Intelligent Transportation Systems

Integrating Technologies for Mobility Management & Transportation Coordination

May 24, 2011
RouteMatch Software Overview

RouteMatch Software is a leading provider of public and human service passenger transportation software and technologies.

Founded in 2000 and Headquartered in Atlanta, Georgia with a staff of over 100 employees exclusively focused on building, delivering, and supporting transit ITS solutions.

Products and Services designed specifically for Mobility Management including: route and schedule optimization, automated dispatching, vehicle tracking and monitoring, cost allocation engines, coordination tools, and transit traveler information systems.

Deep experience across the North America with over 350 public transportation customers including public transit, health and human service, private and hospital systems.

Fastest growing transit ITS technology firm in the U.S.A. Founded & based in the United States.
Enterprise and Service Integration Tools

RouteMatch is uniquely qualified to provide a single, Enterprise solution for all your transit management system requirements

**Multi-modal Service Integration**
- Paratransit (Demand Response)
- Fixed Route CAD/AVL
- Multi-Agency Coordination
- Brokerage – Medicaid / NEMT Transportation Mgmt
- Intelligent Vehicles
- Single Source of Software, Hardware, and Support
- Funding Source / Contract Trip by Trip Eligibility
- Para to Fixed Scheduling
- Transfer Protection
- Flexible Vehicle Deployments
- Flex Deviation Support
- Bus Pass / Voucher Systems

**Regional Traveler Information**

**Single Point of Contact Support**
Mobility Management Operations

**Federal Definition:** Mobility management is an approach to service development and management that focuses on individualized customer markets and involves establishing a variety of services tailored to meet the needs of those markets.

**Denver RTD – ADA Paratransit Service** - One Call Center Model, 4 Contracted Service Providers 315 vehicles, 3300 Daily Trips, Subsidized Same Day Taxi Service. 325 Vehicles, 11 Million Service Miles, 748,949 Service Hours

- Access A Ride Program
- 325 Vehicles
- 11 Million Service Miles
- 748,949 Service Hours
- 692,747 Annual Boardings
- ITS Infrastructure Automated Scheduling and Mobile Data Communications

**Lower Savannah Council of Governments;** August 2010 Established Regional Small Urban / Regional Rural Mobility Management Center.

- 1 Small Urban Transit System, 5 Regional Rural Transit Agencies
- Public & Human Service Transportation
- Multi Agency Coordination
- Multi Funding Source Coordination
- Comprehensive ITS Infrastructure

**Hopelink – Regional Medicaid Brokerage King & Snohomish Counties WA.**

- Non Profit Human Service Organization
- Medicaid & Other Human Service Transportation
- Deviated Fixed Route Operations
- Integrated IVR Systems
- Comprehensive ITS Infrastructure
### Technologies for Mobility Management

#### Five Key Goals for Mobility Management

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Technologies for Mobility Management

Goal #1 – Provide Access To Services

Call Center Design

- Centralized / De-centralized
- Creating Access based on Service Needs

Web Enables Access

- Extending Access (24 Hours)
- Consumer Access
- Center / Facility Access
- Managing the High Demand
- Eliminating Duplication

Integrated Voice Recognition

- Telephony Based Access
- 24 Hours Access
- Auto Attendant

Smart Phone / Email Access

- Text & Type Request
- Staffing Management
- Changing the culture from Inbound to Outbound Delivery
Expanding Services
Decentralized Operations
Coordination
Enter Trip Reservation

| #1: Select Date | #2: Enter Trip Info | #3: Review | #4: Summary |

Customer Information:
- Name: COOGAN, TOM M
- DOB: Age: ??
- Internal ID
- SSN#
- Phone: (303) 303-3030
- Email

- No trips on SATURDAY
- No trips on SUNDAY

- Demand Response Trip
- Trip Date: 06/25/2010 (Earliest Date: 06/24/2010)

- Standing Order Trip
- First Date
- Last Date

Select One:
- One Way
- Round Trip

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# Technologies for Mobility Management

## Goal #2 – Provide Customer Service & Outreach

### Information & Referral
- Providing the rider with information
  - Telephone
  - Website
  - Email
  - SMS

### Reservations & Scheduling
- Providing Options at the point of service
  - Eligibility & Certification
  - Arrival & Departures
  - Curb / Door
  - Wait Times
  - Assistance Needs
  - Special Needs

### Replicable / Scalable Processes
- Managing the Access Points
- Responsive in meeting service needs
- Delivering on the promise
Customer Service & Outreach

- Knowing the rider
- Meeting the needs
- Accuracy & Consistency
Improve Customer Service and Outreach

**Notification Module**

- Notify customers of general service announcements, trip reminders, trip status, real time arrival, and user defined messages
- Reduce No Shows
- Improve Customer Service
- Automate Call Back Process
- Emergency Management and Floodgates
- Track Call Status Data

- Phone
- Email
- Text
- Web Portal

**Connect to AVL System for Real Time Arrival Notifications**
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Goal #3 – Tools to Improve Multi-Modal Service

**Demand Response Paratransit Services**
- Cost Effective & Efficient
- Managing the Day of Service
- On Time Performance
- Integration w/ Fixed Route System
- Transfer Protection
- Real Time Awareness of Vehicles, Drivers and Riders

