



**PROPOSAL – MOBILITY-ON-DEMAND
SOFTWARE APP
FOR
CITY OF GAINESVILLE**

Client has identified a need for **Mobility-On-Demand Software App** and is looking for a qualified IT services firm to deliver quality application, with technical support and training and do this work on time and within budget.

**PROPOSAL
MOBILITY-ON-DEMAND SOFTWARE APP**

**SOFTWARE STAFFERS
960 FOOTHILL DR.
SAN JOSE, CA 95123**

DATE: June 05, 2023

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1. Overview

June 05, 2023

Software Staffers, an information technology (IT) firm with an address at:
960 Foothill Dr.,
San Jose, CA 95123

(Hereinafter also referred to as "Software Staffers") is pleased to provide this IT project proposal to: **City of Gainesville**, (hereinafter referred to as "Client") in support of **"Mobility-On-Demand Software App"** of Client (hereinafter referred to as the "IT Project").

By the signature of Software Staffers' authorized representative hereunder, this IT Project proposal constitutes Software Staffers' formal offer to provide the services and/or deliverables described herein on the terms and conditions described herein.

This IT Project proposal will be valid for a period of 120 days following the date first set forth above.

Software Staffers

A handwritten signature in black ink that reads "Monty Roy".

Monty Roy

2. ABOUT SOFTWARE STAFFERS

Software Staffers is an IT development and staffing company based in San Jose, California. We have been in business for 7 years and have successfully completed and delivered many IT projects for companies in various industries like Software, Pharmaceutical, Biotech, Manufacturing, Financial and Retail. Our in-house staff has the knowledge and experience to design, test and deliver the **Mobility-On-Demand Software App** for **City of Gainesville**. We can do so within the given timeframe and budget.

3. THE SOLUTION

The goal is to create, design and develop a robust and comprehensive online system to provide a Mobility-On-Demand Software App that will allow it to continue to improve the quality of the door-to-door, geo-fenced, and fare-free mobility on demand service. Application will be hosted in a SaaS (Software as a Service) environment and available to users via all type of device types(Mobile, Tablet, Laptop and Desktop). Application administrators will have the ability to change the form layout and field typesbased on app requirements.

4. OUR PROPOSAL

WORK TO BE PERFORMED

- a. Design visually appealing website portal for IT Project
- b. Application will be hosted on a cloud (Amazon or Microsoft)
- c. System will be responsive for all users (useable on iPhone, Android, Tablet, Laptop and Desktop)
- d. Two years of application hosting and management will be provided. Data storage will be allowed up to 5TB. Additional data storage can be negotiated or bought directly by the city from cloud storage provider
- e. Two years (2) of full support and for bugs based on initial requirements
- f. Daily and Weekly backup will be provided for 2 years. Backup data will be available for 3months' prior

- g. Ticketing or email-based support provided for all application users
- h. Super users will be fully trained on the application during rollout
- i. Software and Security updates will be performed by IT firm for a period of 2 years.
- j. The system for RTS MOD micro transit service operation will include scheduling, dispatching, and capability for system reservation for bus passenger services.
- k. **Back Office Administrator Dashboard (browser-based)**

The administrator dashboard is a back-end system that enables fully automated scheduling, reserving, dispatching. This includes but not limited to:

- Dynamic algorithms to optimize vehicle routing, efficiently match drivers and passengers, and facilitate pick-up and drop-off.
- Ability to calculate distance between customer's origin and selected destination and to refuse trips which exceed customizable minimum and maximum distance parameters.
- Ability to manage number of allowable trips from same customer/phone number within a defined time such as within 30 minutes of last completed or cancelled trip.
- Manual methods for rejecting or redirecting ride requests.
- Ability to do keyboard search queries by name, phone number, and email address.
- Ability to efficiently add passenger(s) to a route in progress.
- Ability to add/remove/expand geo-fence boundaries.
- Ability to add and edit service areas and service hours.
- Dispatch booking capabilities for users without smartphones or web access.
- Trip Requests – rider's name, trip request time, pick-up and drop-off times and locations, number of passenger(s), and seat type(s) selected.
- Allow multiple users on one account and permit user/account information update.
- Configure service parameters, including but not limited to ability to add vehicles and vehicle capacities/parameters, such as maximum wait time, maximum in-vehicle time, etc.
- For ride requests with a pick-up or drop-off at a non-transit hub location, such as a school or hospital, the app automatically aligns pick-up and drop-off times to match a configurable schedule, such as school or business open/close times.
- Assign rides by vehicle and location destination.

