

Attachment D – Specifications Requirement Form

(Complete Form and Submit with Proposal)
NOT INCLUDED IN THE PROPOSAL PAGE COUNT

Check the Yes box to indicate identified feature / statement is standard with software. Check No if feature is not available or applicable to your software.

Identify as an Add-on if it is available outside of the standard package.

It is strongly encouraged that you identify within the **additional information column** any added information to support your selected choice. If need be, include additional information as an attachment to this form. If attaching additional information clearly note as to what specification category and number you are providing the information for.

GENERAL SPECIFICATIONS					
	Specification	Yes	No	Add-on	Additional Information
REQUIRED	1. Allow, for 4 or more staff & dispatchers licenses or user accounts. Must be able to set controls for each user type.				
	2. System must have a 99% uptime or greater.				
	3. Import existing customer database from RouteMatch Software.				
	4. Customer and technical support requests are supported for all functions, with trackable tickets issued for each request. Support requests must be initially responded to within 24 hours and resolved in a timely manner.				
	5. PLT has a contract for cellular service with Verizon. Vendors must allow the agency to use their own SIM cards and not charge the agency for cellular service.				
	6. Compatible with any off-the-shelf Android tablets.				
	7. Must meet all cybersecurity standards and requirements as outlined by the US Department of Homeland Security.				
	8. Health Insurance Portability and Accountability Act (HIPAA) compliant.				
	9. The software must be capable of managing dial-a-ride (DAR) trips and deviated fixed routes operated by PLT.				
STRONGLY DESIRED	1. Vehicle maintenance tracking				
	2. There must be a recovery mode/feature for the operators' trips on the tablet if they encounter an area with no service.				

GENERAL SPECIFICATIONS					
OPTIONAL	1. None				

CUSTOMER DATABASE					
	Specification	Yes	No	Add-on	Additional Information
REQUIRED	1. At a minimum the customer database must include name, address, phone number, use of mobility device, 3 rd party billing (if applicable), adjustment for loading times, and passenger type.				
	2. The software shall be capable of registering new clients through manual entry, capturing information while the PLT dispatcher has the new customer on the telephone. When entering data, the system shall alert the user if there is an existing customer or account entry under the same name or address.				
	3. The software shall allow entry of dispatcher notes and comments for each passenger and any unique circumstances.				
	4. The customer database shall record client rides, no-shows, and trip request history with a search function that allows searching by passenger, time, or date.				
	5. The software shall track passenger no-shows and late cancellations (less than 15 minutes before the ride).				
STRONGLY DESIRED	1. The application must be capable of capturing 3rd party payee information for invoicing.				
OPTIONAL	None				

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GIS AND MAPPING FUNCTIONS					
	Specification	Yes	No	Add-on	Additional Information
REQUIRED	1. The system shall have the capability to use street level GIS map data speed to calculate driving and trip duration during the scheduling process. The system will also have the capability to use the street GIS level map data to identify one-way street information while calculating drive length and duration.				
	2. System shall permit manual assignment of x- and y-coordinates in the event an address cannot be geocoded based on existing map address range attributes.				
	3. Maps must either include regular updates (at no additional cost), use open API Maps (such as Google or Bing), or have the ability to self-update.				
	4. PLT must have the ability to define new service zones and edit existing ones. This includes modifying routes, stops, service zones, and schedules.				
	5. The system shall have the ability to assign common names to destinations (such as; Walmart, Post Office, Hospital, etc.).				
STRONGLY DESIRED	1. PLT shall have the ability to permanently and temporarily block road segments off to prevent buses from traveling on them.				
	2. The software's optimization algorithm accounts for traffic patterns in determining travel times.				
OPTIONAL	1. Exportable data to standard GIS software for geospatial analysis.				

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PLANNING AND RUNCUTTING (Applies to the deviated fixed route only)					
	Specification	Yes	No	Add-on	Additional Information
REQUIRED	1. Ability to import existing GTFS with routes, schedules, stops, and deviation zones.				
	2. Ability to export GTFS with routes, schedules, stops, and deviation zones.				
	3. Ability to edit existing route shapes, schedules, and bus stops by tracing the route and adding stops geographically or by defining stops and time points.				
	4. Calendaring to set rules for when schedules operate.				
STRONGLY DESIRED	None				
OPTIONAL	1. Ability to do manual blocking and optimize blocks to automatically create vehicle schedules.				
	2. Manually split blocks to build runs.				
	3. Exportable data to standard GIS software for geospatial analysis.				

