

## Scope of Work

- I. Scope of Solicitation**
- II. Instructions to Offerors**
- III. Scope of Work / Specifications**
- IV. Terms and Conditions - Special**
- V. Appendices to Scope of Work**
- VI. Bidding Schedule**

### **I. SCOPE OF SOLICITATION**

Clemson University is seeking offers for an Automatic Dispatch System to include dispatch, tracking, reporting and information services as outlined herein. Award will be made to one Offeror. Award will be made to the lowest responsible and responsive bidder(s). Only one lot will be awarded, whichever is most advantageous to Clemson University.

Contract will be awarded for one year with an option to renew on an annual basis for up to four additional years at one-year intervals.

### **MAXIMUM CONTRACT PERIOD - ESTIMATED**

Start date: 04/14/2011 End date: 04/13/2016. Dates provided are estimates only. Any resulting contract will begin on the date specified in the notice of award.

#### **Timeline for Project:**

Clemson University plans to have this system implemented and in operation no later than August 15, 2011, including initial training and system field testing.

### **II. INSTRUCTIONS TO OFFERORS**

- 1. INFORMATION FOR OFFERORS TO SUBMIT - In addition to information requested elsewhere in this solicitation, Offerors should submit the following information for purposes of evaluation:**

- All Offerors must include the name of the manufacturer and model number along with detailed product information with offer. Complete literature must be submitted as an attachment in the Bid Attachment Response in the online bid document. Any deviation from specifications, indicated herein, must be clearly pointed out; otherwise, it will be considered that items offered are in strict compliance with these specifications, and successful bidder will be held responsible. Include Offeror's name on the cover of any specifications or descriptive literature submitted with offer.

### **A. Cover Letter**

Offeror's shall provide a cover letter that contains a commitment to provide the product/services described in this solicitation. The cover letter must include the name and signature of a representative of the Offeror who is authorized to negotiate a contract with the University and should summarize the overall benefits to selecting your company along with an overview and details of your company.

### **B. Contract Documents**

The Contractor shall provide copies of all contract documents. Contract documents may include, but not be limited to: software license agreements, professional services agreements, master services agreements, maintenance agreements, support and service level agreements, etc.

## **III. SCOPE OF WORK / SPECIFICATIONS**

### **1. Automatic Dispatch System: Standard**

Dispatch System will be used for the University's five (5) on-demand vans/buses which operate nightly from 6:00pm ET until 6:00am ET. Bids must include GPS hardware, connectivity and tracking for the vans/buses. The successful Contractor will be responsible for the installation of all hardware in the vans/buses. The successful Contractor will be responsible for installation and implementation services on campus as well as training and on-going support and maintenance of the system as outlined herein. The University plans to have this system implemented and in operation no later than August 15, 2011.

#### **A. System requirements must include the following mandatory minimum requirements:**

- 1) An automated dispatch system that has access to the system for up to 50 users (dispatchers, drivers, and managers)
- 2) Inclusion and allowance of automated requests from phones from users with features that include:
  - a. Ability to allow users to enter just the first few letters of each location's name to search for a location.
  - b. Smart-Search to quickly match frequent locations.
  - c. Ability to automatically identify previous users and remember their previous requests and locations.
- 3) Inclusion and allowance of automated web based requests from users with features that include:
  - a. Ability to integrate with the University's authentication system and to build a profile for each user, allowing users to log in to use the system.
  - b. Ability to remember users' previous requests and locations.

