



New York City Taxi & Limousine Commission



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Mayor

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Commissioner/Chair

Louis J. Tazzi
Deputy Commissioner for Administration
Agency Chief Contracting Officer

Request for Proposal
for
NYC MEDALLION TAXICAB TECHNOLOGY ENHANCEMENTS
PIN: 5P00198
March 2nd, 2005

It is illegal to engage in practices that could undermine or prevent the fair award of a contract related to this solicitation. The Comptroller of the City of New York is charged with the audit of all New York City contracts. Any contractor who believes that there has been unfairness, favoritism or impropriety in the proposal process should inform the Comptroller of the City of New York, Office of Contract Administration, One Centre Street, Room 1005, New York, New York 10007; telephone number 212-669-2323.

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I. AGENCY AUTHORIZED CONTACT PERSON

Contractors are advised that the Authorized Agency Contact Person for all matters concerning this Request for Proposals is:

Name: Mr. Louis J. Tazzi
Title: Deputy Commissioner / Agency Chief Contracting Officer
Mailing Address: New York City Taxi & Limousine Commission
40 Rector Street – Fifth Floor
New York, NY 10006
Telephone #: (212) 676 - 1035
E-Mail Address: RFP@tlc.nyc.gov

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II. TIMETABLE

A. Pre-Proposal Conference

Date: **March 15th, 2005**

Time: **10:00 AM**

Location: **Department of Citywide Administrative Services
2 Washington Street, Room 1980
New York, NY 10004**

This facility is a secure building; all attendees should have photo identification and allow ample time to check in. Attendance by contractors is optional but recommended by the TLC.

Any contractor planning on attending the conference should return *the Pre-Proposal Conference RSVP Form (Attachment D)* to the contact person listed in Section I.

B. Closing Date for Clarifications and Questions

All questions regarding this procurement should be submitted ONLY to the Authorized Agency Contact Person. Straightforward questions (e.g., travel directions to Pre-Proposal Conference location) will be answered orally. All substantive questions must be made in writing, and submitted by mail or e-mail. All answers to questions shall be addressed in the form of Addenda to this RFP, and will be available to all prospective proposers known to have received the RFP.

No contractor questions will be accepted after **March 29th, 2005**. All questions and answers will be shared in writing with all proposers known to have received the RFP. Answers will be distributed approximately 14 days after the above date.

C. Proposal Due Date and Time

The due date and time for proposal submission is **May 10th, 2005 by 4:00PM Eastern Standard Time**.

Proposals shall be submitted to:

**NYC Taxi and Limousine Commission
ATTN: Mr. Louis J. Tazzi, DC/ACCO
Technology Enhancements Project Proposals
40 Rector Street
Fifth Floor
New York, New York 10006**

The TLC will not accept e-mailed or faxed proposals. Proposals received at this location after the proposal due date and time are considered late and shall not be accepted by the TLC, except as provided under New York City's Procurement Policy Board (PPB) Rules.

The TLC will consider requests made to the Authorized Agency Contact Person to extend the proposal due date and time prescribed above. However, unless the TLC issues a written addendum to this RFP that extends the proposal due date and time for all contractors, the proposal due date and time prescribed above shall remain in effect.

Anticipated Contract Start Date: August 1st, 2005.

III. SUMMARY OF THE REQUEST FOR PROPOSALS

A. Purpose of the RFP

The Taxi and Limousine Commission (TLC) is initiating a major technology initiative, herein referred to as the Medallion Taxicab Technological Enhancement Project. As part of this project, the TLC is seeking, on behalf of the New York City taxi industry, one or more highly qualified contractors to build, install, and maintain equipment that delivers an integrated solution for the full spectrum of services described in this RFP. All services are to be provided to all segments of the taxicab industry including fleets, individually owned medallions, and leased medallion operators. The TLC is seeking to deliver enhanced service to the riding public through the implementation of the electronic collection of trip data, credit/debit card payment capability and the installation of an interactive passenger information monitor in all New York City taxicabs. Additionally the TLC requires improved communication between drivers and the TLC through implementation of text messaging capability in all medallion taxicabs.

These service enhancements will utilize state-of-the-art technology to provide additional value and convenience to both taxicab drivers and passengers.

It is anticipated that more than one contractor will be selected to deliver these services. Multiple vendors may partner to deliver a single, integrated solution, but one shall be designated as the lead firm. The lead firm will be accountable for performing all the requirements prescribed in the contract and will be the sole contact for resolution of service problems and negotiation of all business issues. The TLC also encourages contractors to identify creative ways to subsidize the costs of these initiatives to medallion taxicab owners using commercial advertising or other revenue sources, as described below.

B. Background

New York City Local Law 12 created the New York City Taxi and Limousine Commission (TLC) in 1971. The TLC is charged with “furthering the development and improvement of taxi and livery service in New York City, establishing an overall public transportation policy governing taxi, coach and car services and wheelchair-accessible vans, and to establish certain rates and standards.” The Commission’s Board consists of nine members, eight of whom are unsalaried commissioners.

The TLC’s regulatory mandate includes:

- Licensing vehicles, drivers and businesses authorized to transport passengers for-hire
- Establishing licensing criteria and standards of conduct
- Establishing and enforcing standards for vehicle and public safety
- Business accountability
- Developing a comprehensive transportation policy applicable to vehicles for-hire
- Setting taxicab rates of fare

The TLC is empowered, under the New York City Charter, to regulate safety and design, with respect to comfort, convenience, noise and air pollution control, and efficiency of the operation of vehicles and its auxiliary equipment.

In March 2004 the TLC’s Board of Commissioners mandated the implementation of certain technology based service enhancements in medallion taxicabs by passing formal rules. These rules consisted of four specified technology enhancements:

1. Electronic Trip-Sheet Data Collection
2. Text Message Capability
3. Credit/Debit Card Acceptance
4. Passenger Information Monitors

These improvements may collectively be termed as “medallion taxicab technological service enhancements,” and are required to be fully installed and operational in taxicabs with the inspection cycle beginning November 1, 2005 and ending February 28, 2006.

These service enhancements represent a rare opportunity to significantly improve the riding experience of countless passengers, New Yorkers and visitors alike, and improve operations for drivers. The implementation of these technological enhancements will assist the TLC in communicating with taxi drivers, track vehicles, and introduce new payment options for the riding public. The TLC anticipates that vehicle location technology will be an invaluable management tool for its policy analysis and for citywide transportation planning. The ability to communicate with taxi drivers on a real time basis will enable the TLC to increase the level of service provided to the riding public in groundbreaking ways.

This project interacts with a number of user communities on many different levels. *Attachment E – Taxicab Industry Overview* provides a detailed description of the entities that are involved in this project. Proposers are encouraged to consider the driver profile, the owner profile, the passenger profile, and the TLC regulatory profile as they develop their proposal.

C. Anticipated Contract Term

It is anticipated that the term of the contract(s) awarded from this RFP will be for 36 months and may additionally include up to two one-year options to renew.

D. Award Process

The subject procurement will be conducted in a two-stage award process.

Stage 1

The first stage will be the award of one or more City contracts authorizing the contracted firm(s) to provide technology hardware and services to the taxi industry. It is anticipated that Stage 1 contracts will be awarded in the summer of 2005.

Proposers will be evaluated on their technological and price proposals as they relate to the “core requirements” of this RFP. The core requirements are:

1. Electronic collection of trip-sheet data
2. Ability to receive text messages
3. Ability to accept credit/debit card
4. Ability to deliver information through a monitor located in the rear passenger section

This RFP also includes other items (e.g. the provisions concerning commercial advertising and commercial sponsorships, and their financial impact) that the TLC wishes the proposers to include in their responses.

After contract registration, each contractor will conduct an acceptance test. The acceptance test will likely begin in the late summer/early fall of 2005. The acceptance test will serve as proof, among other things, that all proposed equipment will function in the current taxicab environment at the levels agreed

upon by the TLC and the contractor. The selected contractors will be given additional opportunities to resolve any issues noted during the acceptance test. However, in order to move forward to the second stage of the selection process the contractor must successfully complete the acceptance test. Any contractor that does not within a reasonable time successfully complete the acceptance test will be terminated in accordance with the City's terms and conditions for this specific contract.

Stage 2

Upon successful completion of the acceptance test, the contractor will receive notification in writing from the TLC authorizing implementation and rollout of their solution to the NYC taxicab industry.

In Stage 2, each contractor will compete to sell their solution directly to the medallion taxicab industry. At the time of the Stage 1 contract award, the City will have negotiated best and final offers for maximum pricing on behalf of the medallion taxicab owners, maximizing the purchase power of the City's entire fleet of yellow cabs.

Ultimately, each taxicab owner will enter a contractual agreement with a contractor of their choice to provide the technology enhancements and associated services.

This procurement method serves both the best interests of the City, the taxi industry, and the riding public as it maximizes the purchasing power of the entire fleet of approximately thirteen thousand taxicabs. It provides a mechanism for taxicab owners to procure the highest quality services at a fair and reasonable cost. The process gives buying power to all taxicab owners that they would not otherwise be able to obtain individually.

The City is providing its technical resources to select qualified vendors based on experience, quality, and cost efficiency. These same resources are overseeing acceptance tests and implementation of this large-scale project. This is a significant benefit to the taxi industry as over 40% of medallion owners are individuals or privately owned small businesses. These individuals and small businesses do not have easy access to such technology expertise.

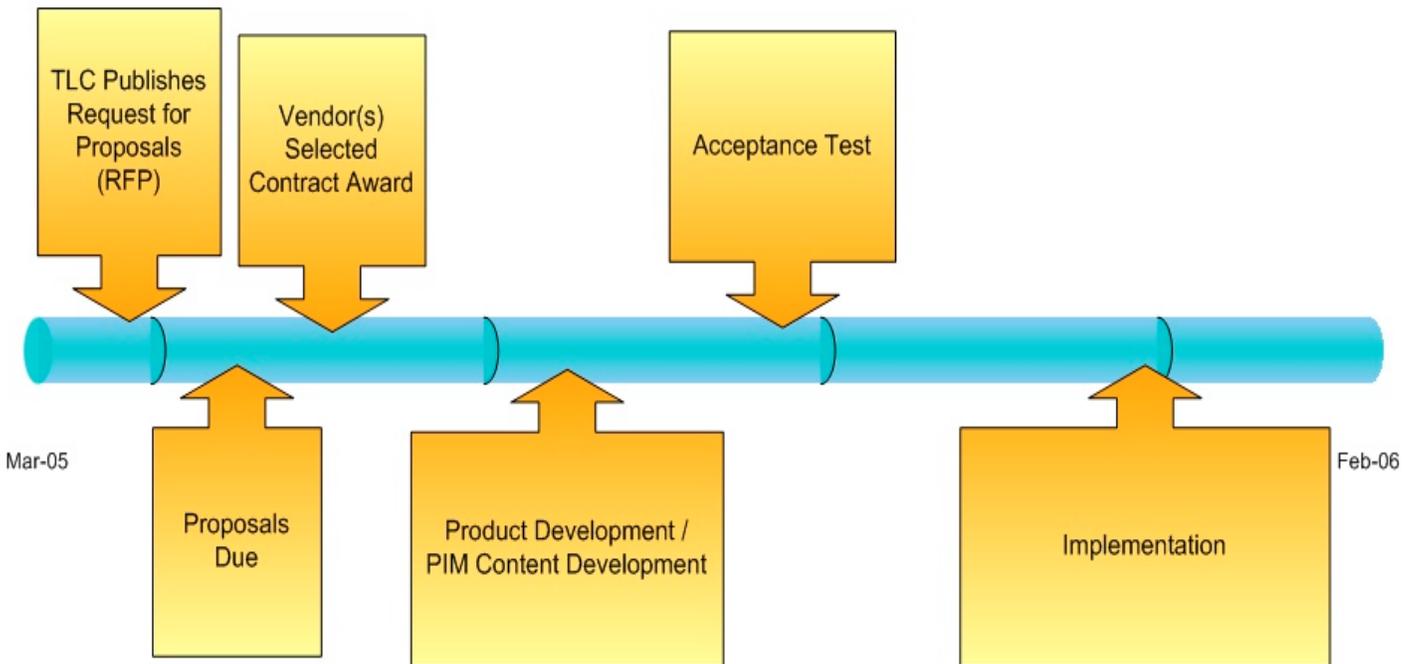
This procurement method best serves the City's interest by providing the ability to closely monitor the solicitation process. It allows the City to manage the technology enhancement program utilizing the expertise of several City agencies, such as the Office of the Comptroller, the Department of Information Technology and Telecommunications, and the Department of Transportation. Operationally, this allows the City to utilize multiple relationships to serve the TLC constituency in the most efficient and effective manner.

The RFP process provides competition ensuring that only highly qualified vendors are selected to deliver the service enhancements. Historically, certification-like models have been unsuccessful when there is a highly technical project requiring significant investments for research and development with a limited market potential. This procurement process will allow for maximum competition among qualified vendors, thus enabling the taxi industry to procure high quality technology services at the lowest price.

Note: The City bears no responsibility to the Proposer for the cost of preparing a response to this solicitation or participating in the evaluation process.

Below is a diagram that illustrates the order of events for the major milestones in this project.