- Real time monitoring and analytics for all service operation and vehicles.
- Ability to add a minimum of 7 service geographic areas using 2-3 vehicles each.
- Ability to designate roles and permissions.
- Configurable Agency settings.
- Generate configurable promotional code

1. Back Office Dispatcher-Facing Dashboard (browser-based)

- Ability and ease to sign into account.
- Dispatch booking capabilities for users without smartphones or web access.
- Ability to log drivers in
- View in-progress rides.
- Ability to approve or deny ride requests based on predetermined parameters such as, but not limited to, group size, location, number of passenger no-shows.
- Ability to add, edit or cancel rides in the system.
- Ability to add/modify driver break and lunch periods.
- Ability to view services by service area geo-fence and generate reports by service area geo-fence.
- Ability to pan and zoom the map by geo-fence and to view entire route on a map.
- Dispatcher portal shows pre-scheduled rides assigned to specific vehicle manifests immediately upon ride booking.
- Add out-of-zone addresses riders can choose from.
- Add or remove roads and locations that are not travelable.
- Ability to set a method to deny trips when demand outnumbers available resources.
- Configurable real-time dispatcher display screen.
- View and export reporting suite.
- View recent ride history by type.
- Dashboard for analysis of service operations and vehicles available.
- Real-time analytics to alert dispatchers of demand surges and long wait times.

m. Passenger-Facing Features of the App

Passenger booking web-based portal and a consumer-facing smartphone application (iOS and Android) that have the following functionalities:

- Application will be available for free download on the Apple App Store and Google Play store.
 - Application will be device agnostic and accessible to all current browsers.
 - Allow users to search for and book rides for self and others using same phone number – multiple users on same number.
 - Ability for users to book multiple trips (outside of a defined time window and within the allowable O-D trip distance), recurring rides, and pre-schedule rides up to a customizable number of days in advance.
 - Rider booking capabilities for users without smartphones or web access.
 - Allow riders without smartphones or web access to receive trip alerts.
 - Present a 15-minute pick-up and drop-off window (or less) information for pre-scheduled trip requests for rider's acceptance before confirming the booking.
 - Trip time – ability to track ride's estimated wait time, arrival, and vehicle in real-time.
- App will allow customer to cancel ride if times provided not convenient for rider.
- Ability to request MOD vehicle and seat type.
 - Ability to enter place names (i.e., library, school, store or services) as well as addresses. Places and addresses will have auto complete capability.
 - Ability to notify user of invalid rider request (exceeded number of trips within a defined time window, rides within non-allowable O-D trip length, out of service area, service hours, or non-serviceable locations).
 - Ability to identify number of passengers traveling.
 - Ability to receive trip updates through the app or via SMS/email.
 - Depict real-time vehicle locator map, including fixed route operations.
 - Ability to view trip history and details.
 - Ability for user to contact customer service and/or dispatch (i.e., email, text, call).
 - System assigns passenger bookings (including pre-scheduled rides) to a driver manifest immediately upon booking.

