low-traffic bicycle boulevards (residential streets which have been optimized for bicycle priority travel and low vehicle speeds and volumes) and premium bike lanes on higher-order streets.

Approach
The ICF Team’s approach to this subtask is to draw on the expertise of staff from Alta Planning, one of the preeminent firms in bicycle and pedestrian planning, to address these issues. Alta planners are experts in both the hard (infrastructure) and soft (programs) approaches to increasing non-motorized modeshare. The ICF Team understands the needs of a wide spectrum of current and potential bicyclists and pedestrians, and what facility designs will meet these needs and attract new users.

Work under this task is expected to fall within four primary application categories:
1. Non-motorized policy development – Includes non-motorized and multimodal policy approaches, which may be incorporated into bicycle and pedestrian master plans and matched to the specific needs of the local area. Alta Planning has developed over 300 bicycle and/or pedestrian master plans, and as NYSDOT Bicycle and Pedestrian Program Manager from 1993-98, Alta principal Jeff Olson was the principal author of the NYSDOT State Bicycle and Pedestrian Plan in 1996, and this plan set statewide nonmotorized policy that has continued to the present.

2. Bicycle/pedestrian infrastructure planning and design – Includes developing recommendations for specific infrastructure plans and designs, including the development of bicycle paths, trails, sidewalks, and shared use pathways. ICF Team members bring a full appreciation of the local context as well as principles for effective infrastructure planning and design. For instance, Alta staff authored the Planning chapter for the forthcoming update to the AASHTO "Guide for the Development of Bicycle Facilities"; conducted a shared lane markings study for the City of San Francisco that has led to shared lane markings being admitted into the next revision of the MUTCD; and created the National Bicycle and Pedestrian Documentation Project for ITE.

3. Direct provision of bicycle/pedestrian programs and services to the public – Marketing programs to increase walking and bicycling are important supporting efforts to encourage use of facilities. Efforts under this task may include planning and strategy consultation to public agencies considering Bike Sharing/Public Bike programs; planning and management of Safe Routes to School programs (Alta is currently supporting programs throughout the nation, including developing the pilot program for Safe Routes to Schools in the Rochester, NY region); public safety and informational campaigns about the benefits of walking and biking; and development of bicycle maps and information.

4. Improving bicycle/pedestrian nexus with transit – The value of bicycle and pedestrian networks increases greatly when they are well-integrated into transit facilities. Possible activities include advising transit agencies on bicycle access to stops, bicycle parking at stops, creating integrated bicycle/pedestrian/transit user maps, and pedestrian safety enhancements nears stops.

The Consultant approach to these efforts to support bicycle and pedestrian strategies and policies typically involves a five-stage process in which they:

1. Gather existing data in order to define the problem to be solved and evaluate existing conditions;
2. Assess the needs of current and potential users through stakeholder interviews, surveys, counts, and demand projections;
3. Evaluate the potential network using a variety of GIS tools and models, field work, and use of online mapping tools, resulting in a robust recommended network;
4. Develop design guidelines to guide future infrastructure investments; and
5. Prioritize projects to develop cost estimates and funding strategies in order to improve feasibility.

Traffic Calming Strategies

Issues
The fundamental principles of traffic calming are simple: more cars moving more quickly results in a higher probability of crashes that are also more likely to result in injury or death. Traffic calming slows traffic speeds and reduces traffic volume in order to save lives. In the process, traffic calming also can support increased bicycle and pedestrian activity, as well as transit use, as people feel safer and more comfortable using non-motorized forms of transportation.

In implementation, however, traffic calming projects can be challenging where they conflict with stated or unstated policies that prioritize vehicle throughput and vehicle Level of Service over traffic safety and crash reduction. In addition, some common strategies to calm traffic have other impacts that may be unpopular with certain stakeholder groups, such as merchants who fear that slower-moving traffic will reduce customer visits to their establishment, or emergency service providers who object to vertical or horizontal deflection tools because they may slow or limit emergency vehicle response.

Approach

The ICF Team’s approach to this task relies upon the expertise of team members Alta Planning and Urban Trans Consultants in developing and evaluating traffic calming strategies. The Consultant approach shall include the following elements:

- Involving the participation of stakeholders in design of traffic calming programs. In order to anticipate and manage potential opposition, every traffic calming project must include the participation of affected stakeholders (including neighbors and neighborhood associations, merchants, emergency services, transit providers, and schools, as well as community groups working on bicycle, pedestrian, and disability issues). The Consultant’s process begins with facilitating agreement on the problem to be solved and the criteria of a successful solution, and then includes detailed review of the traffic calming “toolbox.”

Identifying potential traffic calming strategies appropriate to different circumstances, within the overall “toolbox” of strategies, including horizontal deflection (chicanes, partial street closures, mini traffic circles, offset intersections), vertical deflection (speed bumps/humps, speed tables, raised intersections, raised mid-block crossings), vehicular diverters permeable to pedestrians and bicyclists (diagonal diverters, street closures, local access only streets, enforced turns), crossing treatments (medians, crosswalks, HAWK signals, pedestrian/bicycle detection, scramble signals, bike turn lanes and signals).

Developing a guidebook or information resource for use in highway design and local land use planning. This task could build upon Alta’s current work authoring a national Bicycle Boulevards Design Guide that will be co-published by the IBPI (Initiative for Bicycle and Pedestrian Innovation) at Portland State University and the Association for Pedestrian and Bicycle Professionals (APBP); this guide includes a detailed discussion of traffic calming in the context of bicycle boulevards as well as criteria for when to apply which tool.

Evaluating the potential benefits and costs of traffic calming strategies, not only in terms of improved traffic and pedestrian safety, but in terms of potential for increased pedestrian and bicycling activity, and reduced vehicle travel. This quantification is challenging and is associated with a range of uncertainties, but estimates can be
Parking Management

Issue

Parking management is a key demand management tool that can be used to change commute and other travel behavior. Studies demonstrate that parking is one of the key determinants of mode choice. However, too often employers treat parking as free and a right of employment. It is estimated that nearly three-fourth of all firms in the U.S. provide free parking for their employees, with employers providing over 85 million free parking spaces for commuters nationwide. In reality, parking is an expensive resource, with employers spending an estimated $40 to $70 billion per year on “free parking.” Moreover, subsidizing parking creates an incentive to drive more often, which contributes to a number of negative externalities, including increased traffic congestion and air pollution.

Parking management involves a range of tools, techniques, and policies that impact the demand, location, time, price and supply of parking to better manage parking and transportation resources. Although parking management is often thought of as limiting parking, effective parking management strategies can be used to enhance mobility, access, and efficiency of the transportation system.

A wide range of parking management techniques can be used to support more efficient use of parking and support reductions in vehicle travel demand, including:

- Rules and regulations to manage parking (shared parking, parking trade or credit programs, demand based parking requirements),
- Better management of parking supply (Park and ride initiatives, integration of parking with transit options), and
- Creating incentives for employers and employees to encourage the use of alternative modes (parking cash-out, preferential parking for carpoolers, parking pricing, solo commute fees).

An understanding of parking issues (inventory, occupancy and turnover), parking attitudes, the value and price of parking, parking economics and how parking impacts commute behavior are all critical elements of every transportation demand management program, since parking plays such a large role in travel behavior. Recently, there has been a renewed interest in parking management and how it can be used to improve the efficiency of the transportation system. The ICF Team will look to capitalize on this renewed interest to help further parking management opportunities that contribute to vehicle trip reduction throughout the state.

Approach

The Consultant shall apply the following principles and strategies that are key to the development of a successful parking management approach when addressing transportation management challenges in New York State:

- Use a combination of parking management and TDM to solve employee and commute parking problems and issues (both too much or not enough parking);
Use “park once” principles that encourage people to park their car and then walk or use alternative modes;

Emphasize the importance of parking inventory, occupancy and turnover information to develop appropriate parking management strategies tailored to specific circumstances;

Develop guiding principles as well as planning rules and regulations to make best use of parking resources and develop demand based parking requirements;

Use parking pricing and parking revenues to enhance TDM options;

Use TDM options to manage “excess” parking demand; and

Use TDM strategies to enhance the walking environment and increase utilization of available parking spaces outside of the core.

The ICF Team shall address a full range of parking management related issues, including promotion, technical assistance, and planning related to parking pricing, parking cash out, employer-based parking programs, regional and city-wide parking policies, among other issues. The ICF Team will rely on the substantial expertise of Michael Kodoma & Associates in developing parking management plans, as well as ICF staff (with expertise in parking cash out and pricing), K.T. Analytics (parking pricing), and Urban Trans Consultants (site-based and employer-based TDM plans).

ICF’s Team has been connecting parking management strategies to TDM issues for years, underscoring the important relationship linking parking management with transportation efficiency. For example, Michael Kodoma has worked as part of a project team that helped the Metropolitan Transportation Commission complete an award winning effort to develop Smart Growth Parking Policies in the San Francisco Bay Area. Alongside the Oregon Department of Environmental Quality, Michael Kodoma has developed an employer handbook and a workshop series designed to help employers use parking management to solve parking problems. Additionally, ICF supported EPA in analyses of the potential for parking cash out programs to reduce vehicle travel and motor vehicle emissions and in developing resource materials, including briefing papers on parking cash out. In New York State, Michael Kodoma is currently working with the New York Metropolitan Transportation Council to conduct a series of parking management workshops for local jurisdictions. In the Bronx, Manhattan, Ossining, Patchogue, and the Hamptons, the ICF Team has worked with key stakeholders to develop customized programs with specific parking management and TDM strategies to meet the needs of local communities.