Technology Enhancement Project Timeline



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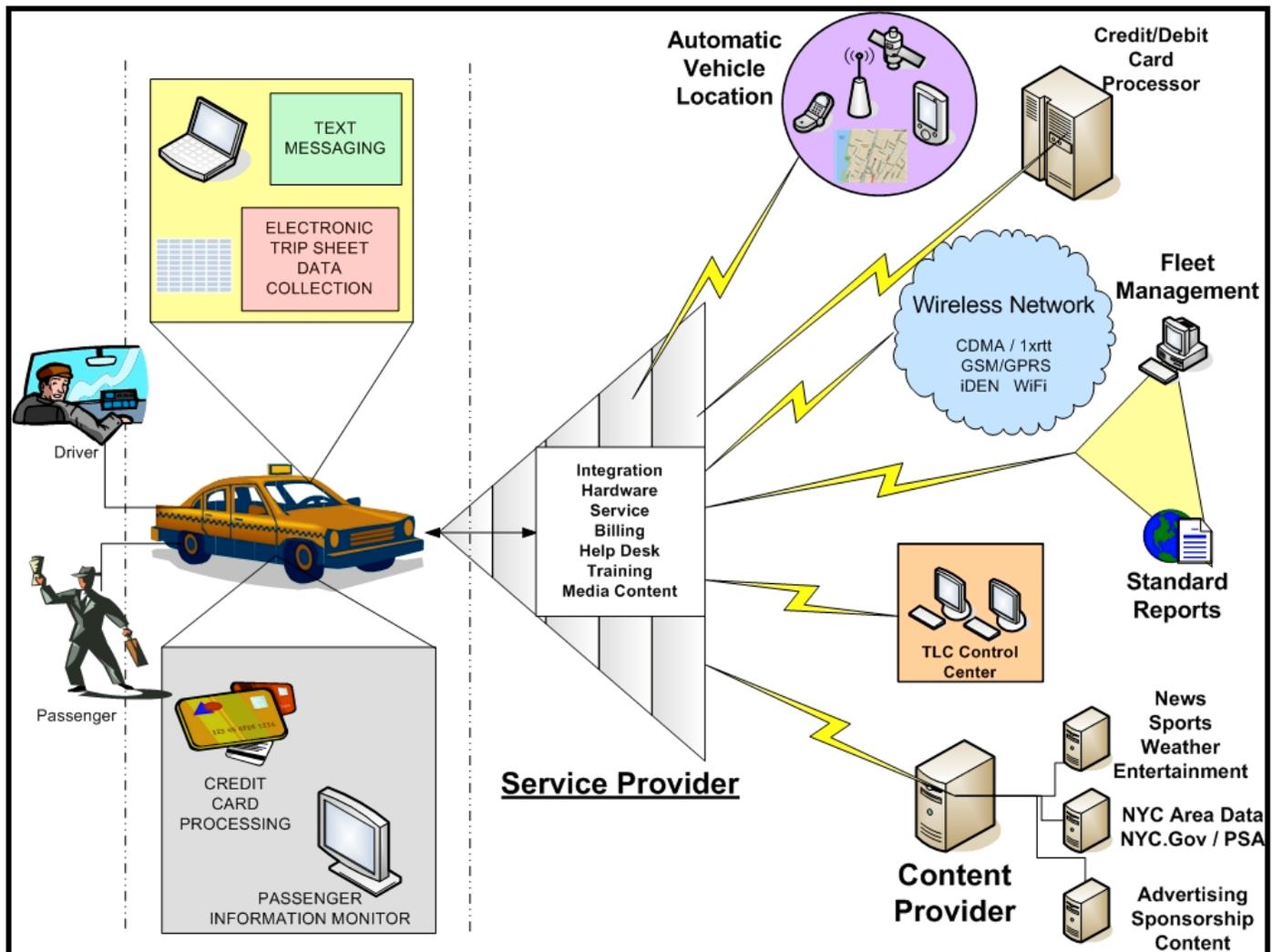
IV. SCOPE OF SERVICES

The contractor will build, install, and maintain equipment that delivers an integrated solution for the following four service enhancements:

- Electronic trip-sheet data collection
- Text message capability
- Credit/debit card acceptance
- Passenger information monitors

The following diagram illustrates the relationships between the parties involved in the Medallion Taxicab Technology Enhancement Project. The contractor is responsible for fulfilling many roles, as depicted below.

Figure 1: NYC Medallion Taxicab Technology Enhancement Project Overview



A. Electronic Trip-Sheet Data Collection

At present, drivers are required to maintain a trip log that details each and every fare that a taxicab has. The trip-sheet is filled out by hand and stored in paper form. Medallion owners are required to maintain these trip-sheets for three (3) years. The trip-sheet is a document that is commonly used when complaints are filed with the TLC.

With over 500,000 trips daily, this process is not the most efficient or accurate method for maintaining this information. While the daily trip volume is high, the total amount of data captured for each trip is relatively small. These factors make maintaining the trip log an inefficient process. The TLC believes that by automating this process, efficiency and accuracy can be improved. The TLC foresees vehicle location technology being introduced and integrated with data that is currently stored or produced within the taximeter.

The following data elements shall be captured and stored as part of automating the driver's trip-sheet log:

- Date, time and location of passenger pick up (meter engaged) and drop off (meter disengage)
- Trip duration – measured in time and in mileage
- Trip number
- Itemized fare (tolls, surcharges, and tip amount)
- Payment type (cash, credit including brand, or debit)
- Total number of passengers
- Car identifier (medallion number)
- Driver identifier (TLC license number)

Taxicab location data will also be input to a trip map allowing the passenger to track their journey through New York City and the surrounding tri-state metropolitan areas (Nassau and Westchester Counties and Newark Airport). It will be captured and integrated with an electronic trip-sheet database file. Automated collection and dissemination of trip-sheet data is a primary goal and an important benefit for the City and the industry.

The proposed system will build a database of trip records. As there is likely to be more than one service provider, the trip data may reside in more than one location. As described, the database builds records from a vehicle location system, taximeter input, and driver input.

Currently there are seven approved taxi meter companies (see *Attachment E*). It is highly desirable that the contractor's solution is compatible with the currently installed taximeters. The contractor may use a new meter, but that meter must be fully compliant with all TLC rules and the standards established by the New York State Department of Agriculture Bureau of Weights and Measures.

Automating the trip-sheet should be simple and require minimal manual input and interaction from the driver. The contractor's solution should take into consideration the environment in which a medallion taxicab works.

Trip-sheet data shall be available for each vehicle at the end of each shift to both the TLC and to the cab owner, driver, or leasing agent of the vehicle in a secure environment. Trip-sheet data should be available on-line in near real-time and in an archived format for a minimum three-year period. To provide a simple common technology interface within the industry, the trip data sheet should be exportable into a standard format and printable using standard-sized paper.

A byproduct of implementing location-based technology will be a positive impact on the TLC's customer service initiative regarding lost property. Forty-seven thousand lost property calls come into the 311 Citizen Service Center each year. Today, if a passenger reports lost property to the 311 call center or directly to the TLC, little can be done if the passenger does not know the medallion number of their specific taxicab. When the service enhancements are implemented, the TLC can greatly increase the recovery of lost goods as it will be able to identify the prior location of each cab during a given timeframe by querying a trip-sheet data base. This process is covered in more detail later in this document.

The contractor should capture location data and transmit the data to a database hosting facility. The contractor will build a database of trip records from a vehicle location system, taximeter input, and driver input. The database should be hosted and maintained by the contractor. Reports derived from this database will allow the creation of trip-sheets similar to the manual log currently prepared by taxi drivers. Ownership, control, and permission for use of the any data generated or derived from this project rests solely with the TLC. Along with the drivers, it is anticipated that fleets, agents, and individual vehicle owners will have access to data about their cabs. Electronic capture and storage of trip data should eliminate the need for the retention of paper records, although the system must allow for the printing of paper records.

Vehicle location data will serve as the foundation for information that will assist the City in offering better regulation and policy to its constituency. This reporting capability may also have significant value, providing fleet management applications that are not currently available to the taxi industry.

City agencies will use this database for providing day-to-day operational command and control as well as for planning and other related studies. It is expected that data extracted from the database will provide information for policy decisions.

The TLC may require that trip-sheet data be transmitted to a central database as part of a future phase of this project. Such a database will be designed in an open architecture allowing for maximum flexibility.

The automatic vehicle location (AVL) system must include all five boroughs of NYC and the surrounding tri-state metropolitan area. Data should be transferred in a secure fashion to ensure data integrity. The contractors shall be required to work with the TLC to develop a data structure / format that will be consistent across all contractors. As the TLC further examines its requirements for data management this standard protocol will be defined. Data should be accessible within sensible timeframes.

The following describes some of the ways in which data might be utilized:

- The database will be used by taxi owners and the TLC to provide trip data sheets.
- City agencies will use the database for providing day-to day operational command and control as well as for planning and other related studies. It is expected that data extracted from the database will provide information for policy decisions.

B. Text Messaging

The implementation of text messaging technology will impact TLC operations in three main ways. First, the TLC will be able to communicate with taxis in the event of a citywide emergency. Second, the TLC would be able to streamline the process for lost property claims. Finally, text messaging will provide higher levels of customer service through increased street hail efficiency.

To improve communication with drivers the TLC requires the ability to send short alphanumeric messages to cabs and receive pre-programmed responses from the driver. The driver would transmit a response by pushing a single button. Messages might be a traffic warning like "Attention: Flooding at 42nd Street & Broadway due to water main break." Or, the message might be an alert of a significant fare opportunity like: "Attention: Queen Mary arrives at noon today, Pier 82."

Driver Impact

For the taxi driver, text messaging provides a more efficient method of communication. Messages might originate from the TLC, other City agencies, and perhaps fleet headquarters. The TLC prefers to limit responses to the TLC generated messages to an acknowledgement or a predetermined message. The TLC prefers not to provide the driver with a keyboard-like interface, but rather a series of one-button responses.

Passenger Acceptance

Passengers will benefit from improved recovery of lost goods, as text messaging will allow more efficient notification of lost property. There will also be improved service levels when cabs are notified that there are large numbers of potential passengers in certain areas.

Notification by text messaging of major traffic problems will allow the driver to take corrective action and improve the level of customer service.

Passengers may be concerned about distractions to the driver caused by text messages. Contractors should consider this as they develop a solution to meet the TLC's text messaging objective. Messages sent to a taxi should not interrupt the driver from the critical task of controlling the vehicle.

Owner Impact

For fleet owners, text messaging provides a potential mechanism for rapid communication with drivers when an emergency occurs. Individual owner-operators will also profit from any productivity improvements resulting from traffic alerts and from notification of fare opportunities. All owners will be concerned about the initial and recurring costs of implementing text messaging functionality.

TLC Concerns

The TLC requires control of all message content and delivery. Messaging that requires a "hot key" response from the vehicle should be archived for reporting purposes. The TLC does not require that "information only" messages be stored. The user messaging interface should be easy to operate by non-technical users.

Lost Property Claims

The TLC receives, on average, about four thousand lost property calls each month. Four variables: Medallion number, location, time, and date are critical in successfully retrieving misplaced items. These cases typically fall into one of two categories:

- The passenger knows the taxicab number in which they were riding, as well as the date and time when the property was lost

- The passenger knows the date, time and location where the property was lost, but does not know the taxicab number

If the passenger knows the taxicab number and the date and time of the trip, vehicle location technology can be used to locate the taxicab and send a message to the driver that property was lost within the taxicab. If the passenger knows the date and time that the property was lost, as well as the location, but does not remember the medallion number, vehicle location technology can be used to narrow the scope of inquiry to a few taxicabs in the vicinity at the time the property was lost. Vehicle location technology could provide the medallion numbers of all taxicabs in the general location, thereby allowing the TLC to focus its investigation on a limited number of taxicabs, and increase the chance of recovering a rider's lost property.

The TLC needs to be able to route messages to a specific vehicle, a selected group of vehicles, or the entire fleet. The ability to send messages based on geographic area, partial medallion number, and partial driver license number is key to maximizing this communication effort. Additionally, the TLC needs to send text messages to a group of taxicabs based on "trip-sheet" location-based information, such as sending a specific message to all cabs that dropped off at the intersection of 11th Street and Bleecker Street between 1 and 2 PM.

Street Hail Efficiency / Fleet Management

Increased revenue will result from timely notification of fare opportunities. The TLC envisions that text messaging can be used to deploy cabs to areas of the City where there is an unusual demand for service or notify them of major traffic problems. Text messaging can help increase revenue opportunities by receipt of information about fare opportunities such as cruise ship arrivals. Many such fare opportunities are known in advance.

Emergency Transportation Management

Text messaging will enable the TLC to communicate with taxis when a citywide emergency such as a blackout, major water main break, or transit strike occurs. It would also permit the TLC to communicate instructions to taxi drivers who could assist with execution of citywide contingency plans. Emergency management may take place from many different areas or agencies within the City. Agencies such as the Mayor's Office of Emergency Management (OEM), the New York City Police Department (NYPD), and the Department of Transportation (DOT) may require the ability to send fleet-wide messages as part of their emergency management practices. Contractors should address the need for remote access to the text messaging interface and security levels that can be provided to the City. The text messaging system should provide a secure means for sending text messages to the entire fleet or any subsection and combination of vehicles thereof.

All City messages that are categorized as emergencies should have the ability to preempt any other text messages routing to medallion taxicabs.

Messages requiring a response should be held from the driver until the vehicle is not moving and the driver can respond to the message using a hot key. These messages, the date and time of send, as well as the driver's response should be archived. Messages not requiring a response should be viewable by the driver taking into consideration that their full attention should be on the road while driving.

C. Credit/Debit Card Acceptance

Credit cards are widely accepted as a payment mechanism in the United States with about 22% of all consumer payments being made by credit card. Debit cards (including both PIN and PIN-less) account for another 31% of all consumer payments. Debit cards have seen a large increase in use including signature based debit cards. Signature debit transactions account for about 63% of all debit point of sale (POS) transactions. The major card brands have had successful programs to expand the use of credit/debit cards as a consumer payment vehicle. Credit/debit cards are now widely used in the grocery industry and are expanding in use in the Quick Pay industry. Some popular Quick Pay participants are fast food restaurants and gas stations. Consumers now expect to use plastic as a convenient way to pay for day-to-day expenses. A recent focus group study sponsored by the TLC showed that consumers strongly desired the use of credit/debit cards in taxicabs. The TLC has recognized the value to consumers of credit/debit card acceptance in taxicabs and has mandated that taxicabs be required to accept all major credit/debit cards starting in November 2005.

Drivers must be enabled to accept payments from all major credit/debit cards. For the purposes of this RFP, "all major credit/debit cards" is defined as Visa, MasterCard, American Express, and Discover Card. It is highly encouraged that the proposed systems also accept Japan Credit Bureau (JCB) cards and Diner's Club cards so that consumers are given the maximum options for payment. It is estimated that over 500,000 JCB and Diner's Club cardholders visit NYC annually.

Security and confidentiality of credit/debit card information must be maintained throughout the system. It is important for passengers and drivers to be able to quickly, simply, and with assurance complete a transaction. This enhancement shall be simple to use and take into account passenger and driver demographics such that fonts, key sizes, receipts, messaging, and equipment markings are easily legible.

Driver Impact

From the driver viewpoint, the TLC believes that the use of credit and debit cards present the opportunity for increased passenger revenue resulting from more trips and greater tips.

A taxi driver will also be concerned about any impact of card acceptance on cab operations and driver productivity. Credit/debit card transactions must be fast and there must be high success rate of completing a card-based transaction.

Drivers will also benefit from increased safety. Since there will be less cash on-hand, the use of credit/debit cards should diminish the probability of robbery.

