

MSAA COORDINATION PROJECT

Transportation Provider Partners

Via Mobility Services

Denver Regional Transportation District

City and County of Broomfield (Easy Ride)

Seniors' Resource Center

Technology Partners

DemandTrans

RouteMatch

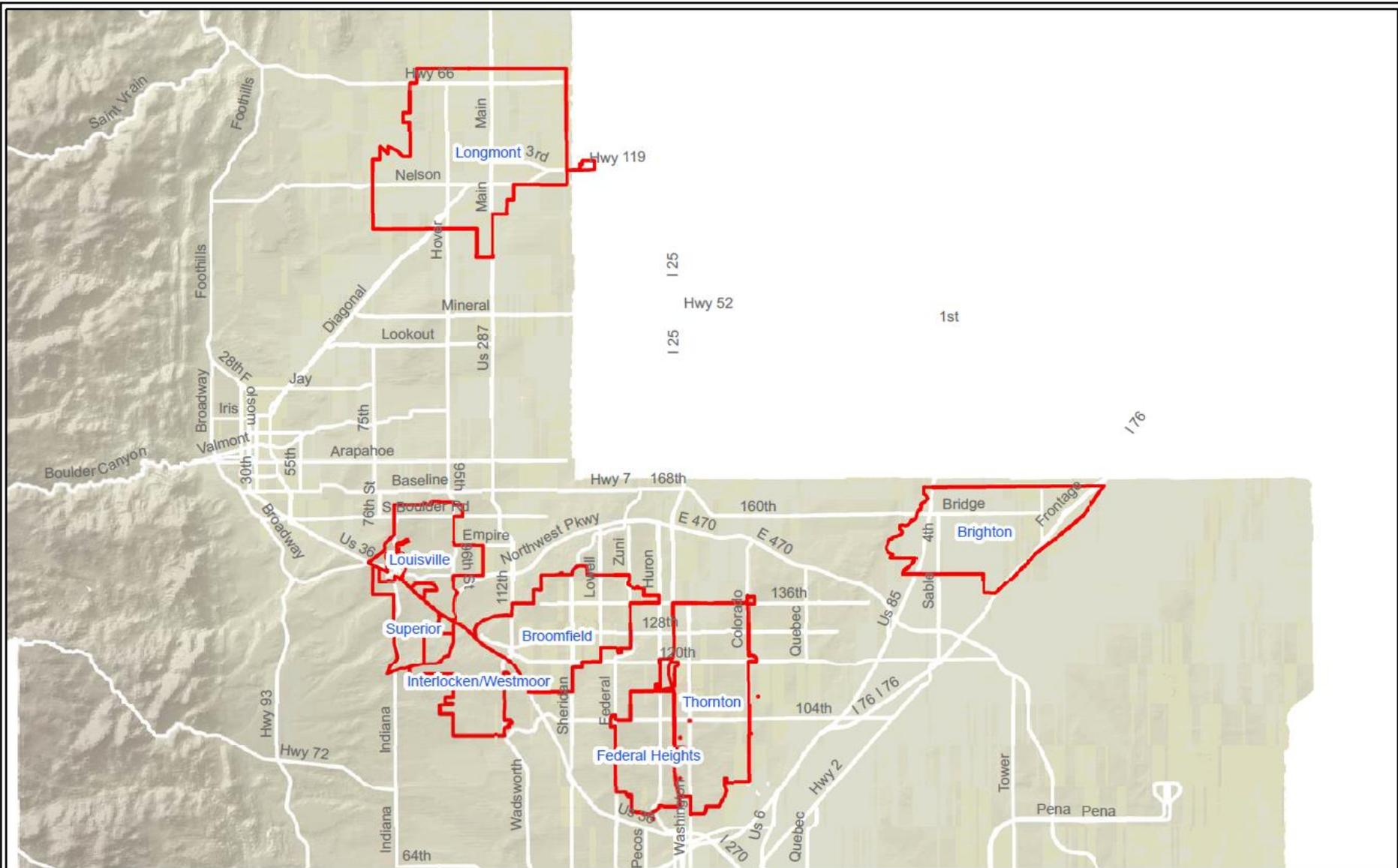
Project Manager

Transit Plus

Project Goals

Build off Via/Call-n-Ride success

- ◎ Enable coordination of trips between providers
 - Exchange trip information through technology
 - Automated
- ◎ Replicable, scalable, and cost effective