In the context of the statewide TDM efforts, innovative parking management approaches are techniques that bring further value to the practice of TDM. Many of the Consultant Team’s projects begin with defining a parking problem then, then approaching the problem with parking management and TDM strategies as a way to solve it. Such an approach relies heavily on understanding TDM strategies, and recognizing TDM as a valuable tool. For example, if the team were to investigate underground parking at $50,000 per space, being able to save 100 spaces could translate into a cost savings of $5 million, which could in turn, provide funds for inexpensive TDM options to be used to achieve project objectives. New York’s parking management approaches may vary greatly – from high-priced parking in New York City to free parking at suburban office parks. Yet, management strategies can be combined and used to support TDM in all of these locations. The Consultant approach will include working with target
markets (e.g., employers and employees) or other stakeholder groups to promote, refine, and improve parking management strategies using an inclusive approach that includes a comprehensive range of parking management options. This allows the team flexibility to focus on adjustments to parking policies that not only encourage use of alternative modes, but also enhance economic vitality and improve quality of life.

It is important to understand the situations in which different types of parking management programs thrive. For instance, although there are notable examples of success with parking cash out, adoption of parking cash out programs nationally has been limited. This is due in part to the limited number of employers that have unbundled parking leases that enable them to reduce their parking costs when parking needs are reduced. In addition, the taxable nature of cash in lieu of parking means that it is more favorable for employers to offer a tax-free transit or vanpool benefit rather than a pure cash incentive. Understanding the specific circumstances under which parking cash out is a valuable option will help the ICF Team to tailor messages and recommendations in ways that are most likely to be effective.

Evaluating Federal Programs

Issues

There are a range of federal programs and policies that relate to TDM and could potentially be promoted or utilized by localities across New York State. Some of these programs and benefits were created specifically to support the goals of TDM and are already incorporated into New York’s programs. For example, the federal tax code allows employers to offer their employees a tax-free commuter benefit either as an employer subsidy or by allowing commuters to set aside up income tax-free to pay for mass transit and vanpool fares. The tax-free limit was recently increased from $120 to $230 per month as part of the American Recovery and Reinvestment Act (ARRA) of 2009. Another recent change to the federal tax code allows employers to provide employees up to $20 per month tax-free for bicycle commuting expenses. TDM service providers in the downstate region already promote these programs, but there is potential for greater outreach and communication on the availability of these tax incentives statewide.

Some other federal programs have potential to serve as funding sources or to provide technical assistance to support planning that encourages reductions in VMT. For instance, FTA’s Access to Jobs grant program is focused on meeting the transportation needs of low-income workers, many of whom do not own cars and live far from job opportunities. This grant funding can be used to provide Commuter Choice services such as guaranteed ride home, shuttles, ridesharing, and bicycle-friendly transit. Applying for this grant program may make sense for New York communities with large populations of low-income residents.

EPA also offers assistance to communities that wish to become more “livable” communities by pursuing smart growth strategies. Smart growth strategies include providing a wider range of transportation choices and directing development to areas that are already accessible by public transit. By influencing how communities grow, these federal programs help reduce VMT and the number of single-occupancy vehicle trips. Under SAFETEA-LU, the Safe Routes to School program also provides funding for education and infrastructure related to improving walk and bicycle access to schools.

Approach

Under this subtask, the ICF Team shall conduct various types of work, including:
Evaluating the potential for federal programs to support reductions in vehicle travel within New York State. ICF has conducted analyses of the full range of voluntary and incentive-based federal programs, including parking cash out, tax-free transit and vanpool benefits, and smart growth programs to support reductions in VMT and greenhouse gas emissions nationally and within specific locations. For EPA, ICF conducted an analysis of a range of federal programs, including transit investments, smart growth assistance, and pre-tax transit and vanpool benefits to reduce vehicles from the roadway.

Providing resource materials to support adoption or utilization of these programs. This may include briefing papers, case studies, and other guidance materials geared toward local governments or individual employers;

Identifying potential federal grant programs and funding sources to support TDM implementation and evaluation activities, and documentation of use (e.g., who can receive the grant, allowable uses, recordkeeping or reporting requirements, timeframe in which grants will be awarded).

The ICF Team will rely upon the expertise of its staff in evaluating a full range of federal programs related to transportation, and assessing their potential to reduce VMT, criteria pollutants, and greenhouse gas emissions.

TDM and Commuter Choice Contingency Planning

Issues

TDM strategies can play a critical role in supporting employee mobility during and after an emergency. Specifically, disruptions to commuter travel on roadways and transit can be mitigated through existing TDM programs such as regional rideshare programs, 511 networks, and telecommuting services. However, planning needs to be conducted for the use of TDM services in the unique, rapid decision-making circumstances of an emergency.

Although not the only strategy to be employed in contingency planning, regional rideshare programs have been identified as a potentially effective strategy for accommodating commuters during travel disruptions. Within the next year, New York State’s 511 service aims to provide, amongst other services, dynamic information on rideshare referrals. The system is also being developed with the understanding that a 511 system has the potential to act as a critical single-point information source during transportation emergencies. New York’s 511 system provides the platform on which to expand contingency planning efforts in an effective manner. For example, with the support of transportation management associations/organizations, private companies throughout the State could potentially link their emergency hotline number to rideshare 511 number and website so that displaced employees may find out what transit options are available to them. Additionally, the 511NY platform could be expanded to support a reverse 511 alert system on New York’s rideshare website so that businesses can be notified of travel disruptions or emergency situations.

Approach

There is a natural linkage between the application of TDM strategies and commuter continuity in the context of emergency management and planning. Transportation planning for emergency preparedness requires coordination amongst a range of state and local stakeholders. Through research, ICF has learned that MPOs can provide a central point of contact supporting a coordinated approach to emergency planning through TDM. While MPOs have a strong history
of influencing regional transportation operations, they continue to face challenges in bridging regional coordination between emergency response stakeholders and transportation stakeholders. Therefore, any multi-modal approach to emergency contingency planning requires an ongoing commitment to dialogue and communication to reduce redundancy and improve efficiencies in effort.

For more than 20 years, ICF has been providing emergency management services to numerous private companies, industry associations, and government agencies. These services include risk assessment and hazardous materials transportation planning. In more recent years, the Consultant has helped clients address domestic preparedness and transportation security. ICF understands this relationship. This understanding, as well as multi-disciplinary skills in TDM and emergency planning, make ICF especially qualified to help NYSDOT learn from some of the country’s best emergency management programs with a focus on increased travel options, while integrating appropriate best practices and improving upon the existing system.

A general approach in addressing a task order under this area shall include the following:

Convene and facilitate regional stakeholder task forces comprised of NYSDOT representatives, MPOs, TMA/TMOs, and private business. Regional task forces would support the assessment of needs and challenges of current contingency planning strategies and procedures currently in place throughout the state. The objectives of the task force would be defined by the specific goals under the subtask. Objectives could include identifying approaches for streamlining regional resource-sharing of rolling stock piles and leveraging private-public partnerships. The ICF Team would work with the task force to review the assignment of the study, discuss key elements, and solicit feedback so that topical research can be refined appropriately.

Gather data about contingency planning efforts employing TDM strategies, and include gathering statewide information about standard operating procedures, contingency plans, hotlines, resources, most favorable travel options, coordination efforts, pilot projects, and experiences and lessons learned with implementation efforts during major emergency situations and travel disruptions within the context of New York.

Disseminate findings to primary audiences as defined under a given task under this area.

With the aim of commuter contingency planning in mind, a stakeholder task force, as proposed above, could pursue the following:

Develop an information exchange framework that identifies the private and public networks and relationships that can facilitate commuting and enable business continuity in the event of an emergency.

Host semi-annual or annual meetings/conferences with companies interested in being part of an emergency preparedness network to find out about their own strategies and identify areas in which travel coordination is necessary and viable. Alternatively, host workshops for employers to clearly identify the connections between TDM strategies and emergency planning. This would entail defining how TDM solutions can provide employee productivity in the event of road closures, event planning, or natural and man made disasters. Examples include use of density maps to determine employee clusters for ridesharing, implementing a pre tested telework program, and changing work hours. Encourage companies to promote an “emergency only” internal ride match. Encourage
telework as a viable business strategy providing multiple benefits while emphasizing the important role it can play in supporting short- and long-term business continuity after an emergency.

Develop promotional materials and case studies that demonstrate how TDM can be used in emergency preparedness and business continuity.

In partnership with transportation management associations/organizations, encourage smaller companies to identify peer companies to share lessons learned from developing business continuity plans.

Develop a database system to register both public and private transit inventory and assets that may be utilized during an emergency. New York City’s Private Asset and Logistics Management System (PALMS) provides an example of this system.

Develop templates for Memorandums of Understanding (MOUs) that can be used by public and private organizations interested in formalizing their transportation resource agreements.

Promote emergency drills that require city, county, transit, and private business participation. Integrated emergency drills would solidify the networks that need to be in place during a real emergency and evaluate the state of preparedness of the business community and to enhance cooperation with business community initiatives.

Expand the 511.org model by including an explicit link to up-to-date information about ride matching in the event of an emergency, as it relates to emergency transportation for “stranded” employees, etc., and increase advertisement of 511, rideshare and vanpool capacities during and immediately following an emergency through media outlets (e.g., a news ticker; highway kiosk).

Utilize regional geographic data for map development to identify areas most in need of available rideshare resources relative to available commute options and home/employment locations, and utilize GIS to identify transit links most likely to be impacted in the event of an emergency, thus targeting areas that could most likely need back-up services.