If a driver is a cab owner, they will be concerned with the merchant fees charged for card acceptance. And if they lease a cab, they may be subject to charges from the cab owner for use of cards.

Drivers must be trained and educated on the use of credit/debit cards. They must know how to answer customer questions and resolve basic problems.

Passenger Acceptance

Passengers will be appreciative of having an additional payment mechanism. Acceptance of all major credit cards including Discover Card, Diner's Club, and JCB will enhance the value of the system to consumers. With the use of credit/debit cards, passengers will have an opportunity to have a taxi ride without depleting their on-hand cash and they will not be required to visit an ATM for cash, which can be worrisome at night.

Owner Impact

Some owners use agents to broker lease agreements for their medallion and/or their cab. These leasing agents receive "rent" on a weekly basis or on a daily basis. Owners of cabs or leasing agents

are most likely to be the merchant of record and as such they will be concerned about credit/debit card fees. They will also be concerned with the total investment required to accept card payments.

TLC Concerns

The TLC will need to assure that the credit/debit card equipped cabs work in all five boroughs of New York City and the surrounding tri-state metropolitan areas, including JFK Airport, Newark Airport, and LaGuardia Airport. This means high service availability for all of New York City and the surrounding areas.

The TLC expects the RFP responses to reflect reduced credit/debit card fees made possible through the economies of scale. The TLC does not wish to have access to any data that may impose on the privacy rights of passengers. Name and account number will not be stored in any database accessible by the TLC.

Merchants require reports for shift change reconciliation, daily reconciliation, transaction details, and historical views of payments. Access should be secure, simple, and in keeping with technology knowledge levels in the industry. Contractors will be required to provide the settlement process and the times in which the merchants can expect automatic deposit of funds into an account. Preference will be given to contractors who can get the money in a depository account in the shortest amount of time. Timely settlement is a key interest of the taxi industry.

Each card transaction should be identified by medallion number, trip number, date, and time and will include the total fare including tolls and surcharges. An end of shift report detailing card transactions successfully processed through the system should be available to the driver.

Merchant of Record

There may be a large number of “merchants” who will participate in the credit/debit card program. It is expected that the owner of the cab will be the merchant. The estimated number of potential merchants in this scenario is:

- 16 Fleet operators with 2,050 cabs
- 53 Agents operating 5,350 cabs
- 5,133 Individually owned cabs
- 5,202 Total potential merchants

There is a potential of 5,202 merchants in total. Each of these merchants could require a financial qualification. Upon approval, the merchant would negotiate fees with the merchant bank and subsequently, sign a merchant agreement.

The TLC expects industry alliances will form and assume the role of the credit/debit card merchant of record. The organizations would be responsible for depositing money into driver accounts.

Contractors should be aware of several trade organizations that represent all aspects of the taxi industry – namely fleets, individual owner-operators, agents, and drivers. Once contractors are selling to the industry, they are encouraged to leverage these relationships to offer a more competitive solution.

D. Passenger Information Monitor

The passenger information monitor (PIM) is an audio-visual device, similar to a laptop screen that shall provide information to the passenger. Some commonly seen examples of passenger audio-visual offerings are typically found in airplanes (Jet Blue for example), waiting rooms (such as Accent Health by CNN), at airports, and in some TV-like screens in elevators (such as Captivate Network) in commercial buildings.

The PIM shall be installed in the rear passenger area of the taxicab. The PIM will be used to complete the electronic payment process. The PIM must display the total fare (itemizing fare, tolls, surcharges, and tip) at the end of every fare. The tip shall only be displayed for credit and debit card payments. Finally, the PIM will be used to communicate TLC Public Service Announcements (PSAs) and will provide a map allowing the passenger to track their journey through the New York City and surrounding metropolitan areas.

The PIM will be the primary interface between the TLC and the passenger. All TLC PSAs will be communicated via the PIM. Some examples will be friendly reminders like “welcome and buckle-up” at the start of each trip and “kindly remember to take your personal belongings” at the end of each trip.

Additionally, the TLC recognizes that the PIM can provide revenue to offset the costs of the technological enhancement package to taxi owners. The TLC welcomes a revenue generating business model where limited, commercial advertising and commercial sponsorships share the PIM with other required functionality (route map, payment functionality, and TLC PSAs).

A minimum condition of passing the acceptance test is that the contractor must immediately make available functionality of interactive mapping of the passengers’ current and total route and TLC PSAs.

The TLC reserves the right to establish standards for the display of content in the taxicabs and may amend such standards from time to time. The contractor shall review all content prior to installation and agrees that the content shall be limited to commercial advertisements and commercial sponsorships (plus the TLC PSAs). PIM content must not contain, imply, or declare endorsement by the TLC, or any other City agency without prior written consent from the TLC or the appropriate City agency. The contractor shall neither develop, accept, install, nor maintain PIM content that falls within the following categories:

- Information promoting unlawful or illegal goods, services, or activities
- Obscene material (Refer to New York Penal Law 235.00, as such provisions may be amended, modified, or supplemented from time to time.)
- Material, image, or description, which, if sold or loaned to a minor for monetary consideration with knowledge of its character or content, would give rise to a violation of New York Penal Law 235.21. See also New York Penal Law 235.20 as such provisions may be amended, modified, or supplemented from time to time
- Information that is libelous or violates New York Civil Rights Law 50 as such provisions may be amended, modified, or supplemented from time to time
- Images or information that demeans an individual or group of individuals on the account of race, color, religion, national origin, ancestry, gender, age, disability, or sexual orientation
- Images or information that are so violent, frightening, or otherwise disturbing as to be harmful to minors

- Image of a person, who appears to be a minor, in sexually suggestive dress, pose, or context
- Images or information that would be deemed by a significant segment of the public to be patently offensive improper, or in bad taste
- Advertisements that proposes a commercial transaction where the information contained in it is false, misleading, or deceptive

Functional Overview

The following core requirements must be met in the initial version of the PIM.

1. Route Map: There should be an interactive map, driven by on-board AVL capabilities, where the current start point (meter engaged), ongoing route, and end point (meter disengaged) is clearly indicated to the passenger. The goal is to provide the passenger with a real-time visual representation of their ride. This map is not intended to provide routing or turn by turn directions to the driver, nor is it to be used as an indicator of miles traveled.
2. Display of TLC PSAs including fare information: The PIM must deliver TLC PSAs such as those currently shown on stickers in medallion taxis, for example the passenger's bill of rights and flat fare notice. Additional TLC PSAs may be developed during the contract term. (See Section H attached stickers and current PSAs).
3. Credit/Debit Card: The PIM should be the interactive device for the passenger to understand and complete payment processing.

The TLC expects that the PIM will become a mechanism to supply passengers with content such as news, weather, and sports information, as provided by the contractor.

In terms of hardware specifications, the PIM will need to operate in a harsh operating environment. The PIM screen will be a durable touch-screen. It should have vandal-proof features. It shall be safe in the case of a collision or sudden stop, which could include smooth rubberized or similar style coating to prevent injury in the event of a collision. The PIM should be designed in a way to withstand continuous operation and be weather and spill resistant. The TLC anticipates that the proper screen size shall be a minimum of 10" to a maximum of 15.5" diagonal measure. Other screen sizes will be considered, but contractor must consider that the presentation of PIM and its content is a heavily weighted factor in evaluating a proposal. The PIM and associated equipment shall not have any exposed wiring that may endanger passengers or drivers. Design concepts, presentation, and quality will be weighted heavily in selecting the appropriate contractor.

It is preferred that the PIM have a backlit color display, with a dimming mechanism, so that passengers can control the screen after TLC PSAs have run. The passenger should be able to mute the audio portion. The PIM should reset to the default audio and brightness levels at the start of a new fare, upon engagement of the meter.

Owner Impact

Vehicle owners are going to be most concerned about cost and life cycle of the in-cab equipment, particularly the life cycle within the NYC taxicab environment.

Driver Impact

Driver interaction with the PIM is envisioned as minimal, however there are a few points to consider as you develop your solution.

The drivers will need to be versed enough in the technology to assist passengers during their first exposures to the PIM, especially as it pertains to credit card and debit card transactions. The

passengers will need to interact with the PIM to complete any electronic payment; thus the driver will need to be able to assist a passenger with the payment process. The payment process needs to be self-explanatory. The driver will be exposed to PIM content for a 12-hour shift. This should be kept in mind as content is developed.

Passenger Acceptance

Defining factors for passenger acceptance with the PIM include having levels of passenger control and useful information. The PIM itself must have a mute function. There is a challenge to keep passengers engaged with meaningful content and various levels of interactivity. Focus group studies have shown that NYC passengers are very supportive of accessing information such as news, weather, sports, and entertainment. Passengers also provided additional examples of content that they thought had significant interest and value, such as movie trailers, this weekend's happenings, information on Broadway theater, and celebrity news.

The studies also showed passengers are accepting of advertising such as sponsorships, for example, this week's weather forecast brought to you by Magazine XYZ, etc. They were less receptive to "in the face" advertising such as television commercials, etc.

TLC Concerns

The TLC shall reserve 20% of the PIM's capacity for presenting content to passengers for TLC PSAs, and other authorized City use. Depending on the type of technical solution and configuration of the in-cab system, this 20% may be allocated as time, storage capacity, etc. This will be covered in more detail during contract negotiations.

More than seventy percent of all trips consist of frequent riders whose "personal vehicle" is essentially a taxicab. This creates a need to keep content fresh and up-to-date. However, much of the TLC public service and core information can be standardized and updated on a much less frequent basis. Logistically, it is difficult to physically update up to 13,000 medallion taxis and therefore some form of remote update for the changing information will be needed to deliver on passenger expectations and achieve acceptance.

End of Page

E. Service Enhancements Associated Revenue

The TLC believes that the implementation of technological enhancements may present opportunities to generate revenue. The TLC anticipates that increased revenue potential may take many forms, some of which are outlined below. Contractors should explain how revenue streams could be created or enhanced, to reduce the cost of the core functionality requirements to the taxi industry. Revenue sources may include:

- Traditional commercial advertising (banner ads, and video clips)
- Roof-top commercial advertising (static and electronic media)
- Location-based content / commercial advertising
- Commercial content placement (record labels paying to promote artists)
- Placement fees (third party brands such as news organizations, weather brands, radio stations, or others seeking to provide targeted information)
- Commercial sponsorship (designations such as “powered by”, or other such programs that provide contextual promotion for branded products or services)
- Increased trips and tips resulting from credit/debit card use
- Using operational data to increase driver productivity
- Electronic commerce opportunities

In general, studies have shown that the introduction of credit cards as a payment option typically increases revenue. With a new payment option, additional customers are now available thus producing more trips. Customers will not be prevented from using a cab because of a cash shortage. The TLC presumes that driver tips will also increase.

Although the primary functions of the PIM are to provide an interactive terminal for credit/debit card acceptance and to show an updated map of the cab trip, it may also provide a mechanism to generate income. It is expected that there will be some additional commercial content on the PIM (as well as TLC PSAs). The revenue generated from this content can offset some or all of the system costs. Proposers should indicate how revenue would be used to offset costs to the taxi industry. For example, in addition to TLC PSAs and trip fare, the PIM can provide a potential revenue stream from sponsorships of screen pages, short video advertising clips, and electronic commerce such as movie tickets and restaurant, airline, and hotel reservations.

The PIM needs to be robust enough to handle various formats of content (for example, flash media, animated graphics, and video streams). Commercial advertising content should not impact any other functionality that the PIM might provide such as vehicle tracking and mapping.

The following are the types of advertising content being considered by the TLC:

- Notices (text and/or video) from credit/debit card companies that their cards are accepted in all medallion taxis in NYC
- Commercial sponsorship of content using corporate logos
- Commercial banner ads displayed during viewing of information
- Short video clips

Only the contractors that are selected, as a result of this RFP, will be authorized to deliver taxi media content. This privilege not only covers the PIM, but may extend to the rooftop displays as well.

The City believes that as the medallion taxicab fleet implements its technological enhancements, it shall stimulate new commercial advertising revenue. Contractors will have the opportunity to broker advertising business arrangements on behalf of the medallion taxicab owner who is providing the millions of residents, commuters, and other visitors in New York City with a basic transportation service.

Reporting Of Revenue and Inspection of Books and Records

The contractors, at their sole cost and expense, must maintain current, complete and accurate books and records of all business, accounts, and transactions of the taxi media content provider relative to advertising activities. The records must be maintained in New York City for the entire period that the taxi media content provider is engaged by one or more contractors and for not less than six years. The records are required to include all information necessary and sufficient to support and compute royalties or other fees payable to one or more entities within the taxi industry.

The contractor must provide quarterly and annual reports outlining the itemized gross revenue generated by the NYC taxicabs to the TLC. Such reports must be audited by an independent third party.

The TLC or its authorized representative shall have the right to inspect and examine the books, records, files and documents of the company as they pertain to the rendered services by the company as a contractor. All such inspections must occur within New York City. The TLC or its authorized representative shall be entitled to make copies of such books, records, files and documents of the company as they pertain to services and revenues associated with medallion taxicabs.

End of Page

F. Wireless Telecom Services

The contractor will be responsible for providing the necessary communications infrastructure required for this project. The TLC anticipates that various forms of wireless networks will provide the communication network for the taxicab technology enhancements. Wireless communication will be necessary to process electronic payments in a mobile environment. In addition, wireless service will also play a major part in collecting and transmitting trip data to a central repository and then information back to the cab. Coverage of the wireless networks is vital to the success of this project.

G. Implementation and Program Management

Contractors are required to submit a high-level project plan and implementation schedule as part of their proposal. The project plan should provide an overview of the scope of work to be performed, timeline for such work, and description of how the contractor will provide ongoing service and monitoring of all services provided. Beginning with implementation, the contractor shall provide monthly service level reports to the TLC depicting implementation progress as well as system performance.

H. Acceptance Test Criteria

Upon completion of the Stage 1 competition, the contractor will be required to pass an acceptance test. The acceptance test is proof that all proposed equipment functions to the levels agreed upon by the TLC in a service level agreement. It is important for the contractor to understand that movement to the implementation phase of the project is dependent upon successful completion of the acceptance test. Contractors will be given opportunities to resolve any issues noted during the acceptance test.