Via MSAA Project 2016
Call-n-Rides for Service Coordination



Service Development Division
 4/19/2016



Technology

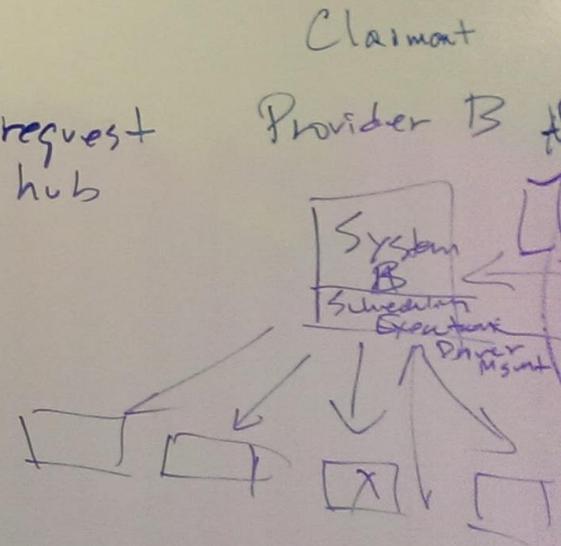
- How to transfer information?
 - A data exchange hub.
- Open source software selected
 - Open Source = original source code is made publicly available and may be redistributed and modified
- Utilize Ride Connections software*
 - Ruby on Rails conversion to Java
 - Ongoing support

*We learned about Ride Connections through the original VTCLI project.

Lifecycle of a trip

1. Send trip to hub
2. View trip in hub
3. Claim trip in hub
(UI) / Automated
4. Withdraw trip from hub — Requestor initiated
5. Return claimed trip — Claimant initiated
6. Return Trip data to hub — Claimant to hub
7. Receive trip data from hub — Requestor from hub

3a. Update trip request data in hub



Admin System

Figuring out the “Hub”

- ① When and how would information get transferred from the Hub to providers?
 - Application program interfaces (API's) or adapters needed
- ① Communication
 - When did providers want information?
 - Automated versus manual

Customer Service Guidelines

Business Rules Committee

- ⦿ Consistency between providers
 - Customers
 - Fares/voluntary contributions
 - Financial decisions
 - Seatbelts
 - Ages
 - How to communicate between providers
 - Trip changes
 - Data

Client Intake Guidelines

General: upper and lower case used, no periods

- First name (how they want to be addressed)
- Official name (legal name)
- Last name
- Address (no # symbol, use second line for apartment or building number)
- Disabled (when to use it)
- Low income (using HHS Poverty Guidelines)

Mobility Requirements

- Ambulatory
- Wheelchair
- Knee Walker
- Unstable needs assistance
- Walker
- Ambulatory Lift
- Ambulatory
- Scooter
- Extended Leg W/C = Extended Leg Wheelchair
- D2D Ambulatory = Door to door ambulatory

Service Needs

- Oxygen
 - Walker
 - VIP = Visually impaired
 - HIP = Hearing Impaired
 - MIP = Memory Impaired
 - Wheelchair
 - Electric Wheelchair
 - Wide Wheelchair
 - Wheelchair, can transfer
 - Scooter
 - D2D = Door to door
 - DTD = Door through door
 - NLA = Never leave alone/no leave alone
 - Crutches
 - Cane
 - Service Animal
 - Driver Alert
 - IDD = Intellectually or developmentally disabled
 - SD = Seizure Disorder
 - Other
- *Gate codes and “unstable” will move to notes instead

Trip Purpose

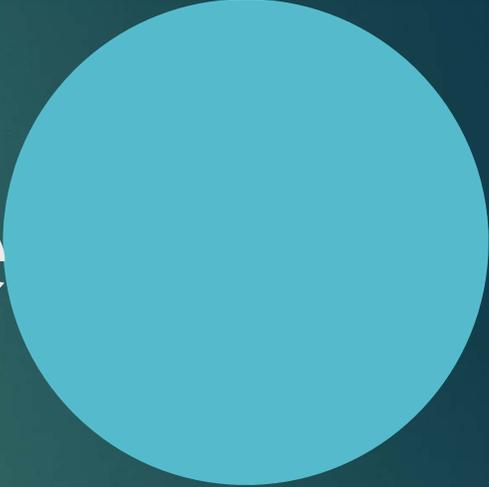
- Medical
- Personal
- Adult Day Program
- Employment
- Grocery
- HR = Health Related (includes dentist, pharmacy, etc.)
- Dialysis
- Recreation

*There may be other codes that providers may use but those trips are not likely to be put in the hub (for example, Broomfield meal program code).