- c. Smart auto-completion of location names for start and end location fields.
- 4) Inclusion and allowance of automated mobile requests (for Internet enabled phones) via a mobile web site.
- 5) Inclusion of a Dispatcher Dashboard with analytical tools and features that include:
  - a. Ability to manually enter requests including start location, destination and number of passengers for each user.
  - b. Smart auto-completion of location names for start and end location fields.
  - c. Ability to change any of the field values after a request has been entered in the system.
  - d. Ability to visually distinguish between new and assigned requests.
  - e. Ability to move completed requests off-screen, but accessible at a single click.
  - f. Ability to automatically register request creation time.
  - g. Ability to continuously re-compute and display average time per request.
  - h. Ability to mark each trip as cancelled, no-show and/or recall
  - i. Ability to specify current drivers on duty.
  - j. Ability to automatically limit the number of requests directly accepted by any automated request method based on the number of drivers on duty.
  - k. Ability to remember and automatically call back users whose requests could not be accepted due to too many pending requests.
- 6) Inclusion of automated outbound phone call notifications from the service with features such as No show, Driver assigned, Driver en route and outage notifications. Notifications should be configurable as automatic or one-click notifications activated by a dispatcher.
- 7) Inclusion of a bus-route module during possible overlap hours of regular service and on-call service that informs riders to take the appropriate bus service and routes.
- 8) Incorporate daily statistics in Excel format and automatically email to relevant managers and users.
- 9) Incorporate on-demand standard reports for specific time ranges in both graphical chart and Excel formats. Reports must include:
  - a. Automatically generated daily pie chart showing breakup of the current day's trips by result.
  - b. Automatically generated daily pie chart showing breakup of the current day's trip by source.
  - c. Automatically generated daily bar chart showing trip requests by hour, with breakup by result.
  - d. Automatically generated weekly chart showing cancelled trips by day.
  - e. Automatically generated weekly chart showing no-show trips by day.
  - f. Automatically generated weekly chart showing average time to pickup by day.

- g. Automatically generated monthly chart showing trip sources by day.
  - h. Ability to generate any of charts (a) to (g) for an arbitrary day, week or month.
  - i. Ability to automatically email an Excel report with daily stats to a configurable group of users at a present time daily.
- 10) Incorporate a master user management module to add or remove users and assign/change roles. User management module should allow users to change passwords. Module should allow easy two-click switching between users.
- 11) Incorporate a flexible location management module (stops) to add, remove, enable, disable and configure locations with the following capabilities:
- a. Module should allow arbitrary number of aliases for each location.
  - b. Module should allow special instructions for riders to be associated with each location, such that instructions are read out or displayed to riders who make a request via phone or web, respectively.
  - c. Module should allow formations of groups of locations such that an entire group of locations may be enabled or disabled as one. Further, it should be possible to set up special instructions for a group such that the instructions are read out or displayed to riders who make a request via phone or web, respectively.
  - d. Module should allow associating Bus stops for each location by integrating with the bus-route module mentioned in (8)
- 12) Incorporate phone minutes and volume to include phone call time that, with typical usage, would support over 600 riders per day. Additional blocks of minutes will be charged at flat rates.
- 13) Incorporate an unlimited number of web and mobile requests at no cost.
- 14) Incorporate private server access outside of university system for software as a service.
- 15) Incorporate a private database hosted at a datacenter for the software as a service.
- 16) Incorporate a hot-backup redundant server, hosted at a separate datacenter, so that all users (dispatcher and riders) will not face any problems in case of down times.
- 17) Contractor manages all server and database management issues, including maintenance.
- 18) Contractor manages all defects and fixes.
- 19) Contractor must provide email support to University employees in a timely fashion.

## **B. Installation and setup:**

- 1) Contractor must provide on-site training and support of three (3) days for University Staff as well as training the Program Coordinator so that he/she is

equipped to train new employees as they come on staff. Travel, meals, lodging and all expenses must be included.

- 2) Contractor's must provide on-site support of location and bus-route database customization to ensure locations, aliases and routes are correctly set up in the system.
- 3) Contractor must establish required initial customization to adapt the interface to the Universities needs.
- 4) Price quoted must include all customizations and services required by the University to meet the University's expectations of the system as detailed in this bid document.
- 5) Hourly rate for customizations required by the University after the initial implementation of the system must be outlined in Section VI, Bidding Schedule. If travel is involved in customizations, travel, meals, lodging and all expenses must be included in hourly rate.

#### C. System Support and Maintenance

- 1) Quote an annual on-site support/maintenance agreement for the software, Mobile Data Terminals and Vehicle GPS Tracking Module.
- 2) Support/Maintenance Agreement includes parts and labor.
- 3) Support/Maintenance Agreement must include the costs of all system upgrades, updates, enhancements, new releases, etc. to the products released during the contract period.
- 4) Support must be available 24 x 7.
- 5) Unlimited email support.
- 6) On an annual basis, the successful Contractor must furnish the University an updated campus map.

#### D. Automatic Dispatch System: GPS Module

- 1) Contractor must be able to provide GPS tracking equipment or incorporate and utilize current GPS tracking equipment within their system.
- 2) The tracking system must incorporate the following:
  - a. A map showing real time location
  - b. A map showing vehicle direction
  - c. Occupancy on vehicle
- 3) The system is required to automatically send riders a map link showing the real time location of the vehicle assigned to them.
- 4) The driver side mobile data terminal must incorporate a dashboard showing current and scheduled pickups, drop-offs and allow the driver to accept or reject these. The terminal must incorporate voice-announcement capabilities for new pickup requests.