During the acceptance test, the contractor will install their system in a limited number of cabs to demonstrate their ability to provide the service enhancements and meet performance guarantees. The acceptance test will demonstrate performance in 50-100 cabs per provider. The TLC will work with representatives from the taxi industry to facilitate the selection of vehicles for the acceptance test. The test shall include items such as:

- Satisfactory demonstration of the achievement of the four service enhancements
- Demonstration of satisfactory response time for credit/debit card authorizations
- Achievement of a satisfactory level of availability of wireless communication
- Demonstration of achievement of successful transmission of text messages to cabs
- Achieving a satisfactory mean time to repair (MTTR) for all major hardware components of the system
- Successful transmission of updates to the PIM
- Collection of trip data in a database and production of trip-sheets via inquiry to the database
- Demonstration of a satisfactory ASA for 1st level help desk calls
- Timely resolution of help desk calls and restoration of service

The TLC may determine additional criteria.

Successful passing of the acceptance test will be required as an element of the contract with the TLC. Upon successful completion of the acceptance test, the contractor will receive notification in writing from the TLC authorizing implementation and rollout of their solution to the NYC taxicab industry.

The contractor is responsible for providing all applicable technology upgrades to the NYC taxi industry under this contract, at no additional cost to the City and the taxi industry, so that the taxi industry is kept current with new technologies over the life of the contract. Accordingly, all technology areas listed in this RFP shall be modified, increased, enhanced, and upgraded by the contractor at no cost. (For instance, if new electronic payment method is introduced to the merchant world, the contractor should promptly make the City aware of the enhancement and provide the City with the ability to implement it over some mutually agreeable timeframe.)

The contractor shall work to improve the delivery and capabilities of all services in the contract using innovative management techniques and technological advances. Furthermore, any rate or price reductions resulting from these innovations and technological advances would be passed onto the TLC and its constituency in the form of price reductions or rebates; whichever is appropriate, over the life of the contract.

I. Maintenance and Trouble Reporting

The overall goal from a service perspective is that a single point of contact is established for service related issues. Each contractor will be responsible for fulfilling this single point of contact role.

The contractor's service delivery procedures shall include, but not be limited to, a method for requesting service by e-mail. Regardless of how service requests are made, the contractor's procedures must provide a prompt confirmation.

Contractors should be aware that all service enhancements must be fully operational or a taxicab is considered unserviceable. Taxicabs that are deemed unserviceable may be prohibited from accepting fares until full functionality is restored. Consequently, contractors are encouraged to have the means to repair or replace equipment quickly. Maintaining an adequate supply of spare equipment for "hot-swaps" is encouraged.

J. Training & Ongoing Support

Over the life span of this project, there will be changes in technology, service needs, and personnel. The contractor should provide provisions for on-going training to accommodate technology refreshment and staff turnover.

K. Network Management & Technical Support

Achieving a highly available service is a necessity for the success of this program. This means the back end systems must be designed with reliability in mind. System problems may occur and it is necessary for the contractor to accurately determine the source of the problem and rapidly repair the failure. The burden for troubleshooting and problem determination cannot be placed solely with the driver. Sufficient network diagnostic information must be available so that problems can be resolved remotely.

V. PROPOSAL FORMAT

A. Basic Instructions

Proposers should submit one original set and five copies of the proposal. Facsimile responses will not be accepted. Signatures are required on the cover letter. Proposers should provide all information requested in the format prescribed below. The proposal should be typed on 8 1/2" x 11" paper. All pages should be paginated.

To facilitate the evaluation process, it is recommended, but not required, that each contractor also submit a total of two CD-ROMs, one of the CD-ROMs should contain an electronic copy of the technical proposal, and one of the CD-ROMs should contain an electronic copy of the price proposal. These electronic copies must be identical to the original hardcopy proposals, and should be in PDF format. Each CD-ROM should clearly indicate the name of the contractor, name of the RFP, PIN number, and whether the CD-ROM contains a technical or price proposal.

It is requested that each proposal be one comprehensive electronic file and not be segmented into multiple files (i.e., The TLC prefers not to have a separate file for each section of the proposal). The electronic files should not contain any animation.

Proposers should submit the technical proposal and price proposal in separate, sealed envelopes. The appropriate CD-ROMs should be included in each sealed envelope. The originals of the Technical and Price Proposal should be clearly labeled "Original" on the cover.

NOTE: The hardcopy proposal marked "ORIGINAL" is the official submission.

Clearly label each envelope with the proposer's name, name of the RFP, PIN Number, and whether the envelope contains the technical or price proposal.

Proposers should give specific attention to the identification of those portions of their proposals that they deem to be confidential, proprietary information or trade secrets and provide any justification why such materials, upon request, should not be disclosed by the City. Such information must be easily separable from the non-confidential sections of the proposals.

The New York Freedom of Information Law allows the City to protect Proposers' trade secrets and materials that might impair contract negotiations, and the City will do so to the maximum extent allowed by law: however, the City upon request might in the future be required to disclose non-trade secret portions.

B. Proposal Cover Letter

The proposal cover letter form (*Attachment A*) transmits the contractor's proposal package to TLC. It should be completed, signed and dated by an authorized representative of the proposer and clearly indicate the ongoing contact person (s). The names, addresses, and contact information for all sub-contractors related to this project should also be included.

C. Technical Proposal

The technical proposal should consist of the following sections, in the order listed below:

- Title Page and Table of Contents
- Executive Summary
- Relevant Experience and Organization Capability
- Approach and Methodology
- Conformance Technical Requirements
- Completed VENDEX Questionnaires

VENDEX forms and instructions for their completion may be obtained at the following Web site address: <http://www.nyc.gov/html/moc/html/tocvendex.html>. Written instructions and forms may also be obtained from the TLC authorized contact person listed in Section I.

D. Price Proposal

A price proposal must be prepared and submitted in a separate, sealed envelope, marked "Price Proposal." Proposers should understand that all costs shall be borne by the taxicab industry. Submit *Attachment B: Price Proposal Worksheet* as part of the price proposal.

VI. Proposal

A. Executive Summary

Provide a concise corporate overview for the prime contractor and any partners that will participate on the project. The proposal should provide a description of the company, its age, organization, number of full time employees, and product specialization.

Proposers should note that the City understands that some of the proposal elements numbered below will not be applicable to all technical solutions. Proposers should make every effort to address each numbered item and specifically identify when an item is not applicable.

B. Relevant Experience and Organizational Capability

1. Describe the successful, relevant experience of the proposer, each proposed sub-contractor if any, and the proposed key staff, highlighting experience within large urban centers and specifically within New York City.
2. Demonstrate on-time and on-budget performance through specific examples.
3. Describe in detail up to four relevant projects that the proposer has managed. Of particular interest are projects involving credit/debit card acceptance, text messaging, vehicle location technology, and customer interactive video terminals.
4. Describe in detail three projects involving database management systems that demonstrate the proposer's level of relevant experience.
5. Describe in detail three projects involving the creation, distribution, and display of content on customer interactive terminals that demonstrate the proposer's level of relevant experience.
6. Describe three technology projects the proposer has managed for the taxi industry that demonstrate the proposer's level of relevant experience.
7. Provide a list of three prior engagements with New York City, as well as with other large government institutions, if applicable.
8. Demonstrate that the proposer's team has relevant knowledge and experience with "out-of-home-like" advertising media in particular, and that they have the skill and ability to manage such efforts in a significant advertising market.
9. Attach a resume and/or description of the qualifications for each key staff position. In addition, provide a statement certifying that the proposed key staff will be committed to this project.
10. Attach an organization outline or chart showing where, or an explanation of how, the proposed services will fit into the proposer's organization.
11. Describe and demonstrate from a technical, financial and managerial perspective, the experience of the proposed team, emphasizing the successful implementation of similar services to those set forth in this RFP.
12. Demonstrate the proposer's capability to manage a technological project of this size and scale. The proposal should include demonstrating the proposer's and sub-contractor's financial capability to support this project.
13. Attach a listing of at least three references for the proposer and each sub-contractor, if any, for recent projects similar in scope, type, and complexity to the project described in this RFP. The references should include a brief description of the project and the name and phone number of an

individual whom the evaluation committee can contact. The individual identified should be of an appropriate level of responsibility. The evaluation committee may attempt to arrange (either directly or through the contractor) a visit to one or more of the stated references, and also reserves the right to make arrangements to contact or visit other installations that were not provided as references in response to this RFP.

14. Attach audited financial statements for the past three years or an explanation of why that is not available. State whether or not the proposer or any sub-contractor/partner has been involved in litigation within the last five years or has pending litigation arising out of contract performance. Exclude routine interpleader actions, garnishments, and similar routine matters that do not reflect on contract performance. Include all information on contract terminations, defaults, debarments or performance disputes arising out of the provision of related services. List all such contracts, reference numbers, contact persons and telephone numbers for the other parties, and a brief description of the facts surrounding each incident.

15. State whether or not the proposer or its principals have ever been involved in any kind of bankruptcy proceedings and provide a summary of all proceedings.

C. Approach and Methodology

1. Describe in detail and demonstrate the effectiveness of the proposer's project approach and methodology. Proposers are encouraged to propose an approach that they believe will most likely achieve the TLC's goals and objectives. If a phased approach to the implementation of the enhancements is recommended, the schedule of when each enhancement will be implemented should be clearly indicated.
2. Describe in detail and demonstrate the effectiveness of the proposer's approach in each of the following areas: project management, design and engineering, implementation, testing and operational quality controls.
3. Provide a project plan delineating all phases of the project and the timeline leading to implementation.
4. Demonstrate that the proposer has the capability to begin and complete the project in a timely manner. It is important that proposers take into consideration the critical nature of the City's need to expedite this project in terms of the commencement, achieving final acceptance, and the completion of the project.
5. Demonstrate that the proposer's solution and approach is the 'best overall value' for the TLC and its constituency (management companies, fleet operators, driver/owners, individual drivers, and the riding public).
6. Describe future phases of this initiative, listing future enhancements to the service offering that are on the technology horizon with a tentative timeline of availability.
7. Provide a work plan, including a qualitative and quantitative resource requirement (hours, personnel, and timeline), which provides an outline of expected personnel and resources (hours) required following project completion.

D. Conformity to Technical Requirements

Provide a complete technical description of the proposer's solution. All requirements should be addressed in the specific order presented below.

The TLC will evaluate solutions based on their degree of intuitive design and ease of operation. Systems that are simple to use and easy to understand will be viewed favorably. This should be considered from both the driver and the passenger perspectives.

Electronic Trip-sheet Data Collection

1. Demonstrate the proposer's ability to host and store trip-sheet data in a secure environment. Describe how this data would be made available to the TLC, fleets, owners, and drivers as needed.
2. The TLC will utilize trip-sheet data for a variety of analyses and studies. Describe the proposer's capability to locate any one vehicle, or a specified group of vehicles.
3. List all data requirements or protocols that the proposed system will require with respect to mapping functionality. The TLC may require trip-sheet data be transmitted to a central database as part of a future phase of this project. Such a database will be designed in an open architecture allowing for maximum flexibility. State whether or not the proposer has any concerns about a central database and if so, describe them.
4. Describe trip-sheet requirements and methods to maintain a highly accurate system. Data must be transferred in a secure fashion to ensure data integrity.
5. The contractors shall be required to work with the TLC to develop a data structure / format that will be consistent across all contractors. Describe the protocol and formats that the proposer believes will work best within these parameters.
6. Explain how trip-sheet data will be accessible and under what timeframes.
7. State whether or not there are any additional specific advantages not previously identified that the proposed AVL plan and system would provide to the City, the TLC, and the taxi industry, and if so, describe them.
8. With respect to the TLC's objectives, state whether or not the proposer is providing any similar solutions to government and/or commercial clients on a comparable scale, and if so, separately identify government applications and commercial applications, as applicable.
9. Provide an exact and detailed explanation of the proposed AVL technology including geographic coverage and accuracy to demonstrate that the proposed vehicle location system will provide vehicle position determination for the five boroughs of New York City and surrounding areas including Newark Airport and Westchester and Nassau Counties.
10. Explain how the proposed AVL system performs in the "urban canyons" of Manhattan. Provide data to support the claims.
11. Demonstrate how the vehicle location system compensates for momentary signal blockage or distortion.
12. List the mapping software and corresponding technology that is proposed. State minimum specifications required to store the map data. Identify how frequently the map will be updated. Provide procedures for updating the map data. Explain how often these updates should occur.
13. Identify the intervals at which the AVL system can update vehicle location. Describe the optimum interval for this application, and explain the variables that affect cost.

14. The passenger will use the map to track their journey through the City. The map should display the approximate position of the taxicab on the map. The passenger should also have zoom in and zoom out capabilities to see finer details of their location. Describe the expected accuracy of the cab position.
15. Diagram the flow of information from the vehicle location system to the trip database system.
16. Provide a detailed explanation of the proposed database architecture. State whether or not it is a centralized database and, if so, explain how it is constructed from trip records that may originate from different Service Providers.
17. State whether or not the proposed database architecture is a relational database or a spatial database.
18. State the maximum interval of time that vehicle locations will be stored in the vehicle location database. Describe the proposer's view on providing a data warehouse of vehicle trip data.
19. Explain how the proposed database management system can support SQL queries. Explain how it supports spatial queries.
20. Identify the size in bytes of a single trip record. Provide the maximum capacity of the proposed database. Describe the system's requirements for a transaction monitor (server).
21. Based on trip information given by the passenger, the database will facilitate the recovery of lost goods by providing a pool of taxicabs that may contain the lost goods. All data fields populated by the system must be searchable. In many instances, consumers can only provide partial identification numbers when they attempt to identify a taxicab or driver. Explain the benefits of utilizing location based technology and associated databases in the recovery of lost property. Identify how the proposed solution will accommodate database queries using partial numbers or "wild-card" searches. Note that the TLC would like to issue a single query that searches the database elements. The net result should be a file of cabs that are likely to have transported the passenger. Describe the query process when there are multiple databases.
22. Describe and demonstrate the proposer's capability to create and maintain an interface between the text messaging application and the trip-sheet database.
23. Access to the data may be required from multiple sources such as the TLC, other City agencies, fleet owners, individual cab owners, and drivers. Explain how this access would be provided and controlled.
24. Provide a detailed diagram and step-by-step description of the driver interface and specific actions that are required to provide the trip-sheet data.
25. State whether or not the proposed system will provide an end-of-shift report of the trip-sheet data collected for a given shift. State whether or not the report will be a summary of the shift or an itemized list of all trips for that specific shift. Indicate whether or not this report will be printed locally from the cab. If so, explain and provide examples. State whether or not this data can be exported to a standard removable storage device or disk.