- System automatically updates and optimizes vehicle manifests when there is real- time cancellations, no-shows, a vehicle goes out of service, or vehicle is behind schedule.
- RTS or Agency-branded consumer facing smartphone application that disallows advertisements. RTS-generated information is exempt.
- App available in multiple languages such as Spanish.
- App effectively interfaces with Braille technology.
- App has ability to increase font size.
- Ride star rating system with ability for customer comments.
- Account Recovery - account management such as password/user name recovery

n. **Driver-facing features of the App**

The system will be a web-based portal (IOS required and Android optional) that interfaces with all web browsers and has the following functionalities:

- Driver Itineraries - driver name, start time of itinerary, timestamp of each pick-up/drop-off, location of each pick-up/drop-off.
- Ability to send trip arrival alert to rider through the app or via SMS/email.
- Driver Shift Actions - driver name, shift start time, shift end time, timestamp of an Offline action, time stamp of an online action, timestamp of accepting/rejecting a trip request.
- Ability for driver to pause app without redirecting rides to another vehicle.
- Ability for driver sign-on to account.
- Ability for driver to accept ride requests from Dispatch and override service sequence and maintain app functionality.
- Ability for driver to contact passenger if they cannot find them at designated pick-up location via anonymized phone number(s).
- Ability to receive Dispatcher notes on specific trips/customers.
- Turn by turn audio and visual (on screen) directions.
- Ability to log pick-ups and drop-offs.
- Ability to see disabilities indicated by rider (in their account) so they can provide appropriate level of service.
- Ability to log no-shows.

- Ability to add trip comments by driver to promote service improvement.
- Ability to pan and zoom the map and view the entire route on the map.

o. Data Collecting and Reporting Requirements

System will provide an online dashboard for reporting real-time data on riders, vehicles, drivers, and service performance/Key Performance Indicators (KPIs). (Note: where applicable, data will conform to National Transit Database (NTD) metric and reporting standards, as well as have the ability to be exported in a CSV format.) Data and reporting will capture, store, and report at a minimum:

- Passenger trip data – total completed trips, total riders, by type of rider, by revenue hour, by trip, by source (call-in, app), origin and destination both of which will be tagged by postal code.
- Travel times – wait time, ride duration, on-time percentage, and late percentage.
- A method for collecting on-time performance relative to planned drop-off times and estimated pick-up times.
- Trips Booked – rider name, rider name, trip request time, planned pick-up and drop-off times and locations, actual pick-up and drop-off times and locations, number of passenger(s), seat type(s) selected, ride status (including but not limited to completed, no-show, canceled by rider, canceled by system, and view errors that turned down the trip request).
- Dispatch response time, missed calls.
- Revenue Hours - Fields will include at a minimum for each hour: number of online minutes, number of trip acceptances, number of trip rejections, and number of minutes deadheading, number of minutes with passengers on board.
- Reporting by geo-fence, with ability to add, alter, or remove geo-fenced zones with history.
- Reporting data inquiries within route number, date and time ranges.
- Vehicle performance and reliability.
- Total vehicle hours.
- Trip and driver comments.
- Driver hours.

- Aggregate reports (e.g. daily and annual totals) will include breakdown reports, including at a minimum, breakdowns by vehicle and day so that total figures can be traced by an auditor to source data, including chronological vehicle manifests of pull-outs from garage, first pick-up, all pick-up/drop-off times and locations, all operator break and/or refueling begin and end times and locations, last drop-off time/location, pull-in garage, and any additional deadhead activity.
 - Reports including but not limited to revenue vehicle hours, will be tagged and allow breakdowns by service zone.
 - All statistics above are available on individual trip basis in an agency-facing dashboard with maps and Graphical User Interface (GUI). At a minimum, the dashboard will include views for: all booked trips, including origin/destination mapping capabilities, all driver shifts, all KPI statistics, vehicle & driver management, and shift management.
 - Generate an NTD-standard report for upload to the Federal Transit Agency system.
 - RTS/City of Gainesville will be able to own and access all data, including rider data, during and post-contract.
 - If any manual data input that will be required to capture sufficient data for reporting purposes, as well as how mileage and location data will be captured will be informed by the IT Firm.
 - Reportable data on pilot KPIs, including ridership, virtual stop usage and frequency, reservations, cancellations, promotional codes, trip ratings, driver ratings, comments, and customer service requests, riders per hour by individual geo-fence and system-wide.
- The following constitute future capabilities
- Daily Reports of Key Performance Indicators are delivered by email to project stakeholders.
 - Virtual stop usage and frequency.
 - Number and percentage of trip transfers to and from fixed route.
 - Driver and trip rating, number of passengers, and seat types selected.
 - Number and success of marketing events – audience reached.
 - Promotional or referral code usage and frequency.
 - A concierge interface for hotels, restaurants, non-profit organizations, or employers to