Medical Problem ID

- MIP = Dementia
- VIP = Vision Impaired
- HIP = Hearing Impaired
- IDD = Intellectually or developmentally disabled
- SD = Seizure Disorder
- Mental Health
- Speech Impaired
- Temporary Disability
- Neurologic and Degenerative Diseases
- Kidney Disease

Hub Demonstration



MSAA Trip Exchange Walkthrough

Trip is created in originating providers scheduling system

RouteMatch 6.2.30 (asalvo) - [CO_Via in RM_CO_VIA_Training] [Trips]

Dolan, Larry (23843) - 12:00 PM - (1050 Lashley St ::<Customer Home >)
Conf# 1005630-17285 DR: Trip Date 10/12/2017
1-(303) 442-2433

Pickup: 1050 Lashley St, Longmont, CO 80501 (Boulder)
Dropoff: <Customer Home> Flatirons Terrace, 930 28th St, Suite 260, Boulder, CO 80303 (Boulder)

Service: MSAA
Trip Estimate: 16.52 Miles, 37 Minutes
FR Trip Est.: 0 Miles, 0 Minutes

Funding Source: Fare Only
Timing Preference: Dropoff
Fare Type: Town to Town, \$6.00 Customer Pay. Computed as Fare Only - Town to Town
Mobility Type: Ambulatory

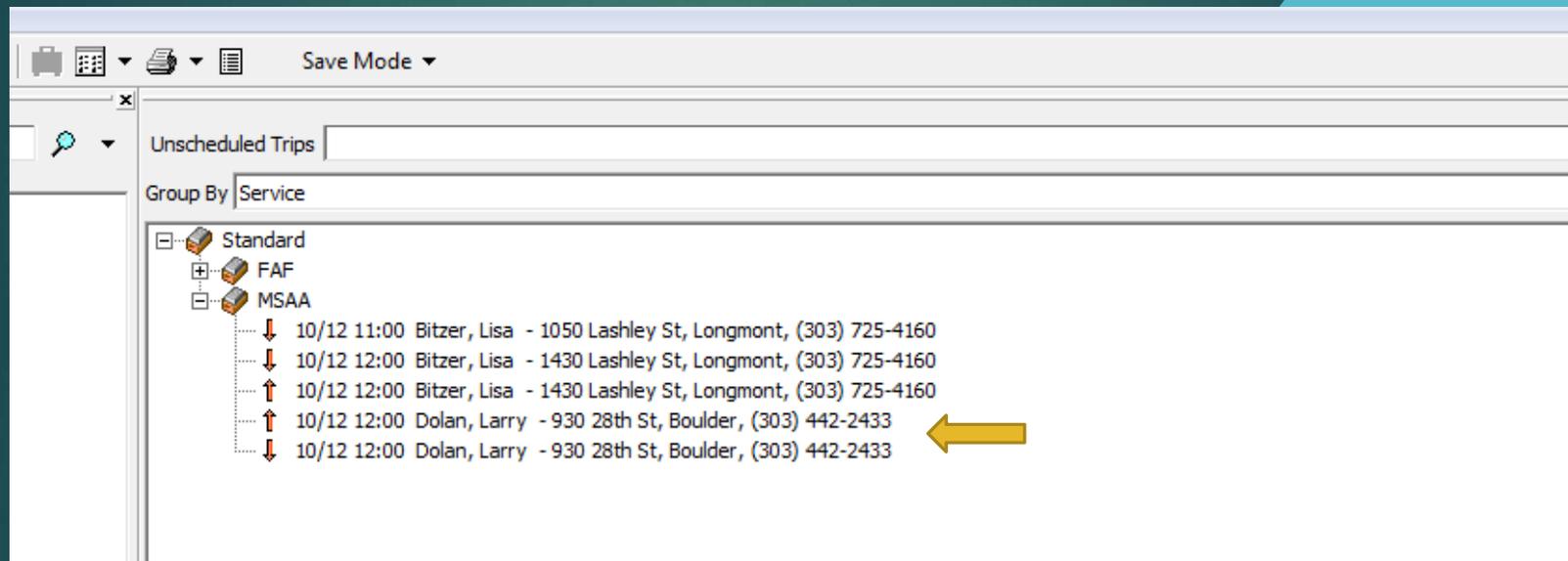
Calendar: October 2017
Today: 10/09/2017