Text Messaging

1. With respect to the TLC's objectives, state whether or not the proposer is providing any similar solutions to clients on a similar scale and if so, separately identify examples of government applications and commercial applications, as applicable. Demonstrate the proposer's practical experience as it relates to the needs of this project. Explain any other features or enhancements that could be of interest within this context.

2. Demonstrate the proposer's capability to deliver both one-way only text messaging to the taxicabs, as well as two-way text message capability. The TLC prefers not to provide the driver with a keyboard-like interface, but rather with a number of one-button responses. Demonstrate the system's capability to provide fixed responses using a push-button mechanism.
3. All City messages that are categorized as emergencies should have the ability to preempt any other text messages routing to medallion taxicabs. Demonstrate how the proposed system will allow for priority based preemption.
4. Provide a statement acknowledging that the TLC prefers to limit responses from TLC generated messages to acknowledgement or predetermined messages. The TLC prefers not to provide the driver with a keyboard-like interface, but rather a series of one-button responses. Explain the design of the messaging system. Describe how the proposer will ensure that any impact on driver or passenger safety is minimized.
5. Provide a detailed diagram and step-wise description of the interface and user's actions required to send messages and receive responses to "hot key" accepted messages. If a phased approach is proposed and these items change between phases, repeat this diagram and step-wise description for each proposed phase highlighting the changes.
6. Demonstrate the system's capability to route messages to a specific vehicle, a selected group of vehicles, or the entire fleet. Describe how the proposed solution will fulfill the TLC's objective to have a system capable of sending messages based on geographic area, partial medallion number, and partial driver license number.
7. Additionally, the TLC needs to send text messages to a group of taxicabs based on trip-sheet (location-based) information, such as sending a specific message to all cabs that dropped off at the intersection of 11th Street and Bleecker Street between 1 and 2 PM. Address the fact that multiple providers could be selected.
8. State whether or not the City should have any concerns in implementing text messaging in taxicabs, and if so, describe them.
9. Provide details with diagrams and words to clearly illustrate the workflow showing how the proposed system will provide text messaging.
10. Explain how the routing of text messages takes place. Describe the addressing system the proposer suggests for text messaging. If IP, describe any security concerns.
11. Provide a detailed diagram and step-wise description of the driver interface and driver actions required when receiving messages as well as receiving and responding to urgent messages.
12. The network and transport mechanisms for text messaging must be highly reliable. The proposer will provide a means to measure message delivery and provide the TLC monthly management reports showing message delivery statistics. Describe the message delivery statistics report that the system can provide, and the reliability of the network.
13. State the expected (mean) transit speed of a 256-byte message from a designated TLC location to a yellow cab.
14. Provide a technical description of the proposed text messaging system and include a description of any equipment the TLC would be required to install to originate messages.
15. Describe how the text messaging system interfaces with the trip database system to provide this ability to send messages based on geographic area, medallion number, and driver license number.
16. Explain how a text message can be stored in the system for later transmission to a cab that is temporarily out of coverage. State the number of attempts the system will make to send the message before terminating. Explain any time limitations that may be present.

17. Explain the need to encrypt text messages for this application. Describe any security requirements for the text messaging system.
18. Text messages may originate within the TLC, other City agencies, and perhaps fleet headquarters. Describe how the proposed system will accommodate the sending of messages from other locations. Describe the architecture of the proposed text messaging system. Explain how the sending/receiving of messages from an organization other than the TLC can be controlled.
19. Explain the policy and methods regarding SPAM. Describe any financial liability the City or the taxi industry might have with regard to SPAM messages.
20. Demonstrate the system's capability to send a text message to a cab in an emergency in near real-time.
21. Timely notification of fare opportunities will result in increased industry revenue. The TLC envisions that text messaging can be used to deploy cabs to areas of the City where there is an unusual demand for service or notify them of major traffic problems. Text messaging can help increase revenue opportunities by receipt of information about fare opportunities such as cruise ship arrivals. Many of such events are predetermined in advance. Explain the system's capability to schedule the sending of messages. State the administrative functions that the messaging system will provide.

Credit/Debit Card Acceptance

1. Provide a detailed diagram of the driver interface and a step-wise description of driver actions required to fully complete a credit/debit card transaction including a tip. Provide the same description from the passenger viewpoint.
2. The system must provide for credit acceptance and for offline (signature based) debit. Provide details with diagrams, words, and/or tables to clearly define how the proposed system would provide credit/debit card acceptance.
3. Explain how the driver will know that the status of the transaction: Authorized / Declined / In process / Complete.
4. New payment cards such as prepaid cards are gaining popularity and the installed system should be extensible for new payment technologies. For example, it is expected that the credit/debit card companies will deploy RFID cards and the system must accommodate their introduction. Demonstrate that the system will have flexibility to accommodate new services.
5. Research shows that in order to gain passenger acceptance, transactions should be performed in the rear of the cab. The transaction profile should be easy to understand and efficient. Provide a detailed diagram and step-wise description of the passenger interface and the actions required to fully complete both a successful transaction including tip and an unsuccessful transaction.
6. If PIN based debit transactions are accepted for cab rides, passengers may be charged "PIN fees" by card issuing banks. Cab riders would be concerned about the amount of the PIN fee and the lack of disclosure of the charge at the point of sale. State whether or not debit cards that require PIN fees can be blocked and if so, explain how. State whether or not PIN fees will be disclosed at the POS and if not, explain why.
7. Leasing agents receive "rent" on a weekly basis or on a daily basis. Explain the financial reconciliation process for both of these scenarios. State when funds from credit/debit card transactions will be available to the merchant.
8. Merchants require reports for shift change reconciliation, daily reconciliation, transaction details, and historical views of payments processed by the driver. Demonstrate that access to reports would be secure, simple, and in keeping with technology knowledge levels in the industry.

9. Each card transaction should be identified by medallion number, trip number, date, and time and will include the total fare including tolls and surcharges. Describe the ability to produce a record itemizing this. Include an illustration of the receipt.
10. An end of shift report detailing card transactions successfully processed through the system should be available to the driver. Provide a sample of an end of shift report that the system can generate.
11. Security and confidentiality of credit/debit card information must be maintained throughout the system. Demonstrate that the proposed solution fulfills this requirement.
12. Describe how the proposer will provide ongoing support for merchant services. Include how the proposer will deal with customer repudiations, lost transactions, duplicate transactions, and transaction queries. Provide a plan for archiving payment data and related reports for merchants.
13. Provide the name of the proposed Merchant Processor and Merchant Bank to provide the service. State whether the proposer plans to use a Merchant Service Provider or Independent Sales Organization and, if so, provide their names.
14. Merchants need to be able to access reports for shift level reconciliation, daily reconciliation, transaction details, and historical views of payments processed by driver. An end of shift report showing date, start time, end time, total miles, total revenue miles, number of revenue trips, number of card transactions, total credit/debit receipts, and total cash receipts shall be available to the driver and cab owner. Provide a sample of an end of shift report and other reports produced by the in-cab system.
15. State whether or not the system can provide a manual batch close or an auto batch close and if so, provide details. Provide the recommendation for a batch close process for the taxi industry.
16. Describe where the receipt printer will be located and explain why it is located there. Describe all options for location of the receipt printer.
17. State whether or not the proposer will provide capture of ISO8583 formatted transactions and whether or not the proposer recommends the use of ISO8583. Explain the proposer's recommendation for the transaction format of card transactions.
18. Explain the transaction set the proposer recommends for use by the cab driver. State whether or not there will be a need for a pre-authorization transaction for higher cost fares and, if so, describe that process.
19. The TLC prefers that the signature be waived for all credit card transactions similar to the Quick Payment Service implemented for gas stations and fast-food restaurants. Describe how the Merchant Bank can assist the TLC in achieving this goal. State how the proposer will leverage the relationships to facilitate obtaining the waiver of signature for taxicab transactions.
20. State whether or not the system performs electronic signature capture. If yes, state where electronic signature capture will be performed.
21. Explain how charge-backs and request for copies are processed in the system.
22. State whether or not the system supports PIN-based debit cards. If not, explain how the system can be upgraded to accept PIN-based debit cards and list the equipment and software that would need to be upgraded. Explain how keys can be loaded into the cab system.
23. The contractor will be required to provide ongoing support and education of the taxi industry about electronic payment processing costs. The objective is to ensure that credit/debit card processing costs are minimized. Describe the proposer's plan to meet this objective.
24. Demonstrate the system's capability to support American Express, Discover, Diner's Club, and JCB cards.

25. Describe in detail the settlement process for American Express, Discover, Diner's Club, and JCB cards.
26. State whether or not authorizations will be switched directly to American Express.
27. State whether or not the proposer's system will support Visa Merchant Direct Exchange.
28. Provide the expected mean time to respond to an authorization request measured from the time that a card swipe is completed and provide the expected 95-percentile response time.
29. Achieving a high level of availability of credit/debit card service is critical to the success of this program. Provide a recommendation for providing a floor limit authorization in the event of wireless network signal loss or other service failure.
30. It is desirable that cab owners receive a single invoice for all service enhancements. Explain the capability of billing for all service enhancements on the credit card merchant statement.
31. The contractor must offer a merchant account to every medallion taxi owner or owner of multiple taxis (fleets, agents). A description of the merchant account potential is provided in Section IV Part C. Describe in detail the proposer's plan for ensuring merchant account capability for all taxi owners. Describe ways in which the number of merchants processed could be reduced or consolidated. Additionally, some entities in the taxi industry may not meet credit standards or other requirements for establishing merchant accounts. Address this possibility, as all medallion taxicabs will be required to accept all major credit/debit cards. Describe the ways in which the TLC can facilitate the merchant signing process and attempt to remove unnecessary costs from the proposed system.
32. The TLC anticipates that taxicab owners are most likely to be the merchant of record. Explain the pros and cons of this scenario. Identify any other scenarios that may be advantageous to the TLC or its constituency. Explain the possibilities that exist for managing the merchant account process.
33. Provide a sample monthly merchant statement.

Passenger Information Monitor

Demonstrate that the proposal meets or exceeds each of the following objectives:

1. It is preferred that the PIM have a backlit color display, with a dimming mechanism, so that passengers can control the screen after TLC PSAs have run. Additionally the PIM should have a means to auto-adjust its brightness and contrast based on the amount of light in the cab. The passenger should be able to mute the audio portion after TLC PSAs have run. Demonstrate that the proposed PIM meets or exceeds these requirements.
2. The TLC believes that PIM content will evolve as the technology providing these enhancements will evolve over time. Describe future enhancements, and their roadmap to deliver them. Include a general discussion of additional hardware and software capabilities, taking into consideration system growth and development. Items to explore include:
 - Internet access
 - Location-specific commercial advertising
 - Coupon or print promotion generation (possibly tied to the receipt)
 - Electronic commerce including items like movie, hotel, and dinner reservations
3. More than 70% of all trips consist of frequent riders whose "personal vehicle" is essentially a taxicab. This creates a need to keep content fresh and up-to-date to deliver on passenger expectations and achieve acceptance. Conversely, much of the TLC public service and core information can be standardized and updated on a much less frequent basis. Logistically it is difficult to physically update

- up to 13,000 medallion taxis and therefore some form of remote update for changing information will be needed. Fully describe how content will be updated.
4. The PIM will be used to supply information to passengers. This includes items such as news, weather, sports, and stock quotes among others. Describe how this type of content will be delivered to the PIM.
 5. Demonstrate that the contractor will provide a consistent, high-quality experience that has added value for drivers, passengers, and the TLC.
 6. State the frequency in which “looped” content repeats itself. Demonstrate that the proposer will keep content fresh and interesting for all passengers. Describe in detail the required update intervals for various types of content.
 7. Describe the storage requirements for the mapping software and map data in the proposal. Explain how the street map is updated and how often the updates must occur to achieve reasonable accuracy.
 8. Demonstrate the system's capability to process, store, and report user interactivity. Media providers will be very interested in being able to track the success of their content based on level of interest, number of views, etc. Additionally the TLC may wish to conduct in-cab surveys on various issues; describe how this can be accomplished. Demonstrate that the proposed solution can track and report how often passengers access specific content.
 9. State the capabilities of measuring how often specific content is displayed on the PIM. Identify how this data can be merged with other data elements that currently reside in the taximeter. For example, the number of passengers is captured in the meter. Explain the various types of reports that can be generated from this data collection. Provide specific examples of such reports.
 10. There is substantial concern in the industry over the capability of a typical medallion taxicab to supply the power and services necessary to run the PIM and other equipment in this project. Describe the power and services requirement of the proposed system, its impact on typical medallion taxicabs, and methods to provide additional power that do not void vehicle warranties.
 11. With respect to the PIM, state whether or not the proposer is providing any solutions to clients on a similar scale and if so, separately provide examples of government applications and commercial applications, as applicable.
 12. Provide a flow-chart or diagram which shows the PIM displays for a credit/debit card transaction including the input of a tip.
 13. State the size of the proposed screen and its resolution. Explain the rationale in selecting the size.
 14. The proposed PIM and associated equipment must have the ability to integrate the location data with a street map and display to the passenger the cab location at fixed multi-second intervals. Clearly define the time increments offered in the proposal for updating the cab position on the displayed map.
 15. Describe in detail the construction of the PIM and its mounting in the cab.
 16. The great majority of cabs have a plastic security partition protecting the driver. Approximately 475 vehicles have been issued exemptions from having the security partition. For these cabs, the PIM should be mounted safely and securely within the rear of the cab to protect both the driver and passenger from harm in case of a collision. Explain how the PIM can be safely and securely installed in vehicles without a partition.
 17. Provide recommendations on technology and operational procedures to update banner ads, interactive content and video clips.

18. State whether or not the proposer recommends that hard media (DVDs, for example) should be used to update content. Explain the operational procedures needed to install and update the hard media in up to 13,000 yellow cabs.

Technology Enhancements Associated to Revenue

1. The City believes that as the medallion taxicab fleet implements its technological enhancements, it will stimulate new advertising market segments. The contractor will have the opportunity to broker advertising business arrangements on behalf of medallion taxicab owners who are providing the millions of residents, commuters, and other visitors in New York City with a basic transportation service.

2. The contractor will provide quarterly and annual reports outlining the itemized gross revenue generated by the NYC taxicabs. Provide examples of these reports.

Wireless Telecom Services

1. Various types of digital networks provide wireless communications in the NYC metro area. Describe the proposed wireless network. State the criteria used in selecting that network. Describe what makes this network better than competing wireless technologies.