**Fixed Route Services**
- CAD / AVL
- On Time Performance
- Integrated Passenger Counters (Boardings & Alightings)
- Fare Management & Reconciliation
- Integrated Announcements ADA & Special Event
- Real Time and Planned Deviations

**Coordination w/ Multiple Agencies**
- Serving the unmet need
- Automated Trip by Trip Coordination
- Multiple Funding Sources / Extending the Service Area
- Leveraging Local and Regional Resources
- Higher Modes & Special Transportation Needs
Multi-Modal Service Delivery

Improve Your Reservation Process

- Streamline Reservation Process
- Standing Order and Subscription Management
- Trip Edit Audit Logs

ADA Compliance

- ADA Trip by Trip Eligibility
- ADA Conditional Eligibility Tracking
- ADA Trip Negotiation
- ADA Process Auditing
- Multi Modal and Multi Service Integration

Schedule and Provider Coordination

- Automated Schedule and Route Assignment
- Automated Provider Assignment
- Paratransit to Fixed Route Integration
- Flex Route Deviation Support

Call Center Automation and Web Access Options

- Automate Call Center Communications and Workflows
- Monitor, Collect, and Analyze Call Center Contact Statistics
- Supports Customer Trip Alerts and System Notifications
- Integrate the RouteMatch Interactive Voice Response (IVR) to improve call center operations and customer service
- Integrate Customer Web Portal technologies to offer web-based reservations and customer information ... 24/7/365
Multi-Modal Service Delivery

Program Management
- Ownership
- Funding
- Coordination

Real Time Status
Scheduled, Performed, Completed

Multi-Agency
Technologies for Mobility Management

Goal #4 – Maintaining & Informing Ridership All Modes

Traveler Information Systems

• Scheduled Next Stop
• Real Time Estimated Time Of Arrival
• Day Before Reminders
• Same Day Notification
• Flood Gate or Broadcast Notifications

Methods to Disseminate Information

• Smart Phones
• Text Messaging
• Email
• Web Site / Transportation Portal
• Bus Stop / Transfer Centers

Systems Integration

• 511 Traveler Information Systems
  • Real Time & Scheduled
  • Delays / Changes / Options
  • Travel Advisories – Weather / Traffic
RouteShout helps riders quickly find upcoming bus arrival times using their mobile phones. AdShout helps transit agencies generate new revenue by placing and tracking ads using SMS and Smartphone.
Maintaining & Informing Riders All Modes

- COLLINS AVE AT PENN CIRCLE NORTH FS
- PENN AVE AT HIGHLAND
- HIGHLAND AVE AT PENN
- PENN AVE AT HIGHLAND
- HIGHLAND AVE AT PENN - NO STOP
- PENN AVE AT HIGHLAND
Quick rider adoption for SMS text messaging

**Port Authority of Allegheny County**

- Routes: 1,176
- Stops: 13,795
- Mobile Stops: 51
- Services: 3
- Unique Users: 11,701
- Total Requests: 91,015
- Trend over period: 316.8%

**Central Ohio Transit Authority**

- Routes: 139
- Stops: 4,360
- Mobile Stops: 62
- Services: 18
- Unique Users: 7,387
- Total Requests: 39,897
- Trend over period: 294.4%
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Goal #5 – Provide Tools to Manage Key Performance Indicators

Metrics Driven Business Operations

- System Deployment
- Service Hours / Miles
- Revenue Hours / Miles
- Staffing
- Productivity Per Hour (Passengers)
- Boardings
- Complaints / Incidents
- Capacity Management

Customer Service

- On Time Performance
- Wait Time / Hold Times
- Pick Up / Drop Off Windows
- Average Speed of Answer
- Hold Times
- Call Backs
- No Shows / Late Cancellations

Revenue Management

- Contract Performance
- Performance Bonuses vs. Liquidated Damages
- Fare Management & 3rd Party Billing & Reconciliation
Key Performance Indicators

Business Intelligence
Real Time – Scheduled vs. Actual
Service Oversight – Ticket Dashboard
Key Performance Indicators

RouteShout integrates seamlessly with GTFS and can deliver both scheduled and real-time information.

**RouteShout features:**

- No hardware to install; web-based
- GTFS-compliant
- Detailed reporting and real-time activity monitoring
- Data published to iPhone, Android, and Mobile Web applications
- GTFS data can be updated manually, automatically at recurring times, or through a custom process
- Can pull data from XML or another web service
- Ability to subscribe to route or system-wide mobile alerts
Goal / Mission: Provide a coordinated transportation system that services all residents of the "Community".

**Phase 1:** Goals / Mission
Scope

**Phase 2:** Concept of Operations

**Phase 3:** System Requirements & Design

**Phase 4:** Implementation and Measures

- Urban / Regional Rural System Integration
- Seniors and persons with special needs
- Coordinated services including public transit, human service and private transportation providers
- Rural, Suburban and Urban Multi-modal model
- Technology providing seamless and reliable communication
- Increased Access and availability
- Sustainability
- Meeting the unmet needs of the region
- Expanding and connecting services
Thank you

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