Evaluation and Assessment of TDM and Commuter Choice Programs

Issues

Evaluation, assessment, and monitoring the effectiveness of TDM programs, plans, and strategies is critical, given limited transportation resources. NYSDOT needs to ensure that its investments in programs are yielding results and that the programs are cost-effective and achieve necessary objectives. This is often a challenge for TDM programs, given the difficulty of assessing the effects of public education and outreach initiatives and by the very nature of TDM programs in supporting capital investments in transit, ridesharing (e.g., HOV facilities, park-and-ride facilities), bicycling and walking. Unlike a new transit route or roadway investment, where changes in ridership, travel speeds, or delay can be calculated for a discrete project, TDM efforts typically involve promotion of a wide range of options across a broad area, making it difficult to determine the influence of the program efforts. Development of performance measures and establishment of valid methodologies and procedures to assess impacts therefore requires special attention for TDM programs.
The Consultant shall conduct evaluation procedures relevant to TDM programs including:

- Activity measures, such as number of events held, number of customers served, and number of meetings with employers held.

- Output measures, which relate to what directly results from activities; examples include number of participants at events, web site hits, ridematches made, employers offering different types of Commuter Choice options, or awareness of commuter options and programs.

- Outcome measures, which directly measure the ultimate outcome of these results; examples include number of vanpools established, reductions in SOV commuting, reductions in vehicle trips and VMT, and reductions in air pollutant emissions and greenhouse gases.

- Cost-effectiveness measures that relate the cost of a program effort directly to its effects; for instance, cost per vehicle trip reduced, cost per web hit, or cost per sign-up for a program.

- Return on investment, which relates the overall benefits to the costs associated with a program.

Ultimately, the intended outcome for TDM programs is typically VMT reduction and/or emissions reductions. However, it is important to recognize that a wide range of other benefits and related outcomes may result, as well. For instance, TDM programs may result in time and cost savings for individual commuters and travelers (due to reduced vehicle operating costs and parking costs), potential cost savings for employers (i.e., due to reduced parking costs or office space costs, or enhanced employee productivity), reductions in travel delay for roadway users (as a result of reduced traffic congestion or avoidance of delay), and potential costs savings for state and local governments (such as through reduced needs to maintain or expand roadway or parking capacity). Documenting these effects may also be important in highlighting the value of TDM program efforts.

Approach

Evaluation of TDM and Commuter Choice programs can occur at various scales, with complexity typically increasing as the scope of the program effort grows. For instance:

- An individual TDM program effort (such as a bikesharing program), an employer workshop on commuter benefits, or a web marketing campaign – can typically be evaluated using output metrics that can be readily collected, such as figures on participation in an event, visits to a web site, or use of a service (e.g., a guaranteed ride home, or carpool matching service). This information may be combined with survey data to assess the share of participants who are new to a program, who changed their travel behavior, and/or miles reduced in order to estimate outcomes of interest (vehicle trip or VMT reduction).

- An employer-based program or site-based program can often be evaluated utilizing a combination of information on program participation and survey data as well. For instance, surveys at a worksite can be conducted to estimate changes in mode share after implementing programs. In cases where developers implement TDM plans, mode share surveys may be conducted to assess progress toward meeting mode share goals, as well
as tracking of program offerings. In this case, however, the longer-term nature of the program means that other variables may have an influence on the results (e.g., changes in fuel prices, employment levels, etc.): care must be taken in interpreting results.

At a regional scale, such as a mass marketing campaign and integrated service delivery, the challenge of tracking performance becomes even more complex, given the variety of program elements and options available. Consequently, a comprehensive evaluation of TDM programs typically involves a combination of activity, output, and outcome measures. Surveys of the general public can be utilized to assess awareness and attitudes toward travel options, the use of these options, and motivations for using the options. Data on individual program elements—e.g., employer outreach, consumer events, etc.—can also be aggregated or extrapolated based on more limited data collection or modeling to estimate regional effects. Program tracking, such as through individual reporting of travel behavior, can be conducted in some circumstances, but is often expensive and provides only a limited snapshot of overall effects. In some cases, a combination of monitoring data and survey data can be used. For instance, in estimating the effectiveness of employer-based transit benefits programs, one approach would be to use data collected on transit ridership, combined with information on the share of transit riders who participate in transit benefits programs and survey data to assess the extent to which they changed their travel patterns as a result of the benefit. A challenge for these evaluations is separating the effects of TDM program efforts from other trends and factors that influence travel behavior.

In general, an approach to evaluation requires the following steps:

1. Determine appropriate performance metrics.
2. Develop an appropriate methodology and evaluation tools for measuring these metrics. This requires a creative assessment of the target market’s demographics and conditions under which they are being asked to use the evaluation tool. That assessment is used to determine the most cost effective approach to promote and encourage use of the evaluation tool. This may include intercept surveys, employer distributed surveys, challenge campaigns, incentives, extrapolation of a limited set of results, or monitoring results, etc. The assessment is also used to identify timing when that approach will yield best results. Minimizing that expense of data collection and burden on individuals is important in selecting the approach. Evaluation tools (including surveys, tracking tools, etc.) should be designed to attain a user friendly balance of enough information to make an assessment, but not too much to discourage its utilization. Another issue that needs to be considered is determining the sample size to ensure that assessments are a fair reflection of reality. Finally, in designing a survey, care must be taken to select appropriate questions and a sample that does not bias the results.
3. Implement the evaluation plan. In some cases, this may require a baseline survey or measurement and post-implementation surveys or measurements, along with periodic collections of data. Once the data has been gathered, appropriate statistical tests and methodologies for analyzing data need to be implemented. Tests and methodologies will be based on the type of data collected. In addition, it is important to test the integrity of data collection tools and associated results. This is done through the identification and
resolution of measurement errors and outliers. Finally, it is important to assure consistency in future evaluation efforts so that clear long-term trends can be identified.

4. Analyze and compile results. In analyzing results, care must be made to account for confounding factors that may influence results that are beyond the focus of the study (i.e., a gas price spike, a disruption in transit service).

5. Use the results to adapt program efforts, as needed, or to refine evaluation methods.

The ICF Team brings deep expertise in TDM program evaluation, including development of a national guidebook for the Transit Cooperative Research Program (TCRP) on analyzing the effectiveness of commuter benefits programs. Recognizing the difficulty of evaluating the benefits of voluntary air quality and transportation outreach programs, ICF developed for EPA a first of its kind guidebook on demonstrating the benefits of voluntary outreach programs.

The ICF Team has implemented evaluation studies in a number of regions and for various programs, including the Spare the Air Day program and Transportation Fund for Clean Air program in the San Francisco Bay Area, the regional TDM and Ozone Action programs in the Birmingham (Alabama) metro area, and the Clean Air NY program in metro New York. In Birmingham, ICF conducted a business survey to assess awareness and participation in commute options programs. UrbanTrans has also provided on-going program measurement assistance to the Denver Regional Council of Governments’ Ride Arrangers program. Data were collected through phone, online and paper surveys and analyzed to provide statistically valid coefficients for the measurement and tracking of benefits associated with multiple TDM programs. Data collection and analysis methodologies were standardized to allow for the tracking of long-term program benefits. The Consultant will develop and implement similar methodologies, processes and procedures to evaluate and assess the effectiveness of varied TDM and Commuter Choice strategies and related program efforts for NYSDOT.

2.2 Climate Change/Energy Efficiency Initiatives (Task 2)

Greenhouse gas (GHG) emissions threaten to cause dramatic changes to the climate, which may have significant and far-reaching impacts on society. In 2007, the transportation sector directly accounted for about 28 percent of total U.S. GHG emissions, making it the second largest economic sector responsible for GHG emissions, behind only industrial sources (29 percent). The transportation sector has also been the most rapidly growing source of GHG emissions in the U.S. since 1990 in absolute terms, although its emissions have declined slightly since 2005.

Within New York, the transportation sector is a key source of GHG emissions, responsible for nearly 30 percent of total GHG emissions statewide, according to its 1990 inventory. In response, NYSDOT is taking a proactive approach to reducing GHG emissions from the transportation sector in order to mitigate the impacts of climate change. To this end, NYSDOT is employing and exploring a range of strategies that can be categorized under four primary approaches:

Reduction of Vehicle Miles Traveled. TDM strategies reduce vehicle miles traveled (VMT), typically by increasing travel options for modes other than driving alone, by reducing the need to travel, and/or by changing price signals. TDM strategies vary broadly, from infrastructure investment to public education to market-based incentives to land use strategies aimed at the promotion of compact or smart growth patterns.
Improved Traffic Operations. Traffic operations strategies can also be implemented to improve the operation of the existing road network, which seeks to optimize vehicle traffic flow and reduce idling, thereby eliminating unnecessary emissions. Strategies include providing real-time route information to drivers, reducing delays caused by accidents, and improving the coordination of traffic flows at intersections and arterials.

Vehicle Technologies. Technology strategies include the development, production, and adoption of new cleaner technologies in on-road vehicles. Technologies include innovations to increase the gas mileage from standard gasoline and diesel engines, technologies that replace petroleum, and technologies that reduce idling of vehicles.

Fuel Strategies. Alternative fuels strategies encourage the production, distribution, and use of non-petroleum based fuels. Measures vary by how aggressively they promote the use of alternative fuels. Major increases in the use of alternative fuels will likely require new distribution networks and may require deploying new engine technologies. The promotion of alternative fuels is often linked to agricultural policies to promote the in-state production of feedstocks for ethanol and biodiesel. Alternative fuel policies can also include measures to promote hybrid technologies and fuel cell vehicles.

TDM, Commuter Choice, and traveler assistance can play a role not only in the reduction in vehicle travel demand but also in improving the efficiency of travel. Given how climate change is an emerging issue that is reflecting new policy developments and technical analysis methods, a greater understanding of the potential role of TDM strategies and climate change and energy efficiency is important. Below the five subtask areas identified in the RFP are addressed.