2. One way to quantify wireless coverage is with a visual representation of a carrier's network footprint. Provide a network map for each borough that clearly displays the coverage area within that borough where data services of 20Kbps of throughput can be achieved 95% of the time on first attempt. Also provide a coverage map where data services of 100Kbps can be achieved 95% of the time on the first attempt. Data services must include wireless credit card transactions, text messaging, and file transfer capabilities. Similarly provide a map for that of Nassau County, Westchester County, and Newark Airport (EWR). Explain the processes used in developing the coverage maps. State whether or not the coverage information has been audited or certified by a third party. Explain how the proposer has validated the coverage area.

3. NYC has a very unique radio frequency (RF) environment. Urban canyons created by skyscrapers throughout the City present coverage challenges. Additionally, lack of network infrastructure makes coverage an issue in outer boroughs. Demonstrate that the proposed network will compensate for these issues and provide adequate coverage in both of these areas.

4. The TLC understands that on occasion network failures can occur. Describe the back-up facilities and redundancy that the proposed network provides at the base station level, cell site level, regional network elements etc.

5. Provide an overview of the proposed carrier's network monitoring capabilities. Describe the type of notification system that the proposer has in place that can assist the TLC in managing a network communication outage. Explain the type of trouble isolation and repair guarantees the proposer is offering for network related issues. State whether or not there is any variance in restoral commitments for cell site connectivity issues and cell site hardware failures and if so explain each.

6. Momentary lapse of wireless connectivity may occur during the course of any given shift. This can be caused by a variety of elements. Demonstrate that the proposed solution will effectively handle such an event given our two objectives: (a) capture and transmission of location data, and (b) provide the ability for electronic payment processing.

7. State the average bandwidth/speed provided for sending a 250 character message to a cab from a TLC facility.

8. State the capacity of the wireless network to transmit a 5 MB video clip to up to 13,000 cabs.

9. Provide a network diagram or flow chart of each piece of equipment utilized in processing a credit/debit card transaction. State whether or not there are any single points of failure in this communication path (transmit or receive) and, if so, identify each.
10. Clearly state any planned and committed upgrades in available bandwidth or coverage that might be advantageous to this project.
11. Describe the type of power back up that exists at the proposed cell sites.

Network Management and Technical Support

1. Describe the overall design availability of the proposed services and how the availability is calculated. Second, describe in detail the overall availability rate of the system as a whole.
2. Define the availability rates of the major components of the system—wireless network, in-cab equipment, hosting centers, and credit card processing center.
3. List the components of the proposed system that are currently in operation and what components need to be constructed.
4. Demonstrate that the proposer will achieve a high availability for their system. Describe network redundancies, geographic dispersion, and power supply back up for all major components of the proposed system.
5. Provide details from specific existing customer bases that describe unplanned downtimes of each component that is being provided. Clearly express the overall impact of such downtimes and system unavailability.
6. Describe all key databases required to operate the proposed system and where the proposer maintains a backup copy of the database.
7. Describe the recovery procedure in-place for all major systems.
8. List all major components of the proposed network that can be monitored from the proposed network control center (NCC).
9. Describe in detail how the TLC will be able to ping the major components from a TLC facility.
10. Define the components of the in-cab equipment that can be monitored from the NCC.
11. State the location of the NCC. If a back-up facility is maintained list it also. Describe the staffing of such facilities.
12. Describe the proposed network support staff. Demonstrate the proposer's capability to provide 24x7x52 help desk support.
13. State the average speed to answer (ASA) for 1st level help desk calls.
12. Provide a diagram that shows the problem flow of the proposed problem resolution system.
13. Describe the proposer's responsibility and ownership of report troubles. Demonstrate the proposer's ability to provide a single point of contact for trouble reporting and resolution.
14. Describe the problem management software tools that the proposer uses to manage help-desk services.
15. Provide an overview of the training to be provided to the help desk staff. Explain the level of expertise of the help-desk staff in diagnosing problems with in-cab equipment and in managing network troubles.

16. Complete the Warranty Table provided in *Attachment G*. This table presents warranty period for each of the major hardware components of the proposed system, as well as MTBF and MTTR measurements. The warranty period should be entered as months. Proposers should place an “X” in the column labeled “Parts” if parts are included in the warranty. Similarly, proposers should place an “X” in the column labeled “Labor” if labor is included in the warranty. The MTBF and MTTR should be expressed in hours. On a separate page, explain how the MTBF and MTTR number was derived—calculated, measured, or vendor supplied. Also include any explanation of the details of the warranty, as needed.
17. Provide a plan that describes how the NYC fleet of up to 13,000 yellow cabs will receive required equipment maintenance and service.
18. State the expected mean time to resolve a problem. State the ninety-percentile time to resolve a problem.
19. Provide a copy of the proposed problem escalation procedures.
20. Describe the proposed capacity planning procedures.
21. Provide network management level statistics that will be available to the TLC. Demonstrate the network and problem resolution performance. Identify if such statistics can be accessed via an internet browser.
22. Provide a copy of the proposed Disaster Recovery Plan for all major components of the system.
23. The proposed system should be operational 7 x 24 x 52. State whether or not the proposer expects to have any scheduled “downtime” of the system and if so, describe it and explain the notification process for such downtime.
24. Provide a detailed plan that outlines proposer’s service offering and on-going support services for the entire contract term. Include a description of help desk capability for every service enhancement area for example, credit/debit card processing, text messaging, etc. Problems will be of either a business nature (merchant reconciliation) or of a technical nature (malfunctioning equipment) and include:
 - Credit/debit card processing
 - Billing support
 - Training
 - PIM Content support
 - Database support – management reporting
25. Describe the proposer’s help desk organization and how it will provide support to each of the above cited areas.
26. Indicate the proposed response time for major problems and minor problems. Explain the capability that the proposer and the TLC will have to monitor system performance and network performance.
27. Describe the processes and procedures for warranty and repair services. Explain the proposed methods for troubleshooting equipment failures within the taxicab. Provide a summary of all warranties provided.

System Architecture

1. Provide a high level diagram of the architecture of the proposed system.

2. Describe where capture of credit/debit card transactions takes place in the system.
3. State whether or not there are any gateways in the system and, if so, list the gateways and describe any redundancies.
4. Describe how text messages traverse the network from a TLC designated origin to a taxicab. Describe what happens when network coverage is lost.
5. Describe how AVL data traverses the network and how does this data update the display on the PIM.
6. Provide a high level diagram of the architecture of the in-cab system.
7. Describe where the intelligence of the in-cab system resides.
8. State whether or not the intelligence (computer module) is separate from the other components.
9. Describe the types and sizes of memory required of the PIM for optimum functionality of content delivery (Map, TLC PSAs, and Additional Content).
10. Describe the network protocol used to communicate from the in-cab computer to the other components.
11. Describe the in-vehicle data bus architecture and state the bandwidth of the data bus.
12. Describe the bandwidth required to transmit video from the computer memory to the PIM display.
13. Describe the connectivity to the meter, printer, wireless modem, PIM, credit card reader, and driver display.
14. Describe the expansion ability of the proposed system. State whether expansion boards can be added.
15. Describe the number and type of ports included on the in-vehicle computer.
16. Describe the ability of the proposed system to support additional intelligent devices such as a vehicle dynamics "black box" or an external display.
17. Describe the operating system used in the in-cab computer.
18. Describe the programming language used for in-cab applications. Describe how programming changes are implemented.

System Security and Privacy

The proposed system will process passenger financial data. This information must be secure and confidential. Address the following issues:

1. Credit/debit card transactions will be transmitted over a wireless network from the cab. Describe how these transactions are protected from being intercepted using some type of listening device.
2. Discuss any security / encryption features of the underlying wireless network. Include a description of its strengths and weaknesses.
3. Describe in detail the inherent security measures with any wireless component of the system. Explain any security risks that are present, and any solutions for eliminating such risks.
4. State whether or not the proposer recommends installing a software based security client or a hardware based security client in the cab. In either case, explain.
5. Describe any recommendation for security protection other than SSL and explain why.

6. State if credit/debit card transactions are stored in any location in the system. If so, list all locations where credit/debit card transactions will be stored.
7. State whether or not the backbone network of the wireless network is IP based.
8. Describe how the proposer will provide security in the backbone of the wireless network. State whether or not the wireless backbone is accessible via the Internet.
9. Explain how sites will be protected from security breaches for any hosted content or hosted database.

E. Price Proposal

It is the intent of the City through this RFP to establish maximum pricing for equipment and services that will be offered to the industry. Proposers are encouraged to propose innovative payment structures including volume discounts. The City reserves the right to select any payment structure that is in the City's best interest. For the purposes of comparison, however, all proposers are required to submit a price proposal that follows these guidelines:

1. Complete *Attachment B- Price Proposal Worksheet*, which will indicate an overall "price per taxi" for all services and equipment, as follows:

- One-time acquisition costs
- Recurring lease model (if applicable)
- One-time installation costs
- Recurring monthly service costs
- Credit /debit processing fees
- Value added services

The price proposal should be submitted in paper format as part of the proposal, and (optionally) as an electronic copy in its original MS Excel form. All costs and rates quoted shall, if a contract is awarded, be the maximum pricing for the term of the contract. Provide a complete summary of all equipment prices, including for purchase and installation.

2. Provide (if applicable) an itemized list of items and services that the proposer is offering at no cost to the TLC or the taxi industry.

3. State whether or not any quantity discounts will be offered (e.g., for equipment purchases) and if so, provide a description of each.

4. Contractors shall provide maintenance plans that provide 7x24 coverage, however some taxis operate single shift vehicles. Contractors may offer maintenance plans of less than 7x24 hours to suit such taxicabs in addition to 7x24 maintenance plans. Provide a schedule of maintenance fees for each of the following maintenance programs:

- 7 x 24 x 52
- 7 x 12 x 52
- 5 x 24 x 52
- 5 x 12 x 52
- Time & Materials

5. State whether or not the applicable price(s) indicated in *Attachment B* reflect any fees for wireless access and, if so, fully describe such fees.
6. State whether or not the applicable price(s) indicated in *Attachment B* reflect any fees for vehicle location services and, if so, fully describe such fees.
7. Fully describe all fees associated with credit/debit card acceptance, including the discount rate showing interchange rate and markup for MasterCard and Visa transactions. State whether the discount rate includes authorization and capture fees.
8. State whether or not telecommunications costs are included in the authorization fee and, if so, fully describe such costs.
9. State whether or not there are any fees associated with chargebacks and, if so, fully describe such fees.
10. State whether or not the credit/debit card pricing is volume driven and if so, provide prices assuming each of the following monthly volumes and average ticket sizes: monthly volumes of 200K, 500K, 1MM, and 2MM average ticket size of \$10 and \$15.
11. State whether or not the applicable price(s) indicated in *Attachment B* reflect any fees for text messaging and, if so, fully describe such fees.
12. State whether the proposer will provide a database system with the text messaging and AVL applications, and if so, fully describe all costs associated with the database application. Itemize items such as hardware, software, training, documentation, and installation, etc.
13. Fully describe all fees for network management and help desk support.
14. List and fully describe all software fees.
15. State whether or not the prices indicated in *Attachment B* reflect project management fees and, if so, list and fully explain such fees.
16. State whether or not the prices indicated in *Attachment B* reflect consulting fees and, if so, list and fully explain such fees.
17. State whether or not the prices indicated in *Attachment B* reflect any other fees, charges, or costs associated with the proposal and, if so, list and fully explain such fees.
18. State whether or not the proposer offers an equipment leasing/rental option and, if so, fully explain all terms for the rental/lease options.
19. Provide an explanation of how revenue generated from limited commercial advertising and sponsorships will affect pricing.

VII. PROPOSAL CHECKLIST

The Proposal Package shall contain all materials listed in *Attachment F*. Proposers should utilize Attachment F as a “checklist” to assure completeness prior to submitting their proposal to the TLC.

VIII. PROPOSAL EVALUATION AND CONTRACT AWARD PROCEDURES

A. Evaluation Procedures

All proposals accepted by the TLC will be reviewed to determine whether they are responsive or non-responsive to the requirements of this RFP. Proposals that are determined by the TLC to be non-responsive will be rejected. The TLC's Evaluation Committee will evaluate and rate all remaining proposals based on the Evaluation Criteria prescribed below. The TLC reserves the rights to conduct site visits or interviews and to request that contractors make presentations or demonstrations, as the TLC deems appropriate. Although discussions may be conducted with contractors submitting acceptable proposals, the TLC reserves the right to award contracts on the basis of initial proposals received, without discussions; therefore, the contractor's initial proposal should contain its best technical and price terms. No proposer will have any rights against the City arising from an invitation to engage in, or by engaging in, negotiations.

B. Evaluation Criteria

Relevant Experience & Organizational Capability	Weight 30%
Approach and Methodology	Weight 15%
Technical Requirements	Weight 55%
Total	Weight 100%

C. Basis for Contract Award

A contract will be awarded to the responsible contractors whose proposals are determined to be the most advantageous to the City, taking into consideration the price and such other factors or criteria that are set forth in this RFP. Contract award shall be subject to the timely completion of contract negotiations between the TLC and each selected contractor.

IX. APPENDIX A

A. Complaints. The New York City Comptroller is charged with the audit of contracts in New York City. Any contractor who believes that there has been unfairness, favoritism or impropriety in the proposal process should inform the Comptroller, Office of Contract Administration, 1 Centre Street, Room 835, New York, NY 10007; the telephone number is (212) 669-3000. In addition, the New York City Department of Investigation should be informed of such complaints at its Investigations Division, 80 Maiden Lane, New York, NY 10038; the telephone number is (212) 825-5959.

B. Applicable Laws. This Request for Proposals and the resulting contract award(s), if any, unless otherwise stated, are subject to all applicable provisions of New York State Law, the New York City Administrative Code, New York City Charter and New York City Procurement Policy Board (PPB) Rules. A copy of the PPB Rules may be obtained by contacting the Mayor's Office of Contract Services at (212) 788-0010.

C. General Contract Provisions. Contracts shall be subject to New York City's general contract provisions, in substantially the form that they appear in "Appendix A—General Provisions Governing Contracts for Consultants, Professional and Technical Services" or, if the TLC utilizes other than the formal Appendix A, in substantially the form that they appear in the TLC's general contract provisions. A copy of the applicable document is available through the Authorized TLC Contact Person.