**E. Background and Capabilities**

The proposed contractor must have the experience, capabilities and proven work in the fleet dispatch market.

- 1) Experience in the fleet dispatch within the university environment.
- 2) Experience within a University environment with a population of at least 20,000 students.
- 3) Experience in developing and managing interactive voice services with a total of up to 1,000 calls per day.
- 4) Experience in integrating interactive voice, email, and other features, including the ability to expand to SMS services in the future.
- 5) Experience in provisioning manager and user access for up to 50 people.
- 6) Experience in producing reports and data for managers, including daily email spreadsheet reports.
- 7) Experience in development of mobile web and smart phone applications for potential future integration of services.
- 8) Experience in incorporation of GPS related tracking and dispatch services, including web based public and manager access.
- 9) Experience in location, route and alias design and designation.
- 10) Statistics showing improvement in dispatcher efficiency and time available to dispatchers as a result of system deployment.

**IV. TERMS AND CONDITIONS – SPECIAL**

*Not Applicable*

**V. APPENDICES TO SCOPE OF WORK**

*Not Applicable*

**VI. BIDDING SCHEDULE**

*See Attached*

**VI. BIDDING SCHEDULE**

**BIDDING SCHEDULE:** Notwithstanding any other instructions herein, you shall submit the following price information as a separate document. Please complete this section and re-attach to online bid document.

Vendor Name: \_\_\_\_\_

Fax #: \_\_\_\_\_

Contact Person: \_\_\_\_\_

Telephone #: \_\_\_\_\_

Delivery Time: \_\_\_\_\_

ITEM	QTY	U/M	DESCRIPTION	UNIT PRICE	TOTAL PRICE
<b><u>LOT A</u></b>					
001	1	Lot	Initial Cost of Automated Dispatch System Software. Please indicate total cost to provide all software. This cost will be used for evaluation purposes. Breakdown of this costs may be included in separate appendix by attaching to bid response in online bid document.		\$ _____
002	1	Lot	Installation, Implementation and Customization (at time of implementation) of all products above and below as outlined in Scope of Work to include travel, meals, lodging and all expenses as a fixed price. This cost will be used for evaluation purposes. Breakdown of this costs may be included in separate appendix by attaching to bid response in online bid document.		\$ _____
003	4	Yr	Maintenance and support agreement for all software (license renewal) per attached Scope of Work above to include, but not limited to: any upgrades, updates, enhancements,	\$ _____	\$ _____

ITEM	QTY	U/M	DESCRIPTION	UNIT PRICE	TOTAL PRICE
			new releases, etc. to the product released during the term of the contract. This cost will be used for evaluation purposes. Breakdown of this costs may be included in separate appendix by attaching to bid response in online bid document. Please note that Year One Maintenance and Support is included in the purchase of the initial software.		
004	5	Ea	Mobile Data Terminal: Tablet PC with Touch Screen, Internet Connectivity, and GPS running an operating system conducive to mobile data terminal application.	\$ _____	\$ _____
005	4	Yr	Mobile Data Terminals Annual Maintenance/Support Agreement to include on-site, 24 x 7, parts and labor. Please note that Year One Maintenance and Support is included in the purchase of the initial terminals.	\$ _____	\$ _____
006	1	Lot	Operational Manuals/Documentation for all products above and below per attached Scope of Work. Breakdown of this costs may be included in separate appendix by attaching to bid response in online bid document.		\$ _____



ITEM	QTY	U/M	DESCRIPTION	UNIT PRICE	TOTAL PRICE
007	3	Day	On-site Training for all software, accessories and products to include travel, meals, lodging and all expenses per attached Scope of Work above. Breakdown of this costs may be included in separate appendix by attaching to bid response in online bid document.	\$ _____	\$ _____
<b>TOTAL – LOT A</b>				<b>\$ _____</b>	
<i>(Must transfer total for Lot A above to Line Item 1 in online bidding system for evaluation purposes.)</i>					
<i>Total above for lines 1-7 will be used for evaluation purposes and considered to be the fixed costs for Lot A.</i>					
<b><u>LOT B</u></b>					
001	1	Lot	Initial Cost of Automated Dispatch System Software. Please indicate total cost to provide all software. This cost will be used for evaluation purposes. Breakdown of this costs may be included in separate appendix by attaching to bid response in online bid document.		\$ _____
002	1	Lot	Installation, Implementation and Customization (at time of implementation) of all products above and below as outlined in Scope of Work to include travel, meals, lodging and all expenses as a fixed price. This cost will be used for evaluation purposes. Breakdown of this costs may be included in separate appendix by attaching to bid response in online bid document.		\$ _____
003	4	Yr	Maintenance and support agreement for all software (license renewal)	\$ _____	\$ _____