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TRIP BOOKING AND SCHEDULING					
	Specification	Yes	No	Add-on	Additional Information
REQUIRED	1. Software optimizes the assigning of trips to vehicles, thus reducing or eliminating the need to manually schedule trips to vehicles.				
	2. Ability to monitor On Time Performance (OTP) and the accuracy between the optimization estimated and actual travel times. 90% of optimization estimated travel times should be within 30 minutes of actual travel times, notwithstanding external conditions outside of the control of the PLT.				
	3. No restrictions on how far in advance individuals can schedule rides (DAR or deviation requests).				
	4. At time of a deviation booking the software should present options for the dispatcher to select the deviation based on time and location request.				
	5. Must be capable of scheduling by pick-up time or drop-off time.				
	6. Allows standing order and / or regularly occurring trips.				
	7. Capable of scheduling same-day trips.				
	8. Ability to do group scheduling where multiple individuals have the same trip.				
	9. Ability to indicate if a trip includes an attendant or guest.				
	10. Software must have geofencing and rules that dictate deviation areas.				
	11. When scheduling a trip, it must include the passenger's name, pickup address, drop off address, method of payment, and pickup window.				
	12. Must allow for setting boarding and alighting time buffers based on rider characteristics and use of mobility device.				
	13. Dispatchers must be able to book, schedule and cancel DAR trips and deviation requests. Must allow manual override and editing of individual trip scheduling and reservations.				
	14. Software accounts for vehicle size and capacity when scheduling rides so that it would never over-assign DAR passengers based on seating capacities and configurations.				
	15. Auto calculates the fare at the time of booking.				

TRIP BOOKING AND SCHEDULING					
	Specification	Yes	No	Add-on	Additional Information
STRONGLY DESIRED	1. The software optimizes scheduling and reassigns DAR trips as needed if a vehicle is behind schedule, an individual no-show, a vehicle goes out of service unexpectedly, there are traffic or weather events impacting travel times, or a vehicle is scheduled to be out of service for maintenance.				
	2. Ability to set adjustable pickup window by mode set by PLT.				
	3. Set windows of service hours and days, as well as service areas so that the software restricts trips that are outside these set parameters.				
	4. Ability for the system to automatically set floating breaks based on the schedule.				
	5. A trip request's pickup or drop-off location can snap to predetermined nearby pickup/drop-off points automatically if a reservationist or passenger requests a ride in a large public venue, such as a hospital or sporting venue.				
	6. The system stores common addresses/locations for each passenger and displays these options when booking.				
	7. Ability to import existing destinations from RouteMatch into the new software.				
OPTIONAL	1. The software must automatically process and schedule on-demand reservations within 60 seconds of request submission.				
	2. Ability to interface with MaaS app by embedding the Demand Response Transactional Data Specification (TDS) to support data exchange.				

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VEHICLE OPERATOR INTERFACE					
	Specification	Yes	No	Add-on	Additional Information
REQUIRED	1. PLT provides public transit in rural areas and has spotty cellular service. The software needs to maintain a connection between the dispatch interface and vehicle mobile data unit when the vehicle enters an area with poor cellular connectivity. Otherwise, the software needs to re-establish connection automatically once cellular service is regained without any action required (such as powering off and on the device by the operator / driver).				
	2. If the software adds a passenger trip while a trip is in progress, the driving directions will automatically update with minimal input from the operator/driver.				
	3. When the vehicle is not in motion the operator/driver should have the ability to update trip information such as fare type paid, no-show, etc.				
	4. The operator/driver application will provide all relevant passenger information, including but not limited to passenger name, origin, destination, relevant dispatch notes, and fare type.				
	5. Software must be capable of providing real-time direction routing within the application. The operator/driver application shall display a map, as well as turn-by-turn directions with street names and mileage until next movement, both while the operator/driver is in route to a passenger boarding location and while a trip is in progress.				
	6. Tablets must allow operators/drivers to adjust the number of passengers picked up at a location by passenger type (Adult, Senior, Youth, Disabled, Under 4). All passenger data should be geolocated and time stamped.				
	7. Tablets must display street address and common names (if applicable) of pickup and drop-off locations and deviation requests.				
	8. Dispatchers must be able to send messages to operators/drivers, who can send canned messages back.				
STRONGLY DESIRED	1. Software must be capable of pre-trip inspections that are customizable by vehicle type.				
	2. All operators/drivers will have unique logins to the tablet. Login should be based on driver identification not vehicle identification alone.				

VEHICLE OPERATOR INTERFACE					
	3. The system shall allow an operator/driver to login to only one vehicle at a time.				
	Specification	Yes	No	Add-on	Additional Information
OPTIONAL	1. If the vendor is proposing new tablets or mobile data units, all proposed equipment installed on transit vehicles must be designed to operate long term in a harsh transit bus environment (e.g., extreme ranges in temperature and humidity, bus vibrations, shakes and bumps, etc.).				