book a trip on behalf of a customer via web interface.

- GTFS (General Transit Feed Specification): Ability to consume the GTFS to provide additional information to the public.
- System will have an open API that is capable of integrating with trip planning and mobile ticketing apps (e.g., Kontron) that allows customers to plan a trip and pay for a trip on the service without using the provider's app. Native integration is preferred.
- Identify which app platforms the system currently integrates with and if it is a deep link or native integration solution in the proposal

p. Technical Support, Software Upgrades and Releases

- Provide a licensed software/technology platform that supports demand-responsive routing and dispatch of vehicles.
- Provide upgrades and new features to software generally made available to other licensees for no additional charge.
- Support Services will be provided via phone and email and must be available during RTS operating hours.
- Provide prior notice in a timely manner to RTS when the software will be unavailable for any reason, such as system maintenance, and coordinate a date/time that is outside of regular RTS operating hours.
- Software Security and User Privacy: Ensure privacy and security of all data maintained as part of the service.

q. Privacy Requirements and Software Security

The system will meet the following security and privacy requirements:

- The passenger and driver apps are 'stateless' and do not store confidential passenger data on the local device.
- All data is stored securely in the cloud (Amazon Web Services – 'AWS') or approved equal. All data stored securely in the cloud utilizing infrastructure that is designed and managed for maximum uptime and availability and in full compliance with IT security best practices and standards.
- The passenger and driver apps communicate securely with the cloud-based platform using RESTful APIs¹.

- Data is encrypted in transit using standard HTTPS, using a TLS wildcard certificate.
- All public facing web servers have been hardened using industry best practices, including updating servers according to latest security bulletins. External tools are used to verify the integrity of the TLS certificates and how they are applied to the servers.
- Internal networks are shielded by AWS security groups which define allowable ports and IP addresses for internal services.
- APIs are all secured using token authentication using City of Gainesville identity management system. Tokens are only valid for one user and can only be acquired by successfully authenticating against our authentication API. For certain API calls, throttling exists to prevent against DOS type attacks.
- Maintain a 99%+ uptime performance record and service level guarantee.
- Daily backups of production databases are taken and housed against an AWS S3 bucket for disaster recovery.
- The mobile applications and operations dashboards include their own terms of service to end users that include provisions relating to data privacy, confidentiality, and intellectual property rights.
- In the future and when necessary, Software will not store any payment card or billing information on the Client's servers.

r. Transfer of Data at Contract Termination or Expiration

Provide all services necessary to transfer administration of RTS' demand transportation program to the City of Gainesville/RTS or its designee at the expiration or termination of this Contract and no additional compensation will be allowed for such transfer services. Upon termination or expiration of the Contract or upon RTS' written request at any time during the term hereof, The IT Firm will provide such data to the Agency's designate using the same type of storage device as was used by the Firm to store such data or any other storage device that stores the data in any manner that can be readily accessed and processed by RTS using a computer similar to the one that was used by successful proposer or successful sub-contractor(s) to store and process such data.

s. **Import of Existing Data**

The IT Firm will import the existing data from the current RTS system for the continuity of the operation including specialized client identification (ID) customer database, operator information and schedule information/GTFS feed. During the registration process individuals are providing information that is considered personal information, therefore the IT Firm will comply with City's Minimum Technical Requirements by providing technical knowledge and support to Agency staff.

t. **Training and Support**

The IT Firm will provide training to RTS administrator, operators, dispatchers, and customer service representatives on how to use the software. This will include any customer-facing and operations-facing applications, software, dashboards, or other related tools. The Firm will provide up to four (4) two-hour training sessions prior to service launch and on an as-needed basis, as requested by RTS. The training will be administered virtually or in-person, as requested by RTS.