TDM Best Practices Related to Climate Change and Energy Efficiency

Issues

With growing interest in climate change, transportation decision makers are facing increased public emphasis on the relationship between transportation and GHG emissions. In response, a number of State DOT's, MPOs, and transit agencies across the nation are beginning to integrate climate change considerations into various levels of transportation planning and decision making. NYSDOT has played a leadership role in integrating greenhouse gas considerations into transportation. NYSDOT implements and promotes GHG emissions-reducing strategies externally via statewide efforts aimed at the general public as well as through the coordination of interagency collaboration with New York State Department of Environmental Conservation, New York State Energy Research and Development Authority, and the Federal Highway Administration. NYSDOT also integrates many of these approaches into agency protocol (e.g., NYSDOT emissions reporting), recognizing that individual transportation actions at the local and agency levels can create cumulative impacts that need to be considered in GHG emission mitigation strategies. Moreover, by providing guidance on quantification of GHG impacts of transportation plans, TIPs, and projects, NYSDOT is placing greater consideration on climate change within the metropolitan transportation planning process and project development.

The promotion of TDM best practices (e.g., transit oriented development; expansion of alternative transportation options through the expansion of travel choices) that have been traditionally employed to reduce congestion and improve air quality are increasingly being recognized as policy tools that can significantly affect GHG emissions and improve energy efficiency when applied under the right conditions. For example, the expansion of transit service
in dense urban areas helps to increase mobility while potentially reducing VMT, which in turn, can promote higher-density land development. When implemented in tandem, higher-density land use and increased transit options can play a role in reducing GHG emissions as part of an overall climate change strategy. However, there is a need to understand the potential role of TDM strategies in contributing to GHG reduction and energy efficiency goals, and how GHG reduction strategies can be more effectively integrated into transportation planning and decision making.

Approach

Analysis of planning processes, institutional arrangements, and best practices related to TDM and climate change / energy efficiency may involve a number of components:

- Understanding the role that VMT reduction and TDM strategies may play as part of Climate Action Plans and other initiatives to reduce energy consumption and GHGs.
- Documenting best practices in TDM program efforts that incorporate climate change messaging and/or explicit consideration of GHG reductions.
- Identifying ways to integrate climate change considerations into the statewide and metropolitan transportation planning process and project decision-making, specifically as it relates to consideration of demand management; for instance, consider the feasibility of prioritizing demand management-related strategies for funding or developing more explicit targets for GHG reductions that will be achieved through transportation investments.
- Consideration of the benefits and tradeoffs of creating a special funding program or allocation targeted toward transportation GHG reduction strategies.
- Developing protocols and partnerships for NYSDOT to work effectively with the full range of stakeholders involved in climate change planning efforts, including coordination with land use planning, housing, economic development, and environmental protection agencies and entities.

ICF has deep experience identifying and promoting TDM best practices specifically related to reducing GHG emissions (through land-use decisions; transit expansion; and improving transportation energy efficiency). The ICF Team’s approach to identifying and contributing TDM best practices to meet NYSDOT’s transportation planning objectives will be informed by their experience in supporting the California Department of Transportation on how to integrate climate change considerations into all aspects of transportation decision-making, as well as their recent and on-going work for FHWA. ICF recently led a study for FHWA to advance the practice and application of transportation planning among state, regional, and local transportation planning agencies to meet growing concerns about the relationship between transportation and climate change. ICF assessed current transportation planning practices and statutes to identify specific points where climate change considerations could be integrated into the process. The study identified best practices at the state, regional, and local level in order to create an initial base of illustrative examples to guide practitioners in their efforts, and developed recommendations. ICF is currently supporting FHWA in a review of State Climate Action Plans to assess targets that have been included in these plans and contributions that have been estimated from various types of transportation strategies. The knowledge gained from these
efforts will be a foundation for this subtask, as NYSDOT continues to pursue the institutionalization of climate change and energy efficiency both within and across the agency.

Determination of Effectiveness of Climate Change and Energy Efficiency Initiatives

Issues

A range of transportation strategies can be implemented to reduce fossil fuel combustion and GHG emissions as noted above (including VMT-reduction strategies, transportation operations improvements, vehicle technologies, and use of low-carbon fuels). In developing an effective climate change strategy, research, evaluation, and monitoring must be conducted in order to understand the extent to which a given initiative will assist with progress towards reaching the New York state’s greenhouse emission reduction goals. As NYSDOT is a committed partner in reaching state emissions reductions goals, there is an interest in determining the effectiveness of the range of options before substantial and effective investment can be made in the promotion of those initiatives, both across agencies and internally within the DOT.

While most of the TDM strategies that reduce criteria pollutants will also reduce GHG emissions, there may be some differences in the ranking of strategy effectiveness. For instance, while trip chaining reduces criteria pollutants due to elimination of “cold starts,” at which point vehicles emit a high level of emissions, “cold starts” are not an issue for GHGs. Moreover, some vehicle technology strategies, such as certain types of retrofits that reduce particulate matter and NOx, may actually result in increased GHGs. Consequently, it is important to assess the GHG reduction potential of particular strategies and understand their benefits in the context of multiple pollutants of concern.

Currently, there are a wide range of studies at the national level on-going assessing the effectiveness of transportation GHG reduction strategies. These include:

Moving Cooler, an effort co-sponsored by transportation and environmental groups and federal agencies, which is investigating strategies that could be implemented to reduce GHG emissions from personal travel;

NCHRP 20-24(59): Strategies for Reducing the Impacts of Surface Transportation on Global Climate Change, which is preparing a synthesis of current research;

NCHRP 25-25 (45): Transportation Program Responses to GHG Reduction Initiatives and Energy Reduction Programs, which is documenting state DOT roles and practices to develop an estimate of GHG emissions reductions from on-going and potential actions;

TRB study: Potential Energy Savings and Greenhouse Gas Reductions from Transportation, which is estimating the potential energy savings and GHG reductions that might be realized from transportation; and

U.S. DOT’s Report to Congress on Transportation and Climate Change, which is examining the GHG reduction effects of alternative transportation strategies, and the potential fuel savings and reductions in air pollution associated with these strategies.

While these on-going studies (in combination with past studies) are helpful in documenting the potential effectiveness of alternative strategies, there is a need for analysis of specific strategies within the context of New York State given its vehicle fleet, travel patterns, land use and growth projections, and other factors. In addition to understanding the potential role of TDM and
Commuter Choice strategies, it will be important to understand the comparative effectiveness and synergies with related strategies, such as:

- Road and parking pricing strategies, including congestion pricing, and Pay-As-You-Drive insurance;
- Vehicle pricing-related strategies, such as feebates and subsidies;
- Purchase of alternative fuel vehicles for transit and other fleets;
- Incentives for use of alternative fuel and hybrid vehicles;
- Operations strategies, including traveler information, incident management, and freeway management; and
- Transit signal priority and other transit operations strategies.

There are a variety of methods available to transportation practitioners for analyzing, measuring, and projecting GHG emissions. For TDM and Commuter Choice programs, the main challenge stems from difficulties associated with assessing the vehicle trip and VMT impacts of these programs. In most cases, “off-model” or “sketch-planning” techniques are used to estimate VMT reduction, and these approaches are subject to assumptions that often have a high level of uncertainty.

The calculation of fuel savings and carbon dioxide emissions itself is fairly straightforward, relying on information on vehicle fuel economy and carbon content of the fuel. However, programs that alter vehicle travel speeds and conditions are more complex to analyze, and existing modeling tools are not effective in showing the benefits of operational strategies. For instance, EPA’s MOBILE6 model does not account for changes in CO2 emissions factors based on speed of travel. EPA’s draft MOVES model does reflect differences in fuel consumption and corresponding CO2 emissions based on vehicle speeds but has not yet been widely applied. Also, inputs on vehicle characteristics, roadway characteristics, and other factors that affect the level of emissions are often not known in relation to the specific programs being considered.

Finally, programs that focus on encouraging alternative fuel technologies require analysis of the full life-cycle of GHG emissions in order to accurately assess the overall benefits of these strategies.

Approach

Under this subtask, ICF shall conduct analyses including:

- Research on the effectiveness and/or cost-effectiveness of various transportation GHG emissions strategies, relying on recent national research and analysis, as well as modeling and data analysis for specific program options and strategies using tools such as EPA’s COMMUTER model and EPA’s new MOVES model;
- Analyses of the comparative costs and benefits of alternative strategies, including alternative fuel technologies (e.g., biodiesel, E85, CNG, hybrids), and their potential application to transit buses, fleet vehicles, and maintenance and construction equipment;
- Development of improved methodologies and guidance on how MPOs, transit agencies, local governments, or other project sponsors can calculate the GHG and energy effects of alternative investment options;
Development of a calculator tool to support individual businesses, employers, or partners in estimating or tracking the GHG emissions reductions associated with their programs.