Service: MSAA - [12:00] - [9:30] 2
Service: MSAA - [12:00] - [10:50] 1

Service = MSAA

Adapter criteria looks for trips where service = MSAA

Trip is placed in Unscheduled Trips staging area in RouteMatch



Email is sent from Exchange to indicate that trip was received and to indicate that an Exchange partner has created a trip ticket

FROM	SUBJECT	RECEIVED	STATUS
TripExchange@de...	Trip ticket is received	Mon 10/09/2017 11:46 AM	3... Inbox
TripExchange@de...	Partner creates ticket	Mon 10/09/2017 11:46 AM	4... Inbox
TripExchange@de...	Trip ticket is received	Mon 10/09/2017 11:51 AM	3... Inbox
TripExchange@de...	Partner creates ticket	Mon 10/09/2017 11:51 AM	4... Inbox

Mon 10/09/2017 11:51 AM

 TripExchange@demandtrans.com
Partner creates ticket

To: asalvo@viacolorado.org

[If there are problems with how this message is displayed, click here to view it in a web browser.](#)

Regards from Trip Exchange!

Hello Alex Salvo,

A new trip ticket from Via for Pickup Date - No requested pickup date, Pickup Time - No requested pickup time, Dropoff date - Thu Oct 12, 2017 Drop Off time - 12 AM has been received by the Trip Exchange.

Thank you,
Trip Exchange Team.

All rights reserved @2017 Trip Exchange

Trip is displayed on Exchange

The screenshot shows a web browser window with the URL 6.193/#/tripTicket. The page header includes a navigation menu, a user profile for Erica Hamilton, and a search bar. A table displays trip information with columns for Customer Name, Originator Provider, Pickup Date Time, Dropoff Date Time, Common Trip Number, Passenger/WC, Status, Claimant Provider, and Claim Actions. A yellow arrow points to the 'Larry Dolan' row.

Customer Name	Originator Provider	Pickup Date Time	Dropoff Date Time	Common Trip Number	Passenger/ WC	Status	Claimant Provider	Claim Actions
Randy S	Global Event	03/31/2017 11:33 AM	04/05/2017 3:34 PM	850234521	Passenger : 1 WC :	Available	No Claimants	
Larry Dolan	Via	10/12/2017 12:00 PM	-	1159986482	Passenger : 1 WC :	Available	No Claimants	✓
Lisa Bitzer	Via	10/16/2017 4:30 PM	-	663987328	Passenger : 1 WC :	Available	No Claimants	✓
Myra Patil	Global Event	02/23/2017 04:20 AM	03/02/2017 3:34 PM	749776616	Passenger : 1 WC :	Approved	Via	
Berry Allian	Global Event	03/04/2017 06:15 AM	07/26/2017 3:34 PM	1062666671	Passenger : 1 WC :	Expired	No Claimants	
Chris H	Global Event	05/08/2017 1:00 PM	05/08/2017 1:00 PM	1692734445	Passenger : 1 WC :	Expired	No Claimants	
Lara Datta	Z Solutions	05/25/2017 12:00 PM	06/11/2017 3:34 PM	2036091486	Passenger : 1 WC :	Completed	Ride Connection	

Exchange partner logs in and claims trip

Search...