ITEM	QTY	U/M	DESCRIPTION	UNIT PRICE	TOTAL PRICE
			per attached Scope of Work above to include, but not limited to: any upgrades, updates, enhancements, new releases, etc. to the product released during the term of the contract. This cost will be used for evaluation purposes. Breakdown of this costs may be included in separate appendix by attaching to bid response in online bid document. Please note that Year One Maintenance and Support is included in the purchase of the initial software.		
004	5	Ea	Mobile Data Terminal: Tablet PC with Touch Screen, Internet Connectivity, and GPS running an operating system conducive to mobile data terminal application.	\$ _____	\$ _____
005	4	Yr	Mobile Data Terminals Annual Maintenance/Support Agreement to include on-site, 24 x 7, parts and labor. Please note that Year One Maintenance and Support is included in the purchase of the initial terminals.	\$ _____	\$ _____
006	1	Lot	Operational Manuals/Documentation for all products above and below per attached Scope of Work. Breakdown of this costs may be included in separate appendix by attaching to bid response in online bid document.		\$ _____
007	3	Day	On-site Training for all software, accessories and products to include travel, meals, lodging and all expenses per attached Scope of Work above. Breakdown of this costs may be included in separate appendix by	\$ _____	\$ _____

ITEM	QTY	U/M	DESCRIPTION	UNIT PRICE	TOTAL PRICE
			attaching to bid response in online bid document.		
008	5	Ea	Vehicle GPS Tracking (only) Module	\$ _____	\$ _____
009	4	Yr	Annual maintenance/support Agreement to include on-site, 24 x 7, parts and labor for quantity of five (5) units. Please note that Year One Maintenance and Support is included in the purchase of the initial tracking modules.	\$ _____	\$ _____

**TOTAL – LOT B** \$ \_\_\_\_\_  
*(Must transfer total for Lot B above to Line Item 2 in online bidding system for evaluation purposes.)*

*Total above for lines 1-9 will be used for evaluation purposes and considered to be the fixed costs for Lot B.*

**LOT C**

001	1	Lot	Initial Cost of Automated Dispatch System Software. Please indicate total cost to provide all software. This cost will be used for evaluation purposes. Breakdown of this costs may be included in separate appendix by attaching to bid response in online bid document.	\$ _____	
002	1	Lot	Installation, Implementation and Customization (at time of implementation) of all products above and below as outlined in Scope of Work to include travel, meals, lodging and all expenses as a fixed price. This cost will be used for evaluation purposes. Breakdown of this costs may be included in separate appendix by	\$ _____	

ITEM	QTY	U/M	DESCRIPTION	UNIT PRICE	TOTAL PRICE
			attaching to bid response in online bid document.		
003	4	Yr	Maintenance and support agreement for all software (license renewal) per attached Scope of Work above to include, but not limited to: any upgrades, updates, enhancements, new releases, etc. to the product released during the term of the contract. This cost will be used for evaluation purposes. Breakdown of this costs may be included in separate appendix by attaching to bid response in online bid document. Please note that Year One Maintenance and Support is included in the purchase of the initial software.	\$ _____	\$ _____
004	5	Ea	Mobile Data Terminal: Tablet PC with Touch Screen, Internet Connectivity, and GPS running an operating system conducive to mobile data terminal application.	\$ _____	\$ _____
005	4	Yr	Mobile Data Terminals Annual Maintenance/Support Agreement to include on-site, 24 x 7, parts and labor. Please note that Year One Maintenance and Support is included in the purchase of the initial terminals.	\$ _____	\$ _____
006	1	Lot	Operational Manuals/Documentation for all products above and below per attached Scope of Work. Breakdown of this costs may be included in separate appendix by attaching to bid response in online bid document.		\$ _____
007	3	Day	On-site Training for all software, accessories and products to include travel,	\$ _____	\$ _____