The ICF Team is well-positioned to draw upon the knowledge gained from working extensively on transportation GHG analyses across all types of strategies, including vehicle and fuel technologies and freight emissions reduction strategies. The consultant shall ensure that state-of-the-practice methodologies are employed in evaluating and prioritizing strategies that NYSDOT may want to promote across the state to reduce climate change impacts. ICF currently administers several vehicle technology and emission reduction grant programs, thereby providing several possible frameworks to apply to evaluation projects that NYSDOT may wish to pursue under this task. The Consultant also has expertise in life cycle assessment for transportation and fuel projects, as well as deep industry expertise in transportation fuels markets and systems. Examples of a few of the dozens of recent projects addressing these issues include the following: An evaluation of California-Greenhouse Gases, Regulated Emissions, and Energy Use in Transportation model treatment of electric and plug-in hybrid electric vehicles. An evaluation for the USEPA of the potential of a wide range of transportation control measures (TCMs) to reduce GHG emissions over a range of time periods (through 2020, out to 2050) for a sample of metropolitan areas of different sizes. Expertise in all aspects of vehicles fuels and technologies from subconsultant EEA, which has recently completed a study for the U.S. Department of Energy on Market Based Approaches to Fuel Economy: Summary of Policy Options, which addressed vehicle pricing strategies, highway pricing strategies, worksite strategies for reducing work trips, and macro-economic effects of policies to reduce fuel consumption. Studies of how land use planning can influence transportation activity and the corresponding energy and emissions. ICF is the primary contractor for the U.S. EPA’s Smart Growth Office, and in this capacity the Consultant is involved in many current efforts around the nation to reduce vehicle travel and emissions through land use and urban design. The Consultant prepared a review of literature and past simulation studies, highlighting research that distinguishes TOD impacts from general infill impacts. A study for Electric Power Research Institute (EPRI) by ICF on hybrid electric vehicles, including grid-connected hybrids that have an all-electric range capability was performed. The study included modeling of hybrid electric vehicles for fuel efficiency, costs, emissions impacts, and customer preference. The study found HEVs, including grid connected (plug-in) models, can be designed to meet performance characteristics customers are familiar with. ICF then examined the life cycle costs of HEVs, plug-in HEVs, and battery electric vehicles. Analyses of the energy and GHG implications of alternative transportation strategies could help feed into statewide climate action plans and help in prioritizing projects and programs for funding.

Communication and Outreach on Climate Change & Energy Efficiency Initiatives

Issues

Driven by conclusive scientific evidence and increasing global awareness, climate change has become a mainstream concern. ICF understands the important role people play by encouraging
their neighbors to make better decisions. The Consultant has a history of conceptualizing and implementing social marketing campaigns that address informational and attitudinal barriers to social change; developing community-level initiatives that foster a collective sense of responsibility; and designing tools that help individuals and businesses measure and track their commitments toward sustainability.

While TDM, Commuter Choice, and Traveler Assistance products and services are already promoted for a wide range of benefits to the public, including cost savings, convenience, and making the air cleaner, these programs offer an opportunity to raise awareness of broader climate change and energy efficiency initiatives. Incorporating messages about climate change into these programs also has the potential to garner increased support and participation, as the public and businesses in particular, have become increasingly interested in taking actions to address the environment.

Convenience, saving time, and saving money were key motivators for individuals to use carpools, transit, and other alternatives to driving alone. However in the past few years the public has increasingly become aware of, and concerned about, actions they can take to address climate change. Businesses are increasingly interested in having “green” programs and reducing their carbon footprints, as they have found that clients and customers care about the environment. According to a 2007 Cone Consumer Environmental Survey, 91 percent of Americans have a more positive image of a company when it is environmentally responsible. The challenge is developing effective messages that advance consumer awareness and response, and support TDM program elements in ways that enhance existing messages and market penetration.

Approach

For 20 years, ICF has developed programs that educate, motivate, and empower individuals to take action to reduce the effects of global warming. The Consultant’s climate change team has designed and implemented an array of innovative GHG emission reduction programs and issues-based outreach campaigns and includes top experts in science, engineering, policy, economics, energy efficiency, transportation, communications and information management. The Consultant team also understands the importance of linking this effort to existing initiatives that are supported by local leadership. These include initiatives developed by local governments across the country. The Consultant team’s solid understanding of these issues, paired with their demonstrated experience in social marketing aimed at the connection between transportation choices and air quality, makes the ICF Team uniquely qualified to support NYSDOT and its partners.

Members of the Consultant team have planned and implemented countless successful climate change and energy efficiency outreach programs, including the EPA’s Do Your Part! climate action campaign, the National Park Service's (NPS’) Climate Friendly Parks, NYSDOT’s Clean Air NY, and the Washington State Governor's Office of Regulatory Assistance’s (ORA’s) Permit Toolkit. The Consultant team’s services are scalable and generally include the following:

Comprehensive Review of Available Products and Services. TDM, Commuter Choice and Traveler Assistance programs are very relevant to creating and/or supporting campaigns that address climate change and energy efficiency initiatives. The Consultant shall therefore identify these program elements and conduct audits of outreach programs and campaigns (both the successful and the ineffective) in other regions.
Clearinghouse, Toolkit and/or Website Development. Members of The team have planned and implemented countless programs that are supported by a clearinghouse, toolkit and/or website. A clearinghouse is a one-stop-shop that identifies the available products and services supporting the initiative, provides guidance to citizens and businesses on how to successfully adopt them, and link to partner resources and other vetted topical web sites.

Campaign Materials. The key to successful outreach materials is honing in on messages that spark an audience’s action, reaction or intuition in order to solicit the desired response and outcome. Words and images must engage the audience and portray an understanding of an issue, the desired behavioral change or action and resulting benefits. To that end, the Consultant’s award winning design team can deliver campaign materials (logo, key messages and design templates).

Campaign launch. The Consultant team will draw on their strategic communications expertise and collaborate closely with ongoing programs and campaigns to ensure a timely, well coordinated campaign launch. In addition to news releases, fact sheets and promotional postcards, the Consultant will identify ways to augment and amplify their promotional efforts, such as coordinating the launch with national and local climate change and green building-related conferences or tapping into regularly scheduled city events.

ICF has deep experience with all aspects of these communications for experience on a wide range of voluntary outreach programs focused on energy efficiency and climate change. In particular, for the U.S. EPA, ICF developed a toolkit for transportation decision makers across the country, which included information on Commuter Choice initiatives. ICF authored a series of two-page fact sheets and FAQs on topics including Commuter Choice initiatives; transportation and land use issues; transportation pricing programs; bicycle and pedestrian issues; alternative fuels and fleets; ITS technologies; traffic calming and street design; and modeling and analysis techniques. A similar toolkit for local elected officials and transportation decision makers could be developed making the link between specific TDM strategies and investments to GHG reduction goals.

Performance Evaluation and Quantification related to Climate Change & Energy Efficiency Initiatives

Issues

Evaluation and assessment of the effectiveness of TDM and Commuter Choice Programs can be used to demonstrate progress in meeting GHG reduction goals. A better understanding of the effects of statewide TDM projects on GHG emissions and energy consumption will enable NYSDOT to publicize more confidently the benefits of a given program or strategy and thereby help to ensure its continuation. Additionally, evaluation and assessment will allow the agency to direct funding to the most cost-effective projects, and document progress toward meeting goals.

Approach

ICF has deep experience with all aspects of these communications for experience on a wide range of voluntary outreach programs focused on energy efficiency and climate change. In particular, for the U.S. EPA, ICF developed a toolkit for transportation decision makers across the country, which included information on Commuter Choice initiatives. ICF authored a series
of two-page fact sheets and FAQs on topics including Commuter Choice initiatives; transportation and land use issues; transportation pricing programs; bicycle and pedestrian issues; alternative fuels and fleets; ITS technologies; traffic calming and street design; and modeling and analysis techniques. A similar toolkit for local elected officials and transportation decision makers could be developed making the link between specific TDM strategies and investments to GHG reduction goals.

The ICF Team shall conduct similar quantification analyses to identify and assess viable approaches for achieving NYSDOT’s climate change and energy efficiency goals, at the statewide, regional, and project/program levels. ICF provides experience working with government clients to craft performance measurement systems and conduct program evaluations to help them meet their accountability requirements, and enhance their capabilities. The ICF Team has experience developing specific measures and indicators, creating clear procedures for gathering and interpreting performance data, and producing reports and electronic tools to convey results.

A typical approach to analyzing the GHG impacts of TDM programs shall involve the following steps:

1. Estimate the number of commuters who changed their mode of travel or trip-making behavior (based on surveys, data tracking, etc.);
2. Estimate the resulting number of vehicle trips eliminated by the strategy or program;
3. Estimate any reductions in the length of remaining vehicle trips;
4. Calculate reductions in VMT, due to both elimination of vehicle trips (based on average trip length) and reductions in trip length; and
5. Calculate reductions in fuel consumption and GHG emissions based on the VMT reduced and average fuel economy and carbon content of the fuel; these figures are based on the vehicle types affected, road types used by those vehicles and speeds traveled, and type of fuel used.

Performance evaluation and quantification of impacts also require data on program participation, which is often obtained through surveys of participants’ travel behavior. ICF will draw on its experience evaluating the costs and effectiveness of TDM strategies (including land use impacts and commuter choice programs) nationally and in different regions of the country.

Partnerships and Networking

Issues

Policymakers at all levels are recognizing that action on climate change is necessary, and that transportation-related policies are particularly potent tools to mitigate a range of potential impacts. In order to reach reduction goals at the state level, there is also growing recognition that participation by and cooperation amongst representatives at the local, regional and state level is critical.

New York understands the important role that it can play in facilitating coordinated efforts that integrate various sectors in its planning efforts and policy dialogue. For example, the New York State Energy Plan (SEP), released in 2002, was one of the first plans in the nation to integrate transportation planning, energy conservation, GHG mitigation, and air quality planning.
Accordingly, NYSDOT recognizes that it has a responsibility and opportunity to reduce the impacts of climate change through improved energy efficiency and promotion of statewide travel demand management strategies.

Within the agency, NYSDOT is committed to the development of five Climate Change/Energy Efficiency Workgroups comprised of staff from the agency’s various program areas. These interdisciplinary groups will explore how to best promote energy efficient programs and projects related to transportation planning, reduce transportation energy costs for the public, promote climate change adaptation strategies, facilitate public outreach and partnership building, and reduce NYSDOT’s carbon footprint through the development of internal sustainable policies.