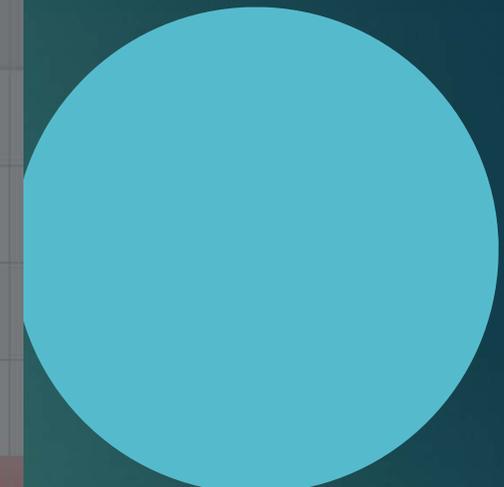
Show Quick Summary Show My Tickets

Customer Name	Originator Provider	Pickup Date Time	Dropoff Date Time	Common Trip Number	Passenger / WC	Status	Claimant Provider	Claim Actions
Randy S	Global Event	03/31/2017 11:33 AM	04/05/2017 3:34 PM	850234521	Passenger : 1 WC :	Available	No Claimants	
Larry Dolan	Via	10/12/2017 12:00 PM	-	1159986482	Passenger : 1 WC :	Available	No Claimants	
Lisa Bitzer	Via	10/16/2017 4:30 PM	-	663987328	Passenger : 1 WC :	Available	No Claimants	 Create Claim
Myra Patil	Global Event	02/23/2017 04:20 AM	03/02/2017 3:34 PM	749776616	Passenger : 1 WC :	Approved	Via	
Berry Allian	Global Event	03/04/2017 06:15 AM	07/26/2017 3:34 PM	1062666671	Passenger : 1 WC :	Expired	No Claimants	
Chris H	Global Event	05/08/2017 1:00 PM	05/08/2017 1:00 PM	1692734445	Passenger : 1 WC :	Expired	No Claimants	
Lara Datta	Z Solutions	05/25/2017 12:00 PM	06/11/2017 3:34 PM	2036091486	Passenger : 1 WC :	Completed	Ride Connection	

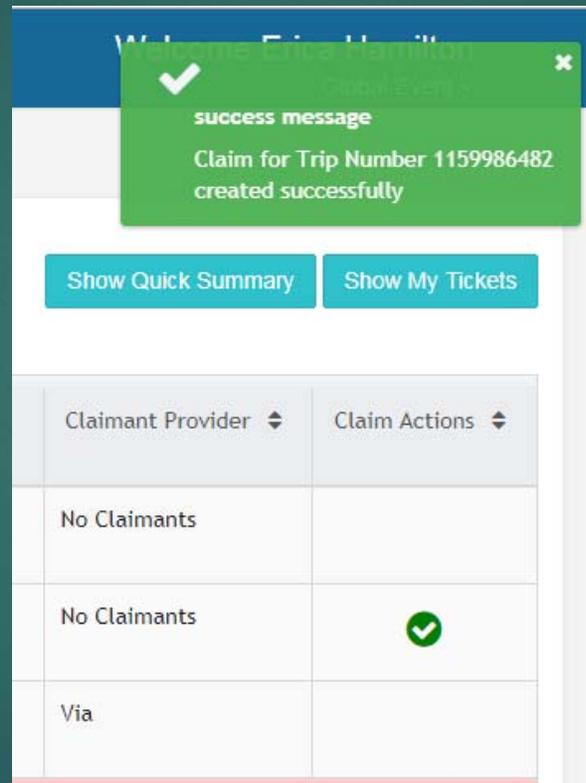
1 2 3

Trip claim details

Originator Provider	Pickup Date Time	Dropoff Date Time	Common Trip Number
Create Claim ✕			
Fare*	6.00		
Notes*	Needs assistance		
Proposed Pickup Date*	10/12/2017		
Proposed Pickup Time*	12:00 PM		
Proposed Dropoff Date	-		
Proposed Dropoff Time	-		
Claim			



Trip claim successful



The screenshot shows a web application interface with a success message overlay. The message is green with a white checkmark and contains the text: "success message" and "Claim for Trip Number 1159986482 created successfully". Below the message are two buttons: "Show Quick Summary" and "Show My Tickets". Below the buttons is a table with two columns: "Claimant Provider" and "Claim Actions".

Claimant Provider	Claim Actions
No Claimants	
No Claimants	✓
Via	



Notification from Exchange that claim was approved

Reply Reply All Forward
Thu 10/05/2017 8:43 AM

 TripExchange@demandtrans.com
Trip claim is approved

To: asalvo@viacolorado.org
[If there are problems with how this message is displayed, click here to view it in a web browser.](#)

Regards from Trip Exchange!