D. Contract Award. Contract award is subject to each of the following applicable conditions and any others that may apply: New York City Fair Share Criteria; New York City MacBride Principles Law; submission by the contractor of the requisite New York City Department of Business Services/Division of Labor Services Employment Report and certification by that office; submission by the contractor of the requisite VENDEX Questionnaires/Affidavits of No Change and review of the information contained therein by the New York City Department of Investigation; all other required oversight approvals; applicable provisions of federal, state and local laws and executive orders requiring affirmative action and equal employment opportunity; and Section 6-108.1 of the New York City Administrative Code relating to the Local Based Enterprises program and its implementation rules.

E. Contractor Appeal Rights. Pursuant to New York City's Procurement Policy Board Rules, contractors have the right to appeal TLC non-responsiveness determinations and TLC non-responsibility determinations and to protest the TLC's determination regarding the solicitation or award of a contract.

F. Multi-Year Contracts. Multi-year contracts are subject to modification or cancellation if adequate funds are not appropriated to the TLC to support continuation of performance in any City fiscal year succeeding the first fiscal year and/or if the contractor's performance is not satisfactory. The TLC will notify the contractor as soon as is practicable that the funds are, or are not, available for the continuation of the multi-year contract for each succeeding City fiscal year. In the event of cancellation, the contractor will be reimbursed for those costs, if any, which are so provided for in the contract.

G. Prompt Payment Policy. Pursuant to the New York City's Procurement Policy Board Rules, it is the policy of the City to process contract payments efficiently and expeditiously.

H. Prices Irrevocable. Prices proposed by the contractor shall be irrevocable until contract award, unless the proposal is withdrawn. Proposals may only be withdrawn by submitting a written request to the TLC prior to contract award but after the expiration of 90 days after the opening of proposals. This shall not limit the discretion of the TLC to request contractors to revise proposed prices through the submission of best and final offers and/or the conduct of negotiations.

I. Confidential, Proprietary Information or Trade Secrets. Contractors should give specific attention to the identification of those portions of their proposals that they deem to be confidential, proprietary information or trade secrets and provide any justification of why such materials, upon request, should

not be disclosed by the City. Such information must be easily separable from the non-confidential sections of the proposal. All information not so identified may be disclosed by the City.

J. RFP Postponement/Cancellation. The TLC reserves the right to postpone or cancel this RFP, in whole or in part, and to reject all proposals.

K. Contractor Costs. Contractors will not be reimbursed for any costs incurred to prepare proposals.

L. Charter Section 312(a) Certification.

The TLC has determined that the contract(s) to be awarded through this Request for Proposals will not directly result in the displacement of any New York City employee.

Agency Chief Contracting Officer

Date

X. ATTACHMENTS

ATTACHMENT A: PROPOSAL COVER LETTER TEMPLATE

To be submitted on proposer letterhead

Date:

RE: NYC MEDALLION TAXICAB TECHNOLOGY ENHANCEMENTS

PIN: 5P00198

Proposer Company Name: _____

Address: _____

Tax Identification #: _____

Proposer's Contact Person:

Name: _____

Title: _____

Telephone #: _____

Proposer's Authorized Representative:

Name: _____

Title: _____

Signature: _____

Date: _____

ATTACHMENT B – PRICE PROPOSAL WORKSHEET

The price proposal worksheet is provided below, however, in the interest of time and accuracy, the TLC prefers that proposer's submit this worksheet as an excel workbook. The Microsoft Excel workbook version of this proposal form is available from the contact person listed in Section I of this RFP. Additionally, the Microsoft Excel file can be downloaded from this internet address:

<http://www.nyc.gov/html/tlc/downloads/excel/proposal.xls>

Instructions

- A. It is preferred that the pricing proposal worksheet be completed electronically, however proposers may complete it manually on paper using the worksheets provided.
- B. Input the proposers' names and date submitted for all worksheets provided in the pricing proposal worksheet.
- C. Summary information regarding the pricing contained in this workbook will be displayed as read-only information on the "Summary" section provided. This worksheet will only be filled in for electronic submission, responses on paper only may optionally provide summary information.
- D. To propose core functionality pricing, described as pricing for the functionality to meet the requirements stated in the Request for Proposal (RFP) use the worksheets as detailed below.
 1. Provide the list of all hardware and software with the purchase price and installation price stated separately. Use the section entitled "1-Purchase Model". Any one-time or setup fees for purchasing hardware and software should be stated using this worksheet and be stated as Installation Price. Express purchase pricing quoted on a per vehicle basis.
 2. Provide the list of all hardware and software with the monthly lease price and installation price stated separately. Use the section entitled "2-Lease Model". Any one-time or setup fees for leasing hardware and software should be stated using this worksheet and be stated as Installation Price. Express lease pricing quoted on a per vehicle basis. Lease pricing is optional.
 3. Express any monthly recurring charges, NOT including monthly hardware and software leasing prices as stated on the "2-Lease Model" section or merchant/processing flat rate per month fees as stated on the "4-Fees" section. Use the section entitled "3-Recurring Charges". Express recurring cost pricing quoted on a per vehicle basis.
 4. , a flat fee per transaction, a one time merchant fee, a one time vehicle fee, flat rate merchant fee per month or a flat rate vehicle fee per month. Use the section entitled "4-Fees".
 5. Provide an assumed average rate per transaction for Visa & MasterCard (credit cards and pinless debit cards) and an assumed average rate for other cards using the section entitled "4-Fees". For each rate provided, express the percentage of the total transactions per month (estimated at 120 per vehicle) that will use each card listed. The sum of the provided percentages of monthly transactions should total 100%.
- E. Use the section entitled "5-Value Added" to propose value-added functionality pricing, described as pricing for additional functionality to exceed the requirements stated in the Request for Proposal (RFP) that will add value for the medallion taxicab industry or passengers. For any value-added functionality, the pricing should include both a purchase model and may include a lease model and any applicable monthly recurring charges and merchant, vehicle & transaction fees.

ATTACHMENT B – (Continued)

1. For value-added functionality, provide the list of all additional hardware and software with the purchase price and installation price stated separately. Use the section entitled "5-Value Added" and fill in the section entitled "Value Added Purchase Model". Any one-time or setup fees for purchasing hardware and software should be stated using this worksheet and be stated as Installation Price. Express all value-added purchase pricing quoted on a per vehicle basis.
 2. For value-added functionality, provide the list of all additional hardware and software with the monthly lease price and installation price stated separately. Use the section entitled "5-Value Added" and fill in the section entitled "Value Added Lease Model". Any one-time or setup fees for leasing hardware and software should be stated as Installation Price. Express all value-added lease pricing quoted on a per vehicle basis.
 3. For value-added functionality, provide any additional monthly recurring charges, NOT including monthly fees or charges stated on any other worksheet. Use the section entitled "5-Value Added" and fill in the section entitled "Value Added Monthly Recurring Costs". Express all value-added recurring cost pricing quoted on a per vehicle basis.
 4. For value-added functionality, proposers should provide any applicable additional merchant and transaction fees expressed either as a percentage of the transaction, a flat fee per transaction, a one time merchant fee, a one time vehicle fee, flat rate merchant fee per month or a flat rate vehicle fee per month. Use the worksheet entitled "5-Value Added" and fill in the section entitled "Value Added Merchant & Transaction Fees".
 5. Proposers who provide additional pricing for value added functionality should note that providing this information to the City, including price schedules, does not obligate the City or Medallion owner to contract for these services.
- F. Enter all assumptions to be considered regarding the RFP response. A worksheet entitled "6-Assumptions" has been provided for this purpose.
1. Include the item reference number for all assumptions that reference a specific item number from another worksheet.
 2. Type 'General' as the item reference if not specifically referring to a item in another worksheet.
- G. Express all pricing quoted in the Pricing Proposal Worksheet in U.S. Dollars.

End of Page

ATTACHMENT B: Summary

Vendor Name:	
Submission Date:	

Purchase Model	
Initial Costs	Cost
Hardware - Total Purchase Price	
Software - Total Purchase Price	
Hardware - Total Installation Price	
Software - Total Installation Price	
One Time Fee - Per Vehicle	
One Time Fee - Per Merchant	
Total Initial Costs	
Monthly Recurring Costs	
Monthly Recurring Costs	Cost
Monthly Recurring Charges	
Flat Rate Per Month Fee - Per Vehicle	
Flat Rate Per Month Fee - Per Merchant	
Average Monthly Transaction Cost	
Total Monthly Recurring Costs	
Annual Period	
Annual Period	Cost
Year 1	
Year 2	
Year 3	
Grand Total	

Lease Model	
Initial Costs	Cost
Hardware - Total Installation Price	
Software - Total Installation Price	
One Time Fee - Per Vehicle	
One Time Fee - Per Merchant	
Total Initial Costs	
Monthly Recurring Costs	
Monthly Recurring Costs	Cost
Hardware - Monthly Lease Fees	
Software - Monthly Lease Fees	
Monthly Recurring Charges	
Flat Rate Per Month Fee - Per Vehicle	
Flat Rate Per Month Fee - Per Merchant	
Average Monthly Transaction Cost	
Total Monthly Recurring Costs	
Annual Period	
Annual Period	Cost
Year 1	
Year 2	
Year 3	
Grand Total	

ATTACHMENT B: 1-Purchase Model

Vendor Name:	
Submission Date:	

All costs are to be quoted on a price per vehicle basis
 Detail all hardware and software costs using the list below and breakout installation from purchase cost
 Do not include any fees or one-time costs associated with card transactions in this worksheet
 Only the fees listed here will be allowed to be charged

Purchase Model	Installation Price ¹	Purchase Price
Total Hardware		
Total Software		

Item	Itemized Hardware List	Installation Price ¹	Purchase Price
PH1			
PH2			
PH3			
PH4			
PH5			
PH6			
PH7			
PH8			
PH9			
PH10			
PH11			
PH12			
PH13			
PH14			
PH15			
Item	Itemized Software List	Installation Price ¹	Purchase Price
PS1			
PS2			
PS3			
PS4			
PS5			
PS6			
PS7			
PS8			
PS9			
PS10			

¹Include any setup or one-time costs as Installation Price

ATTACHMENT B: 2-Lease Model

Vendor Name:	
Submission Date:	

All prices are to be quoted on a price per vehicle basis
 Detail all hardware and software costs using the list below and breakout installation cost from lease price
 Do not include any fees or one-time costs associated with card transactions in this worksheet
 Lease pricing is optional

Lease Model	Installation Price ¹	Monthly Lease Price
Total Hardware		
Total Software		

Item	Itemized Hardware List	Installation Price ¹	Monthly Lease Price
LH1			
LH2			
LH3			
LH4			
LH5			
LH6			
LH7			
LH8			
LH9			
LH10			
LH11			
LH12			
LH13			
LH14			
LH15			
Item	Itemized Software List	Installation Price ¹	Monthly Lease Price
LS1			
LS2			
LS3			
LS4			
LS5			
LS6			
LS7			
LS8			
LS9			
LS10			

¹Include setup or one-time costs as Installation Price

ATTACHMENT B: 3-Recurring Charges

Vendor Name:	
Submission Date:	

Detail all monthly recurring charges expressed on a monthly basis that will be charged per vehicle
 Recurring monthly merchant costs should be stated using worksheet 4-Fees
 Do not include monthly merchant & transaction fees in this worksheet
 Only the fees listed here will be allowed to be charged

Monthly Recurring Costs	Price
Total	

Item	Itemized Monthly Recurring Costs	Price
R1		
R2		
R3		
R4		
R5		
R6		
R7		
R8		
R9		
R10		
R11		
R12		
R13		
R14		
R15		
R16		
R17		
R18		
R19		
R20		

ATTACHMENT B: 4-Fees

Vendor Name:	
Submission Date:	

1. List all merchant & transaction processing fees and categorize them into one of the six categories listed below. Fees should be given for each card type.
2. Only the fees listed here (F1-F30) will be allowed to be charged.
3. Enter the average transaction fee percentage and flat rate per transaction for Visa, MasterCard (credit card and pinless debit card) and an average for 'Other' cards.

Total Processing Fees				Flat Rate/Month	1 Time Fee	Flat Rate/Month	1 Time Fee
				Merchant	Merchant	Vehicle	Vehicle
Item	Fee Description	% Rate of Transaction	Flat Rate Per Transaction	Flat Rate/Month Merchant	1 Time Fee Merchant	Flat Rate/Month Vehicle	1 Time Fee Vehicle
F1							
F2							
F3							
F4							
F5							
F6							
F7							
F8							
F9							
F10							
F11							
F12							
F13							
F14							
F15							
F16							
F17							
F18							
F19							
F20							
F21							
F22							
F23							
F24							
F25							
F26							
F27							
F28							
F29							

ATTACHMENT B: 4-Fees (Continued)

Assumptions for Average Monthly Transaction Costs			
Transactions per month Assumption per Vehicle	120		
Taximeter Fare Amount Assumption per Transaction	\$10.00		
Card Type	% of Monthly Transactions 1	Avg. Rate Per Transaction 2	Average Monthly Fee
MasterCard - Credit Card			
Visa - Credit Card			
MasterCard - Pinless Debit Card			
Visa - Pinless Debit Card			
Other Card Types			
Total			

1. Total of % of Monthly Transactions must equal 100%. Assume a representative mix of the card types listed in your assumption.
2. Average rate per transaction must include both the flat rate per transaction and the percentage rate per transaction times \$10.00
3. For example: Average Flat Rate/Tax of \$0.05 plus 1% of \$10.00 = \$0.15 Average Rate per Transaction

End of Page

ATTACHMENT B: 5-Value Added Services

Vendor Name:	
Submission Date:	

1. Detail all additional services beyond minimum RFP requirements.
2. Do not include any core functionality pricing already itemized in worksheets 1-4 in this worksheet.
3. Only the fees listed here will be allowed to be charged.

Value Added Purchase Model		Installation Price	Purchase Price
Total Value Added Hardware Purchase			
Total Value Added Software Purchase			
Item	Itemized Value Added Hardware List	Installation Price	Purchase Price
V1			
V2			
V3			
V4			
V5			
Item	Itemized Value Added Software List	Installation Price	Purchase Price
V6			
V7			
V8			
V9			
V10			

End of Page

ATTACHMENT B: 5-Value Added Services (Continued)

Value Added Lease Model		Installation Price	Monthly Lease Price
Total Value Added Hardware Lease			
Total Value Added Software Lease			
Item	Itemized Value Added Hardware Lease List	Installation Price	Monthly Lease Price
V11			
V12			
V13			
V14			
V15			
Item	Itemized Value Added Software Lease List	Installation Price	Monthly Lease Price
V16			
V17			
V18			
V19			
V20			

Value Added Monthly Recurring Costs		Price
Total		
Item	Itemized Value Added Recurring Costs	Price
V21		
V22		
V23		
V24		
V25		

	Flat Rate/Month	1 Time Fee	Flat Rate/Month	1 Time Fee
Value Added Merchant & Transaction Fees	Merchant	Merchant	Vehicle	Vehicle

Item	Value Added Fee Description	% Rate of Transaction	Flat Rate Per Transaction	Flat Rate/Month Merchant	1 Time Fee Merchant	Flat Rate/Month Vehicle	1 Time Fee Vehicle
V26							
V27							
V28							
v29							
v30							

ATTACHMENT B: 6-Assumptions

Vendor Name:	
Submission Date:	

1. Assumptions referencing an item number from another worksheet should include the item reference number.
2. Type 'General' as the item reference if not specifically referring to a item in another worksheet.