Approach

The implementation and promotion of strategies that reduce the amount of travel, reduce congestion, promote cleaner vehicle technologies, and promote use of cleaner fuels each have their associated challenges depending on the context of the strategy’s implementation. The first three types of strategies more traditionally fall under NYSDOT’s direct purview, although coordination will be required between the DOT and regional and local agencies, private sector, and non-profit organizations to promote various approaches effectively. For example, NYSDOT is dependent upon the cooperation of local government to promote and institute regional smart growth principles. To increase the reach of Commuter Choice, NYSDOT will need ongoing coordination from transit agencies, associations, as well as city and county governments.

The ICF Team understands the nuanced challenges of coordinating policies across government entities. With deep experience of coordinating policy dialogue and facilitating regional and local transportation decision making, ICF is well positioned to assist NYSDOT under this task. ICF has worked with local, regional, state, and federal policymakers and technical staff, along with the public, environmental and civic groups, and businesspeople, to develop consensus policies, innovative strategies, and realistic implementation plans.

Based on the many successes of projects, the ICF Team proposes to facilitate networking and partnership building under this task by leveraging the strengths of both a bottom-up and top-down approach, recognizing that local agencies bring local knowledge to the table, while government agencies bring regulatory weight to help push relevant solutions forward. Whether the team is starting at the grassroots, local, regional, or state level, the ICF Team will place primary emphasis on bringing all stakeholders to the table, then training agency staff and policymakers using a grassroots-style process framework to support the effective implementation of the group’s top priorities.

2.3 Promotion, Marketing and Outreach (Task 3)

Outreach and marketing is the cornerstone of any voluntary program. The success of TDM programs in New York depends on creating awareness of TDM services among employer partners and employees and building strong relationships with key audiences so that SOV drivers change their travel behavior.

The ICF Team’s experience with Clean Air NY and TDM programs in the New York City metro area gives them a unique insight into the possibilities for enhancing TDM efforts and taking these statewide. In addition, ICF’s extensive work on voluntary programs has provided them with a keen understanding of the optimal marketing strategies and tactics necessary to create a robust voluntary commuting program.
TDM and Commuter Choice Marketing Outreach and Promotion

Issues

From its northern border crossings to the Capital Region to the tri-state area in the South, New York State is a state of varied resources, populations, commuting habits and transit needs. TDM operations in the state need more than a ‘cookie-cutter’ approach that applies what has worked elsewhere to other diverse cities. At the same times, budget realities mean that materials and messages need to work across regional boundaries. The Consultant’s approach must balance the need for region-specific information with efficient, cross-cutting outreach.

At the same time, the external variables influencing the need for TDM Commuter Choice and Traveler Assistance initiatives and how to deliver them are constantly evolving. TDM should evolve with the changing market. Programs that do not refresh services and test new ideas will gradually become marginalized within the communities they serve. Whether the external variables are rising gas price, faltering economy, weather related emergency preparedness, or global warming, there is a need to tailor the TDM message and program offerings to capitalize on that opportunity and increase interest and program participation.

Approach

The following strategies will be key to the success of any marketing efforts undertaken in New York State under this contract:

Understanding regional differences in New York. No two areas of New York State are exactly alike in terms of economic base, demographic profile, transportation needs, or transportation resources. New York has many locations that will require creative programs to meet the mobility needs of diverse groups (students, employees, employers, visitors, senior citizens and others). Mobility needs are likely to increase with population growth, and particularly for lower income citizens as fuel prices and other transportation costs increase. In addition, marketing efforts must speak directly to the populations targeted in each region. The driving experience of a downstate resident is significantly different than that of someone in Rochester or Albany, and downstate New Yorkers are famously loyal to the unique aspects of living in or near ‘the City.’

Maximizing reach on a limited budget. New York State, and in particular New York City, is a large and complex media market. For this reason, the Consultant recognizes the need to select marketing efforts with care. The Consultant knows that just because a media outlet offers a significant discount does not mean that that particular outlet is offering an opportunity that is right for our message or audience. The Consultant will look carefully at placement options to determine the right channels for reaching our audiences. The Consultant will also continually evaluate the response to different marketing efforts so that they can adjust placements as needed to get maximum results in the costly New York market.

Cutting through the clutter. New Yorkers, and especially New York City-area residents, are bombarded with often-conflicting information from all sides, every day, all day. Simply with regard to travel and transit, residents are urged to drive (e.g., through car ads), leave the car at home, take transit and drive together, among other things. The Consultant outreach must cut through the everyday clutter to convey a message that will be memorable and actionable. Reinforcing 511NY as the single point of information for
travel and transit information will help keep this message memorable. Developing compelling creative will also be essential to success.

Complementing the 511NY and Clean Air NY campaigns. Marketing efforts for TDM programs, Clean Air NY and 511NY individually may not be enough to sustain a comprehensive, year-round media presence but combined, these efforts can cover most of the year and the State to great effect. The ICF Team includes individuals who are closely connected to marketing efforts for both the Clean Air NY and 511NY projects. The Consultant knows the goals of each project and are well-suited to identifying areas of synergy quickly and efficiently.

Surveys, Interviews and Focus Groups

Issues

Essential to effective marketing is conducting research to truly understand the different audiences and identify the messages that will compel them to change and sustain driving habits. It is important to understand – what services are currently being used? What services are desired? And what options are people most likely to utilize? Once the research and understanding are available, it becomes easier to identify and implement coordinated cost-effective mechanisms to communicate information to those audiences. Market research, messaging and coordinated cost-effective communication mechanisms are important for a successful TDM program. Any research, however, must take into account potential pitfalls, such as:

Cost. Telephone surveys, especially any wishing to gather data from across a state as large as New York, are expensive.

Asking the right questions. Survey questionnaires must be developed carefully, with the end use of the data in mind. Only then can researchers be sure that they will get the kind of data they require for making marketing decisions.

Response rates. Desired or required response rates must be carefully considered prior to beginning the survey, and the survey must be designed with this in mind. Does the survey protocol allow enough time for surveyors to gather the required responses? Is the respondent pool self-selecting, and will they be motivated to respond?

The need for quantitative vs. qualitative research. Some questions, such as awareness levels and behavior patterns, require quantitative research, whereas others, such as audience preference for particular copy or graphics, require qualitative research such as focus groups. Any research protocol must take into account the different needs and outcomes associated with each type of research.

Approach

As asked, the ICF Team will conduct market research with audiences in different parts of the state. Any assessment will be tailored to meet the needs of the appropriate region, as program services may vary substantially depending upon local conditions, resources, champions, and the network of potential partnerships available.

Typically, in assessing commuter preferences for TDM services, ICF uses a phone survey (not to exceed 20 minutes in length) of the "commuting" population (employed individuals), designed to assess current mode shares, perceptions and interests in various modes (carpooling, vanpooling,
etc.), awareness of existing programs, and likelihood to participate in different types of programs. This information helps provide insights on desired travel choices and program options, perceptions about travel modes that should influence messages and other relevant attitudinal information, broken down by socio-economic and demographic groups that will help in targeting the program’s outreach messages. In addition, for people who are currently carpooling, using transit, etc., this survey can be used to assess why they are taking these options.

ICF uses random-digit-dialing techniques to select respondent households located in target regions with information developed using the most current telephone exchange data available. The sampling procedure used allows the inclusion of unlisted numbers and any newly listed numbers that have not been included in the most recently published telephone directories. Data are collected using computer-assisted telephone interviewing (CATI) methodology.

Marketing, Outreach and Promotion of Voluntary Programs

Issues

Outreach and marketing is the cornerstone of voluntary programs. The success of NYSDOT’s voluntary TDM programs depends on creating awareness of these programs among partners and the public and encouraging broader participation. The ICF Team’s proven approach to voluntary program marketing will enable us to:

- Control costs and improve efficiencies in program implementation,
- Strengthen the 511NY brand,
- Expand TDM programs and capitalize on cross-program (Clean Air NY and 511NY) integration opportunities,
- Plan and implement highly visible communications efforts, and
- Provide maximum return on NYSDOT’s marketing investment.

Approach

The ICF Team’s approach to marketing TDM programs comes from understanding how these programs evolve and where NYSDOT intends to take them. The Consultant knows that NYSDOT has invested extensive resources and energy in the 511NY Get Connected to Go brand, and the Consultant’s approach is designed to help NYSDOT extend the brand and use of 511NY to more New Yorkers.

ICF knows voluntary programs and has supported many of today’s major voluntary programs since inception. ICF understands how these programs came to take their present-day shape and helped identify and explore the alternative designs that each considered over the years. ICF is the largest voluntary program service provider in the world, providing comprehensive support to more than 20 voluntary programs that address a broad scope of policy issues.

To reach travelers as effectively and efficiently as possible, the ICF Team will employ the four-step approach described below – a methodology that they have used time and again with voluntary programs to effect positive behavior change.

Step 1. Understand. The Consultant’s first step in any marketing effort is to listen and learn to make sure they have a thorough understanding of our client’s current communications goals. The Consultant will meet with NYSDOT’s Office of External Relations and appropriate technical
managers at the outset to define objectives and discuss lessons learned from previous initiatives and marketing campaigns.

Having worked with drivers and employers in New York for years on TDM programs and on Clean Air NY, the Consultant is thoroughly familiar with existing research about downstate awareness of and attitudes towards TDM programs and services. MetroPool and CommuterLink have done award-winning research on target audiences, and the Consultant’s marketing team will draw on this in developing marketing efforts.