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DISPATCH INTERFACE					
	Specification	Yes	No	Add-on	Additional Information
REQUIRED	1. Live bus tracking and the vehicle's real-time position shall be auto refreshing the location every 15 seconds or better.				
	2. The ability for dispatchers to assign buses to routes and an operator/ driver and does not allow assignment of an operator / driver or route to more than one vehicle at a time.				
	3. The software shall allow for communication between the dispatcher and vehicle operator / driver through the mobile data unit (tablet). The software allows the dispatcher to send custom messages to vehicle operators / drivers. PLT must be able to populate and edit a list of predetermined or "canned" question and response options for both dispatchers and vehicle operators / drivers.				
	4. The ability for dispatch to easily assign a new vehicle to a route in the event of a bus swap mid-shift. The system can properly capture and retain all data accurately as to which vehicle operated which segment of the route and associated operating statistics.				
	5. The software shall have a map-based user interface and display real-time vehicle location, vehicle number, vehicle speed, county, and schedule adherence.				
	6. If an individual no-show for the first leg of the trip it must notify dispatch and prompt them to determine if the return trip should be cancelled or not.				
	7. Dispatchers have the ability to alter operator/driver shift times.				
	8. The ability for dispatchers to assign buses to routes and operators / drivers while not allowing the assignment of a driver or route to more than one vehicle at a time.				
	9. The software shall allow for communication between the dispatcher and vehicle operator / driver through the mobile data unit (tablet). The software shall allow the dispatcher to send custom messages to vehicle operators / drivers. PLT must be able to populate and edit a list of predetermined or "canned" question and response options for both dispatchers and vehicle operators / drivers.				

DISPATCH INTERFACE					
	Specification	Yes	No	Add-on	Additional Information
	10. The ability for dispatch to easily assign a new vehicle to a route in the event of a bus swap mid-shift. The system is able to properly capture and retain all data accurately as to which vehicle operated which segment of the route and associated operating statistics.				
	11. The software shall have a map-based user interface and display real-time vehicle location, vehicle number, vehicle speed, county, and schedule adherence.				
	12. If an individual no-show for the first leg of the trip it must notify dispatch and prompt them to determine if the return trip should be cancelled or not.				
	13. Vehicle history tracking and playback.				
	14. Dispatchers have the ability to alter operator/ driver shift times.				
STRONGLY DESIRED	None				
OPTIONAL	1. The operator's application shall alert dispatch when the operator/driver logs in and out of the tablet.				
	2. The operator application shall alert dispatch when the operator goes off task or off route.				
	3. Dispatch has the ability to remotely log drivers on and off buses.				

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DATA & REPORTING					
	Specification	Yes	No	Add-on	Additional Information
REQUIRED	1. The software shall provide a reporting system that meets National Transit Database (NTD) and Minnesota Department of Transportation (MnDOT) requirements for reporting. See Attachment B for required reports and third-party invoicing. The reports shall be exportable to an interactive file format such as comma separated value tables or Microsoft Excel.				
	2. The reporting system must allow user-friendly ad-hoc reporting and query generation without the need for a programming specialist.				
	3. The system must track and report at minimum the following operating statistics and performance metrics: no-shows, late pick-ups, denials, rides, miles, hours, rides per hour, and farebox revenue.				
	4. Must be able to generate summary reports as well as detailed reports with individual trip attributes.				
	5. All data must be available for export so that PLT can perform their own additional analysis as needed.				
	6. All trip and passenger data must be retained for at least 7 years and easily obtained by PLT. This includes access to historical data on the software platform beyond any contract period.				
	7. The system stores all data securely in the cloud or server.				
	8. The system must be able to generate reports for third-party billing.				
	9. Reporting features must allow for reporting of fare collection by category, service type, and billing codes.				
	10. The software shall include a searchable historical event log database that is exportable to a CSV or Microsoft Excel file.				
	11. Generate a GTFS-Flex.				
	12. All data is owned by PLT.				
STRONGLY DESIRED	1. The system must track all edits made to trips (what, when, and by whom) and generate associated reports.				
OPTIONAL	1. Dashboard which displays Key Performance Indicators (KPIs), and other data.				
	2. Ability to generate reports that mimic MnDOT Black Cat screens to ease data entry.				

DATA & REPORTING					
	Specification	Yes	No	Add-on	Additional Information
	3. Generates a GTFS Report for the deviated route service.				

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