5. TECHNICAL IMPLEMENTATION

IT Firm objective will be to delivery this project using web application framework software like Laravel, Cake PHP or Code Ignitor (or any other PHP framework of client choice). Application will be hosted on a well-known, secure and reputable SaaS provider like Amazon or Microsoft Cloud.

To being with, IT Firm will create an instance where all the development and testing will happen. This is where IT Firm will work with client to ensure that all the requirements and specifications of the applications are properly delivered. After testing and sign-off from client, a fresh production environment will be created where real life records are created and stored.

The test and production application environments will be separate from each other. Any bugs reported in production environment will be reproduced, fixed and tested in the development environment and then moved to production once approved by key users from client.

Daily and weekly backups will be created automatically. Monitoring of this function will be

done by IT Firm and if there are issues with the backups, IT Firm will take necessary action to fix this issue.

6. RESOURCES

The project will have 5 people working on the project/application until the system goes live. Profile of the resources are as follows:

1. Monty Roy – Project Manager

Monty will be the primary contact for all interactions between the Client and IT for matters related to software development, user training and implementation

2. Mandy Minhas – Client Support Specialist

Mandy will be responsible for day-to-day user support issues and user training after implementation of project

3. Ramesh – Technical Lead

Ramesh will be the lead developer to work on the design and functionality of the application. Other developers will report to Ramesh for development and implementation of this project

4. Anirudh – Full Stack Developer

Anirudh will work with Ramesh to ensure proper delivery of application. He will also test system periodically to ensure application is bug free and stable

5. Rasika – Software Test Engineer

Rasika will work with all the developers and designers on team to ensure their work is tested properly in the application test environment. She will repeat the process until system UI and functionality is working to specifications

6. Sanjeev Kumar – UI/UX Designer

Sanjeev will work on the UI responsive design of the application. He will work full time on the project in the beginning until design of the application is approved by client

Resumes/Bio for all the resources are attached separately

Client references for projects worked on by these resources are also attached separately

7. PRICING AND TIMELINES

Project cost will breakdown into 2 components. One time cost and ongoing monthly maintenance cost. Details are listed below. Pricing is valid for 90 days.

Project Implementation one-time cost:

One time cost of development, testing and implementation of the project will be \$40,000/- USD, which has been arrived at by multiplying the hourly rate set forth by the estimated number of hours to deliver the project

Project completion time:

The time required to finish the project and have it work in production is 90 days from the date project is awarded to IT Firm.

Ongoing Application and Hosting support:

The 2nd component of the delivery is the ongoing maintenance, training and support of the application platform which covers:

- Daily and Weekly backups
- Cloud hosting of the application and data
- Fixing of bugs (not found and fixed in initial implementation)
- Ticketing or email support for all application users
- Software and Security patches on regular basis

Ongoing application and hosting monthly cost:

Monthly cost of application maintenance, backups and user support will be \$1500/month. This will cover all items mentioned in the “Ongoing Application and Hosting support” section above. This cost and billing will start once application and been developed, fully approved by client and implemented in production environment

Payment terms and schedule

- Client will be responsible for any pre-approved reasonable costs related to

travel to client site or any other location required for project implementation

- If travel is required, it will be billed at half of the \$50/hour standard billing rate
- Payment will be made by “**City of Gainesville**” to IT Firm within 30 days of generation of billing invoice
- Any additional development, design, data restoration work or any item not covered in the requirements or implementation above will be charged at \$50/hour. Invoicing for such work performed will be pre-approved by client and billed separately from the monthly cost and due within 30 days of invoice submittal