Item	Item Reference	Assumption
A1		
A2		
A3		
A4		
A5		
A6		
A7		
A8		
A9		
A10		
A11		
A12		
A13		
A14		
A15		
A16		
A17		
A18		
A19		
A20		
A21		
A22		
A23		
A24		
A25		
A26		
A27		
A28		
A29		
A30		
A31		
A32		
A33		
A34		

ATTACHMENT C: ACKNOWLEDGMENT OF ADDENDA

(To be submitted on proposer letterhead)

Date:

RE: NYC MEDALLION TAXICAB TECHNOLOGY ENHANCEMENTS ADDENDUM

PIN: 5P00198

Proposer Company Name: _____

Address: _____

Tax Identification #: _____

The following addenda were received by <<Company Name>> on the dates listed below:

Addendum Title / Date / Date Received.

Proposer's Authorized Representative:

Name: _____

Title: _____

Signature: _____

Date: _____

ATTACHMENT D: PRE-PROPOSAL CONFERENCE FORM



Request for Proposals for NYC Medallion Taxicab Technology Enhancements Conference

March 15th, 2005

Department of Citywide Administrative Services

2 Washington Street, Room 1980

New York, NY 10004

The following individuals will be attending the Request for Proposals Conference on NYC Medallion Taxicab Technology Enhancements:

Name	Company	Title	Email

ATTACHMENT E: TAXICAB INDUSTRY OVERVIEW

Owners

While all taxicabs deliver the same core transportation services, New York City taxicabs are owned and operated in a variety of ways. While the diversity in taxicab operations has developed over the past 30 years, this is not apparent to the riding public. Service to passengers is provided in the same manner, while cabs are operated in a variety of ways. Prior to the early 1970s, cabs were operated in one of two ways:

- Taxis with individually owned licenses were driven by the medallion owner.
- Fleet cabs were dispatched each shift out of central garages that operated anywhere from 25 to several hundred cabs.

Today, taxis are operated primarily in three basic ways:

- **Owner-operators:** In these cases, an individual owns the medallion and the vehicle, and they drive one shift. Forty percent of this segment of owner-drivers lease their cabs to other driver(s) for a second shift.
- **Fleet-type operators** that dispatch cabs from a central garage, leasing to drivers by the shift. Fleets typically own the medallion and the vehicle. Drivers pay a lease fee for each shift they work and return the cab to the garage at the end of the shift. TLC officially recognizes some of these operators as fleets; others are recognized as “agents” and operate in essentially the same way.
- **Long-term leasing,** run by “agents” that lease vehicles and medallions, or solely medallions to drivers for periods of months. Drivers pay a weekly lease fee and retain day-to-day control of the car. Typically, the cab is leased to two drivers who arrange to pass the vehicle back and forth at the end of each 12-hour shift.

In practice, many fleets and fleet-type operators lease cabs both by the shift and on a long-term basis. It is also notable that many long-term lessors and fleets are not actually the medallion owner. In these cases, the medallion owner contracts with a leasing company or fleet to manage the medallion on the owner’s behalf.

Drivers

Drivers greatly outnumber cabs. There are about 40,000 licensed taxi drivers eligible to drive the 12,787 licensed taxicabs. This number has held steady for over a decade. Only a fraction of drivers work full-time. Forty percent of all licensed drivers report having driven a cab five or more days in the preceding week. Twenty-nine percent of all drivers report not having driven at all in the previous week. The flow of new drivers tends to be converse to the economic cycle. Over three thousand new drivers were issued licenses in fiscal year 2003. The flow of drivers into the industry has been counter-cyclical at times. The number of new drivers reached a low of 2,127 in fiscal year 2000 during the peak of the economic cycle but then rebounded as the economy deteriorated.

It’s an immigrant industry with drivers originating from all over the world. Historically, eighty-nine percent of new drivers were immigrants, born in eighty-four foreign countries ranging from Afghanistan to Turkey, Trinidad to Togo. A few nations and regions of the world predominate. On average, 43% of all applicants for a taxi driver’s license were born on the Indian subcontinent, including 21% from Pakistan, 10% from Bangladesh and 10% from India. The proportion from Africa and the former Soviet Union has also grown. The proportion of applicants born in the U.S. dropped over the past decade. The fraction from the Caribbean fell from 27% to 8%. Most applicants have spent several years in the U.S.; only 12% report having been in the U.S. for only one year and 11% report two years in the U.S. The median time here is six years.

Many languages spoken reflect the diversity described above. Sixty languages are spoken among driver applicants. Twenty-four percent of all applicants reported that they had learned English as a child. Drivers are required to pass an English proficiency test as part of the licensing process.

Turnover is high among new drivers. Studies have shown that 23% of first-year drivers leave the industry (i.e., fail to renew their licenses), as did 18% of drivers who were licensed for two years and 15% of those licensed for three years.

Why do some drivers stay and become long-term drivers while others leave? What factors influence drivers' decisions? This is a complex question with perhaps as many answers as there are drivers. But some insight can be gleaned from looking at the background of drivers who stay in the industry versus those who move on. Many drivers come into the industry saying they expected to earn more driving a cab than in their last job. Other drivers come into the industry saying they "like to drive" were somewhat more likely to maintain their taxi license as compared with drivers who came just for the money. Drivers from Bangladesh, the former Soviet Union, African countries, Pakistan and India show higher retention rates than drivers from the Caribbean, Central America and – especially – Europe and the U.S.

Word of mouth appears to be critical; 73% knew someone who drove a cab and 58% found the owner of the cab they would drive through a friend, relative or neighbor. Fifty-eight percent of all applicants in 1991 wanted to drive a cab for two simple and basic reasons: to make money or because they needed a job. One in three named attractive aspects of the job – liking to drive or the flexibility, independence or excitement of driving. Most applicants saw driving a cab as an opportunity to make money and advance financially.

Most applicants also planned to drive "for many years" and hoped to buy a medallion license eventually. These plans were not fulfilled for most applicants. Studies show that one in ten of all prospective drivers sought to drive a cab for short-term financial reasons, often reflecting setbacks in their working lives during the early-90s recession. These applicants held professional, supervisory or managerial jobs requiring high educational achievement or held skilled crafts jobs (e.g., mechanics) or used creative skills (e.g., artists, musicians, and photographers). Many of these applicants expected to earn less driving a taxi than in their previous job, and planned to drive a cab for only a short while.

Passengers

The primary passengers in NYC taxicabs are Manhattan residents. Seventy-one percent of all taxi trips transport Manhattan residents. Outer-borough residents, suburbanites, U.S. residents from outside the New York area, and foreign visitors each account for between 5% and 10% of all trips. Six percent of Manhattan residents "always" or "usually" use taxicabs for work trips and 20% "always" or "usually" take cabs for personal trips. An additional 38% of Manhattan residents "sometimes" use taxicabs for work trips and 48% "sometimes" take cabs for personal trips. Thus, two-thirds of Manhattan residents use cabs for work and/or personal trips at least some of the time. Manhattan adults hail a cab an average of 100 times a year. Sixty-six percent of Manhattanites' taxi trips are between home, work, and/or recreational pursuits (i.e., restaurants, entertainment, and shopping). Providing quick, convenient, door-to-door service taxis function as the equivalent of the suburban family car – not surprising given that 77% of Manhattan households do not own a car.

Contractors should be familiar with the unique passenger profile in New York. New York taxicabs typically make shorter trips, particularly around Manhattan, by frequent users. Such trips account for approximately 70% of the 500,000 trips daily. Longer rides (30+ minutes) are generally to the two main NY airports.

NYC taxicabs traveled a total of 796 million miles in 2003, or an average of 65,300 miles per cab. Total industry mileage grew by 10% from 1993 to 2003. The growth resulted in part from an increase in the number of double-shifted cabs. Mileage varies considerably among operators. Cabs run by fleets and other shift lessors, in service two shifts per day and seven (7) days per week, average 72,000 miles.

Taxicabs leased long-term (usually to two drivers) average 68,000 miles. Owner-drivers, generally driving one shift a day, five or six days a week, averaged 42,000 miles.

The TLC has mandatory vehicle retirement rules for medallion taxicabs: three (3) years for fleet-owned vehicles and five years for individual owner-operated vehicles with some minor exceptions. Yet, most fleet owned taxicabs maintain a life cycle of 2.5 years. This is one of the strictest vehicle policies in the U.S.; most major cities allow vehicles to be used for five to nine years and allow used vehicles to be put into service. This must be taken into account as you build the economic model for this project. The Ford Crown Victoria accounted for 94.4% of all taxicabs in 2003. The Extended Crown Vic, featuring an additional six inches of leg room for rear seat passengers, account for 40% of all taxis and the older models for 55% of all cabs. Other vehicles are approved for use as taxicabs, such as the Ford Windstar, Toyota Sienna, Honda Odyssey, and Ford Explorer.

The TLC has approved the following taximeters for use within its medallion regulated fleet:

NYC-TLC Approved Taximeters		
Meter Manufacturer/Distributor	Model Number	Active Units
Pulsar Technology System, Inc	Model 2010	50
Pulsar Technology System, Inc	Model 2020R	3440
TAXITRONIC	TX-36/TX14CR	5418
Gleike, Inc	N/A	0
Centrodyne Corporation of America	Standard	794
Centrodyne Corporation of America	Standard + Separate Printer	85
Argo: American Taximeter & Comm Inc.	N/A	6
Metrometer Inc	N/A	2668
Syalta/Alon Taximeters	N/A	295

The TLC has administered several focus group studies with drivers and with NYC taxi passengers regarding the medallion taxicab technology enhancement project. A summary of these focus group studies will be made available in Adobe (pdf) file format on the TLC website: www.nyc.gov/taxi and also in paper form from the authorized agency contact person listed in Section I of this RFP.

ATTACHMENT F: PROPOSAL CHECKLIST

- Proposal Cover Letter
- Technical Proposal
 - Narrative Response
 - References For Prime Contractor
 - References For each Sub-Contractor
 - Resumes and/or Description of Qualifications for Key Staff Positions
 - Organizational Chart
 - Independent Audit Report or Certified Financial Statement or a statement as to why no report or statement is available
 - Wireless Coverage Map
 - Acknowledgment of Addenda Form
- Price Proposal
 - Narrative
 - Price Proposal Worksheet (Attachment B)
 - List of “no cost” items, if applicable

ATTACHMENT G: Warranty Table

In-Cab Component Warranty Table						
	Component	Warranty Length	Parts	Labor	Mean Time Between Failures (Hrs)	Mean Time To Repair (Hrs)
Electronic Trip-Sheet Data Collection	Overall System					
Text Messaging	Overall System					
Credit / Debit Card Processing	Overall System					

PASSENGER INFORMATION

THE METERED FARE

- The amount shown on meter plus any tolls.
- Extra \$1.00 from 4pm to 8pm on weekdays, excluding holidays.
- 50-cent night surcharge from 8pm to 6am daily.
- No per passenger or baggage charge.
- Driver not required to accept bills over \$20.
- Tipping for good service is customary.

AIRPORT INFORMATION

- \$45 flat fare from JFK to any destination in Manhattan (Metered fare to all other destinations).
- Metered fare to JFK from any location.
- Metered fare to and from LaGuardia Airport

E-ZPASS INFORMATION

A driver must use E-ZPass when taking toll bridges or tunnels and pass the discount on to passengers. The amount of the toll will be added when payment is due.

PLEASE REMEMBER TO:

- BUCKLE UP FOR SAFETY
- EXIT AT CURBSIDE
- TAKE YOUR RECEIPT & BELONGINGS
- WATCH FOR BICYCLISTS

TAXI RIDER'S BILL OF RIGHTS

As a taxi rider you have the right to:

- Go to any destination in NYC, Westchester Naussau, or Newark Airport.
- Direct the route taken: the most direct route or one of your choice.
- A safe and courteous driver who obeys all traffic laws.
- A knowledgeable driver who speaks English and knows City geography.
- Air-conditioning or heat on request.
- A noise-free trip: no horn honking or radio.
- Clean air: smoke and scent free air.
- Working seatbelts for all passengers.
- A clean taxicab: interior, exterior, and partition.
- Be accompanied by a service animal.
- A driver who does not use a cell phone while driving (hand-held or hands-free).
- Decline to tip for poor service.

WATCHING THE METER

Initial charge is \$2.50, then 40 cents per 1/5 mile or 40 cents per 120 seconds in slow traffic or while stopped. In moving traffic on Manhattan streets, meter should "click" approximately every four blocks, or one block going crosstown.

TRAVELING OUT OF TOWN

Westchester & Nassau Counties:

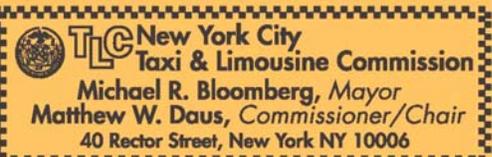
Fare = metered amount to City's limits + twice meter amount from City limits to destination + roundtrip tolls.

Newark Airport:

Fare = metered amount + \$15 + roundtrip tolls.

Other Points Outside the City:

The driver may choose whether to take such trips. The fare must be agreed upon before starting the trip.



SMOKING IN TAXICABS IS PROHIBITED

Compliments? Lost Property? Complaints? DIAL 3-1-1 Out of Town-Dial (212) NEW-YORK www.nyc.gov/taxi

Taxi Fare from
JFK Airport
to any destination in
MANHATTAN
\$45 FLAT FARE
Does not include toll or tip





New York City
Taxi & Limousine Commission
www.nyc.gov/taxi

Michael R. Bloomberg
Mayor
Matthew W. Daus
Commissioner/Chair

DIAL 3-1-1

Out of Town - Call (212) NEW-YORK
Compliments, Lost Property, Complaints
Flat fare is per trip, not per person and
does not include trips to JFK