During this phase, the Consultant will also segment and prioritize the target audiences to the greatest extent possible, knowing that the more closely they can segment the audiences, the more closely they can target key messages and communications channels to reach those audiences. While commuters will likely be the primary audience for much of the Consultant’s communications, the Consultant anticipates that some tasks may want to address non-commuting travelers as well.

Step 2. Design. The goal of Step 2 is to design a plan to serve as the blueprint or backbone of the Consultant’s marketing efforts. The communications plan will reiterate our objectives and target audiences and will include key messages to be used in all communications to travelers, along with the strategies and tactics to reach each audience.

Message development and testing are critical to the success of the effort. If the program messages do not resonate with the individual audiences they are intended to motivate, the Consultant will not influence changes in travel behavior. Specific messages targeted to specific audiences are preferable to general pushes for everyone to adopt alternative modes of transportation.

The ICF Team will create unique messages for specific target markets and adapt them appropriately for other audiences. For example, many immigrant and minority populations often face language, cultural, and economic barriers that prevent them from trying alternative modes of transportation. The Consultant will create messages for these groups specifically addressing these barriers, as opposed to using translated versions of more general messages. Finally, where appropriate, the Consultant will conduct focus groups with target audiences to test message effectiveness.

Once the Consultant has defined the messages, the Consultant shall identify the strategies that they will employ and the channels through which they can most cost-effectively reach target audiences. The Consultant will develop an evaluation mechanism for each strategy so that results can be measured throughout implementation and changed as needed to be more effective.

Though the specifics of our messages will be determined as we move forward with the design of our marketing efforts, the Consultant will use the following principles to guide their planning:

Positive Messages Lead To Change. Experience suggests that people are more responsive to positive messages about ways to reduce congestion than they are to negative messages. Thus, efforts to encourage alternative transportation should be promoted in a positive way with an emphasis on personal benefits. Market research conducted in developing the It All Adds Up to Cleaner Air campaign has helped fine-tune related concepts, including the need to emphasize that small, easily incorporated choices make a difference; to reinforce current behaviors deemed good; to celebrate actions taken; and to use a tone and manner that convey “we are in this together.”
Direct Communication is Critical. National experience also emphasizes the importance of reaching people in a very direct way to motivate behavior changes. An individual is more likely to act upon information when someone he or she interacts with on a daily basis, such as his or her employer, provides a direct message to him or her. In this way, drivers see messages as emanating from credible sources “close to home,” which is why partnerships with employers and other organizations have been and will continue to be an important component of TDM programs in New York.

Small Changes Add Up. The Consultant’s experience indicates that it is important to focus on a wide variety of actions that people can take, including small changes in travel behavior. For example, some employees may find it difficult to avoid driving to work, even on one day. However, these individuals may be able to take other actions, such as agreeing to be a driver in a carpool. It is important to emphasize these other actions by assuring the public that this is an acceptable and valid response. As a result, encouraged efforts may not focus solely on changing commuter travel, but also emphasize a range of positive actions related, for example, to discretionary travel.

Step 3. Implement. The Consultant’s third step brings the communications plan to life to begin to change the behavior of New York drivers. By engaging their cadre of media relations and media buying professionals, writers, Web developers and the creative services team, the Consultant shall ensure that each tactic is executed in an efficient, cost-effective, and well-timed manner. The Consultant shall also employ their project management skills, creative brief process, media planning tools and event preparation templates to speed implementation.

Step 4. Evaluate. The fourth phase in our approach is to measure the effectiveness of the communications efforts. The results of this phase will allow us to refine the communications plan as needed to ensure it is as effective as possible. In addition to media monitoring, we will use data on Web hits, call center activity, recruiting, and other measures as requested by NYSDOT.

2.4 Integrating TDM Strategies in Project Development (Task 4)

Integrating TDM Initiatives into Project Planning and Development

Issues

Often during the capital project planning, development, programming, scoping, and design processes, including environmental and major investment studies, transportation demand management (TDM) measures are not considered. Increasingly, however, there is potential for TDM to play a key role within each of these transportation decision making processes. For instance:

TDM, and related land use, parking management, and pricing strategies can be given strong consideration within the metropolitan transportation planning process; rather than focusing on transportation projects alone, placing emphasis on land use, access management, and operational strategies can put more attention on developing a comprehensive approach to TDM.

Within highway and transit planning, priority can be given to TDM options prior to consideration of capacity expansion. In larger metropolitan areas that must implement a Congestion Management Process (CMP) and are in nonattainment, federal regulations require that single-occupant vehicle capacity projects cannot be developed unless they
come from the CMP. Developing processes to ensure priority to demand management in this process will help to advance TDM efforts.

Within environmental analysis and major investments studies, TDM alternatives can be considered under various scenarios, including potential robust packages of TDM, rather than treating this as a base alternative.

Rather than simply considering a TDM or Transportation System Management (TSM) alternative, guidelines could encourage demand management to be incorporated into all project alternatives in order to move forward.

In project design, consideration of bicycle, pedestrians, and transit access could be elevated in importance.

TDM could be required in coordination with construction and maintenance activities that may increase traffic congestion.

Approaches

In order to effectively evaluate and develop methods, processes, and support mechanisms by which TDM and commuter choice alternatives are integrated into NYSDOT and local transit operating agency project efforts it is important to understand what value TDM offers their planning, development, programming, scoping and design processes. With that understanding, we can begin to identify the messages that will resonate, and technical information, and changes in process that will advance incorporation of TDM into planning, development, programming, scoping and design processes.

The ICF Team’s approach to gaining that understanding may include a review of current practices throughout New York State and a comparison to best practices from around the country. This may be followed by a combination of individual and group stakeholder interviews to discuss current practices as well as their strengths and weaknesses. That understanding will be used to recommend new TDM methods, processes, and support mechanisms that can be integrated into the project planning, development, programming, scoping, and design processes. Those recommendations will be incorporated into fact sheets, guidelines, or training materials. The fact sheets will be distributed through an education and outreach process and used to explain how TDM addresses their issues as well as what clear actionable steps can be taken to incorporate it into the way they do business.

Although the research and stakeholder interviews will guide the specific messaging for the education process, the Consultant team’s recent experience on the Revive I-285 project in suburban Atlanta has revealed that money talks. Key decision makers respond well to information on how TDM can not only save them money, but bring them additional revenue through creative funding sources. For example, in the current economy capital dollars are easier to get than planning dollars (especially with stimulus funds), but there are ways to apply capital dollars toward planning work. The capital planning dollars could go to TDM Optimization plans (for highway projects) that would provide early action public and political wins that show what their organization is doing for the public before a project is built. The key is to roll the TDM optimization plan into a construction mitigation budget that starts early.

This is just one example of how the Consultant team will help NYSDOT and local transit agency decision makers see how TDM can be of political and financial benefit to them. With that understanding, the Consultant has support to integrate new TDM methods, processes, and
support mechanisms into the project planning, development, programming, scoping, and design processes.

Two examples of methods, processes and support mechanisms that the Consultant may recommend follow:

Highway Capital Projects: Key decision makers on highway capital projects should explore opportunities to shift TDM strategy implementation to the front part of the capital project development process. They should also consider changing the role of the TSM Alternative in Highway Capital Projects Planning to be an early action implementation program, rather than a straw-man analytical alternative. Rather than compare the TSM to the No Build and Build Alternatives, explore changing the order of alternatives analysis to the following:

- Model 30 Year Traffic Conditions
- Define No-Build Alternative
- Define TSM Alternative
- Implement TSM Alternative
- Model No-Build +TSM Alternative 30 Year Traffic Conditions (Redefine traffic growth increment to be addressed by capital projects)
- Develop Build Alternatives, if required
- Include coordination with newly-implemented TSM measures

Transit alternatives: Key decision makers on transit projects should explore beginning interim, promotional service to simulate the service being built as soon as a preferred transit alternative has been selected and environmental clearance has been given. They should then count the operating costs of interim service as credit toward local match on any future New Starts or Small Starts submittals.

Through sample early action item alternatives and recommendations revealed through the research performed at the beginning of this task, TDM will demonstrate ongoing value as part of the project development process.

2.5 Departmental Education Training and Development (Task 5)

Issues

Education, training, and development are critical elements in achieving change in organizational practices, and thus are vital to the success of efforts to integrate TDM more effectively into transportation, land use, and employer decision-making.

Under this contract, a range of different types of training programs may be developed. These include:

- Departmental training sessions, designed for NYSDOT staff in planning, operations, engineering, and environmental groups;
- Training sessions and workshops for NYSDOT partner organizations, such as other state agencies, MPOs, and local governments; and
- Workshops and other informational sessions for other stakeholders, including schools, businesses, and community groups.
Each of these audiences will have different needs, and require different content and levels of technical detail.

The combination of evolving TDM programs and messages makes it challenging for various TDM stakeholders (including NYSDOT, NYSDOT’s Partners and stakeholders and public officials) to stay up to date on the latest tools and approaches, and to integrate concepts that hadn’t been fully considered in the past into existing decision making processes.

Simply developing a training session, however, does not automatically lead to the effective transfer of information and techniques. Engaging instructional materials, effective use of technologies, interactive exercises, and well-prepared implementation tactics are all prerequisites for quality learning. ICF has proven to successfully integrate technical expertise, project management, and communication skills into their instructional systems design (ISD) capabilities. The best training solutions not only provide participants with in-depth technical content, but they also provide rich opportunities to apply their newly acquired knowledge to realistic situations, exchange information, challenge old assumptions, and incubate new ideas.