ITEM	QTY	U/M	DESCRIPTION	UNIT PRICE	TOTAL PRICE
			meals, lodging and all expenses per attached Scope of Work above. Breakdown of this costs may be included in separate appendix by attaching to bid response in online bid document.		
008	5	Ea	Vehicle GPS Tracking Module with fully automated GPS based dispatch, alerts and real time tracking for riders	\$ _____	\$ _____
009	4	Yr	Annual maintenance/support Agreement to include on-site, 24 x 7, parts and labor for quantity of five (5) units. Please note that Year One Maintenance and Support is included in the purchase of the initial tracking modules.	\$ _____	\$ _____

**TOTAL – LOT C** \$ \_\_\_\_\_  
*(Must transfer total for Lot C above to Line Item 3 in online bidding system for evaluation purposes.)*

*Total above for lines 1-9 will be used for evaluation purposes and considered to be the fixed costs for Lot C.*

***Only one lot above will be awarded (Lot A, Lot B, or Lot C), whichever is most advantageous to Clemson University.***

**Optional Items:**

001	1	Day	Optional Item - This item will not be used for evaluation purposes but is an optional item to handle any additional off-site training needed beyond what is included	\$ _____/day	
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ITEM	QTY	U/M	DESCRIPTION	UNIT PRICE	TOTAL PRICE
			in initial training as specified in line item #7 above. Please indicate daily rate for off-site training.		
002	1	Day	Optional Item - This item will not be used for evaluation purposes but is an optional item to handle any additional on-site training at Clemson University needed beyond what is included in initial software training as specified in line item #7 above. Please indicate daily rate for on-site training to include travel, meals, lodging and all expenses.	\$ _____/day	
003	1	Hr	Optional Item - This item will not be used for evaluation purposes but is an optional item to handle the cost of any future customization services that may be needed during the term of the contract after initial implementation. Please indicate cost per hour for future customization services.	\$ _____/hr	
004	1	Ea	Optional Item – This item will not be used for evaluation purposes but is an optional item to handle the cost of any additional Mobile Data Terminals that are needed throughout the contract term. This is a cost to add one each Mobile Data Terminal as specified in line item #4 above. This cost must include cost of all installation and customization charges for one terminal.	\$ _____/ea	
005	1	Yr	Optional Item – This item will not be used for evaluation purposes but is an optional item to handle the cost of Annual support maintenance agreement per Mobile Data Terminal added to the initial agreement throughout the contract term. Includes on-site, 24 x 7, parts and labor for one unit.	\$ _____/yr	

ITEM	QTY	U/M	DESCRIPTION	UNIT PRICE	TOTAL PRICE
006	1	Ea	Optional Item – This item will not be used for evaluation purposes but is an optional item to handle the cost of any additional Vehicle GPS Tracking (only) Modules that are needed throughout the contract term. This is a cost to add one each Vehicle GPS Tracking (only) Module. This cost must include cost of all installation and customization charges for one module.	\$_____	/Ea
007	1	Yr	Optional Item – This item will not be used for evaluation purposes but is an optional item to handle the cost of Annual support maintenance agreement per Vehicle GPS Tracking (only) Module added to the initial agreement throughout the contract term. Includes on-site, 24 x 7, parts and labor for one module.	\$_____	/yr
008	1	Ea	Optional Item – This item will not be used for evaluation purposes but is an optional item to handle the cost of any additional Vehicle GPS Tracking Modules with fully automated GPS based dispatch, alerts and real time tracking for riders that are needed throughout the contract term. This is a cost to add one each Vehicle GPS Tracking Module with above features. This cost must include cost of all installation and customization charges for one module.	\$_____	/Ea
009	1	Yr	Optional Item – This item will not be used for evaluation purposes but is an optional item to handle the cost of Annual support maintenance agreement per Vehicle GPS Tracking Module with fully automated GPS based dispatch, alerts and real time tracking for riders	\$_____	/yr

<b>ITEM</b>	<b>QTY</b>	<b>U/M</b>	<b>DESCRIPTION</b>	<b>UNIT PRICE</b>	<b>TOTAL PRICE</b>
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added to the initial agreement  
throughout the contract term.  
Includes on-site, 24 x 7, parts and labor for  
one module.

**Itemized list of products/materials/software/labor/training/etc. with unit/total prices per line item may be included as an attachment to this Bidding Schedule. Travel, meals, lodging and all expenses must be included in Time/Labor Cost above in installation services as well as attached in hourly labor rates.**