Approach

In Developing Training for Transportation Professionals. The Consultant’s ISD approach to training relies on this expertise and on their understanding of the needs of their clients. When planning training solutions for transportation professionals and other technical specialists, ICF is guided by several underlying principles:

- **Adults learn by doing.** Whatever the topic, the Consultant ensures that the curriculum includes interactive exercises, case studies, and scenarios that reinforce learning.
- **Training is best developed by a team of instructional design and technical experts.** ICF has found that it takes a two-part team to create successful training—experts in instructional design and learning techniques and experts in the technical subject matter. Working in tandem, these experts can design a course that is technically accurate and effectively conveys the needed information.
- **Quality training solutions don’t just reiterate the “rules.”** While some training solutions are collections of regulations or notices, ICF’s solutions teach the subject matter as well as serving as true reference tools, ensuring that the training has lasting value long after the initial delivery and helping learners understand and improve their performance.
- **Great training is driven by compelling and engaging instruction, not by technology alone.** Despite significant advancements, technology can only enhance and encourage learning; it is not the driver of the learning process. Rather, it is essential to apply sound ISD methodologies, which are an integral part of ICF’s processes for the development of all their training materials.
- **Improved performance is the bottom line.** Training must be driven from and measured by the performance and results metrics the organization is trying to achieve. ICF training makes the firm connection between an organization’s mission, direction, and strategy and its training investment and organizational success.

These principles bring results-oriented training and performance improvement products to the client’s project.
ISD, as shown in ICF’s ADDIE Model, is the most widely used methodology for developing new training programs. This approach provides a step-by-step system for the evaluation of students' needs, the design and development of training materials, and the evaluation of the effectiveness of the training.

ICF has extended this basic ISD model to include an increased focus on project management and project control, as well as on product quality as defined by client satisfaction. ICF further ensures this satisfaction by always being adaptable to the client’s unique situations and settings where the training is implemented. No matter how complex the requirements for implementation support, the ICF Team has experience in planning for, and meeting, these requirements. Depending on client needs and resources, the Evaluation and Quality Assurance Phase can include one or more of the following:

- **Level 1 or 2 Evaluation** is a simple report summarizing the results of participant and instructor written evaluations and participant tests assessing whether the participants achieved the learning objectives.

- **Level 3 Evaluation** is an assessment of the change in performance on the job by participants in the training.

- **Level 4 Evaluation** is an assessment and quantification of benefits and return-on-investment accruing to the organization, including the connection between the skills learned and their impact on organizational goal achievement.

In some cases, the Consultant works with clients who desire to make the training project itself a learning event for their organization, and participates in feedback and “lessons learned” sessions that coalesce how they can design, develop, and deliver better training programs for that client. For e-learning training projects, the Consultant frequently employs an “e-learning scorecard” to rate and rank responsiveness, levels of interaction, page load times, graphics and audio compression, and other relevant issues.

Ultimately, the goal of any instructional systems design project is to improve performance and enable the organization to reach its goals. In most ICF training projects, the closing of the Evaluation and Quality Assurance Phase comes with the completion of a summative evaluation and lessons learned process that addresses the questions: Has the Consultant solved the problem? Is there a return on the client’s investment? What could improve in the products or in our processes? Summative evaluation assesses how well that goal was accomplished and frequently illuminates additional opportunities for performance improvement, bringing the ICF ISD process full circle.

In Developing Workshops and Educational Activities for Other Stakeholders. Beyond technical training for NYSDOT staff and partners, there is a need for workshops and other educational opportunities for a range of stakeholders. Workshops are only successful at helping stakeholders stay up to date on the latest TDM tools and approaches if the right people attend them. Although the Consultant team has coordinated workshops on dozens of different TDM related topics, the Consultant feels it is important to recognize the topics are only as relevant as the market conditions when they were presented and the quality of the audience that attended. Ensuring quality workshop attendance requires several key steps.

**Know the Desired Outcome.** Workshops require a lot of effort to coordinate, promote and implement. If that effort is going to be worthwhile there needs to be a clear outcome...
defined as part of the workshop preparation and implementation. Simply having high attendance numbers may not be an indicator of success if none of the attendees walk away from a workshop taking the desired action. Conversely if a small group of people attended a workshop, but a high percentage of them took the desired action it should be considered successful.

Understand the Audience. It is important to tailor the workshop’s topics, agenda and promotional messaging to the particular audience being targeted. For example, workshop topics that are relevant for NYSDOT staff may be very different from those of schools or businesses. At the 2008 ACT Conference, UrbanTrans staff provided a half-day professional development workshop on “Integrating TDM into Communities through Land Use”. Although typical conference sessions are attended by a wide range of TDM professionals with varying degrees of experience and skills, this workshop was accredited by the American Institute of Certified Planners (AICP). Knowing this would attract a more seasoned and technically sophisticated audience, the UrbanTrans team tailored the workshop to offer more advanced information and exercises.

Secure High Quality Speakers and Technical Experts. As part of their Best Workplaces for Commuters (BWC) Employer Outreach Contract with the Houston-Galveston Area Council of Governments (H-GAC), UrbanTrans found the most successful workshops with the largest attendance had topically relevant local speakers as well as national experts. After Hurricane Katrina, businesses became concerned with corresponding rising gas prices as well as how to prepare an emergency preparedness plan for their business. UrbanTrans developed a “Crisis and Prices” workshop with speakers that included Houston’s Emergency Preparedness Czar as well as a nationally recognized economist whose expertise was forecasting oil and gas prices. Complementing these speakers were UrbanTrans staff providing specific TDM strategies that qualify for BWC while addressing businesses’ emergency preparedness needs (like telework as a business continuity strategy) and/or employee rising commute costs due to gas prices (like vanpool and/or transit subsidies as well as telework programs).

Make it Convenient. As part of understanding the audience it is critical to identify dates, days of the week, times of day, and locations for workshops that are convenient for the target group to attend. It also needs to be a duration that allows attendees to get relevant information without taking them away from their workday. When UrbanTrans did a “Live Near Your Work” workshop for businesses leaders in Frederick County, Maryland, they coordinated with the local Chamber of Commerce to determine that doing a mid-week, early morning workshop at a locally renown restaurant which was centrally located for businesses in the area would best attract the desired audience. The result was a highly attended workshop that generated quality leads. At times it might make sense to offer training through different mediums for convenience of the attendees. Netconferences provide a great avenue to reach greater number of participants and have a statewide reach. They also help cut back travel cost and time for all involved.

Develop a Series of Workshops. Some of the more successful training programs are developed on a yearly basis, allowing the participants to choose areas of interest ahead of time and also providing training on a range of topics relevant to TDM. Members of the ICF Team have worked with entities such as the Clean Air Campaign of Georgia, 511 Rideshare in Northern California, and the American Management Association (AMA) to
develop an annual curriculum including topics such as telework, business continuity, compressed work weeks, commuter choice, green initiatives and other areas of interest. The schedule for such events is released once a year and gives ample time for the attendees to pick modules, mark their calendars and get others from their organization to attend. This approach to TDM training also helps create a better understanding for the range of options.

Follow up with Participants. The best training programs have a mechanism for following up with employers that express a need to gain more depth of knowledge or implementation assistance. The Consultant program will develop both in person and on-line follow up mechanisms for delivering expertise to employers and others in New York State.

Cross promote with complementary organizations. There are often other organizations whose members would find value in many TDM Workshop topics and are therefore interested in promoting it to them. As part of their Employer Outreach Services Contract with the Metropolitan Washington Council of Governments, UrbanTrans found the most successful workshops with the largest attendance were co-sponsored by the Chambers and other business partners who have local recognition and credibility as well as extensive contacts within the business community. This same type of cross promotion can be successfully applied with organizations that have networks in the school and environmental communities.

The Consultant’s approach to developing TDM education, training and development workshops for NYSDOT’s partners and stakeholders as well as public officials will utilize these steps to ensure that topics selected are relevant and well attended by target audiences.

D. Schedule for Project Completion

Due to the on-call nature of this contract, project schedules will be developed on a task-by-task basis to better facilitate responsiveness to NYSDOT’s specific needs and requirements. The ICF Team will present a draft schedule, to be reviewed and approved by the NYSDOT PM and appropriate Mobility Manager, at the kickoff meeting for each task.
SCHEDULE B

Integrated New York Commuter and Traveler Assistance Services For NYSDOT
Contract #C030710

BUDGET AND PAYMENT SCHEDULE

REDACTED
EXHIBIT B  Consultant Disclosure Legislation Form B

FORM B

State Consultant Services
Contractor’s Annual Employment Report
Report Period: April 1, 2020 to March 31, 2021

Contracting State Agency Name: DOT  Agency Code: 17000
Contract Number: C030710
Contract Term:  /  /  to  /  /
Contractor Name:
Contractor Address:
Description of Services Being Provided: Integrated New York Commuter & Traveler Assistance Program Services for NYSDOT (Statewide)

Scope of Contract (Choose one that best fits):
Analysis  [ ]  Evaluation  [ ]  Research  [ ]  Training  [ ]
Data Processing  [ ]  Computer Programming  [ ]  Other IT consulting  [ ]
Engineering  [ ]  Architect Services  [ ]  Surveying  [ ]  Environmental Services  [ ]
Health Services  [ ]  Mental Health Services  [ ]
Accounting  [ ]  Auditing  [ ]  Paralegal  [ ]  Legal  [ ]  Other Consulting  [ ]

<table>
<thead>
<tr>
<th>O*Net Employment Category</th>
<th>Number of Employees</th>
<th>Number of Hours Worked</th>
<th>Amount Payable Under the Contract</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total this page</td>
<td>0</td>
<td>0</td>
<td>$ 0.00</td>
</tr>
<tr>
<td>Grand Total</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Name of person who prepared this report:
Preparer’s Signature:___________________________________________________
Title:  Phone #:
Date Prepared:  /  /
Use additional pages if necessary)