Hello Alex Salvo,
Your claim on trip ticket 158783746 for 10-12-2017 9:00 AM has been approved by Via.

Thank you,
Trip Exchange Team.

All rights reserved @2017 Trip Exchange

Total Control Panel

To: asalvo@viacolorado.org	Message Score: 1	Login
From: 0100015eecd1566-b066a8cd-7586-4cef-9867-297b099bc871-000000@amazonses.com	My Spam Blocking Level: Medium	High (60): Pass
	Block this sender / Block this sender enterprise-wide	Medium (75): Pass
	Block amazonses.com / Block amazonses.com enterprise-wide	Low (90): Pass

This message was delivered because the content filter score did not exceed your filter level.

Exchange trip status updated after claim approved

Search...

Show Quick Summary Show My Tickets

Customer Name	Originator Provider	Pickup Date Time	Dropoff Date Time	Common Trip Number	Passenger / WC	Status	Claimant Provider	Claim Actions
Charlene Handy	Via	07/21/2017 09:00 AM	07/21/2017 09:15 AM	1123024956	Passenger : 1 WC :	Approved	Global Event	 
Randy Bentson	Via	07/21/2017 3:30 PM	07/21/2017 4:30 PM	1950506952	Passenger : 1 WC :	Approved	Global Event	 
1 1	Broomfield	10/10/2017 1:00 PM	10/10/2017 1:00 PM	8722693	Passenger : 1 WC :	Rescinded	MSRTCs	
Lisa Bitzer	Via	10/12/2017 09:00 AM	-	158783746	Passenger : 1 WC :	Rescinded	MSRTCs	
Larry Dolan	Via	10/12/2017 12:00 PM	-	1159986482	Passenger : 1 WC :	Approved	Global Event	 
Lisa Bitzer	Via	-	10/12/2017 11:00 AM	1037855931	Passenger : 1 WC :	Available	No Claimants	
Larry Dolan	Via	-	10/12/2017 12:00 PM	1081784339	Passenger : 1 WC :	Available	No Claimants	

Routematch originating provider assigns trip to MSAA phantom vehicle for trip reporting purposes

The screenshot displays the RouteMatch 6.2.30 software interface. The main window shows a list of scheduled trips for the date 10/12/2017. The trip at 10/12 12:00 is assigned to the MSAA vehicle pool. The trip details are as follows:

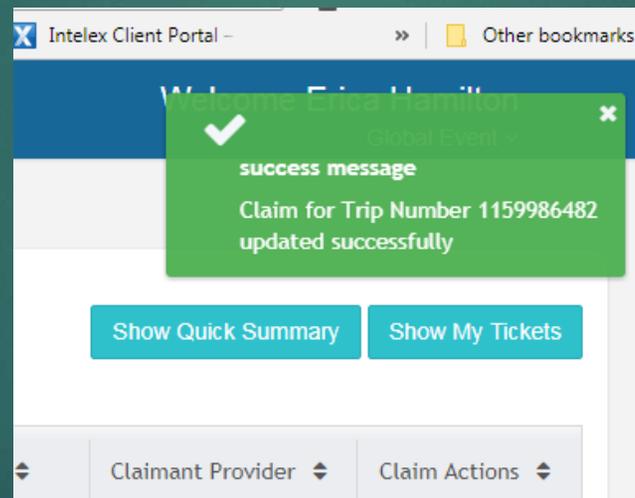
Time	Driver	Address	Phone
10/12 07:00		Garage Stop - 2855 N 63rd St, Boulder	
10/12 11:45	Dolan, Larry	1050 Lashley St, Longmont, (303) 442-2433	
10/12 12:00	Dolan, Larry	930 28th St Suite 260, Boulder, (303) 442-2433	
10/12 12:15	Dolan, Larry	1050 Lashley St, Longmont, (303) 442-2433	
10/12 13:45	Bitzer, Lisa	311 Chinook Ave, Longmont, (303) 725-4160	
10/12 14:00	Bitzer, Lisa	1050 Lashley St, Longmont, (303) 725-4160	
10/12 15:45	Bitzer, Lisa	1050 Lashley St, Longmont, (303) 725-4160	
10/12 16:00	Bitzer, Lisa	311 Chinook Ave, Longmont, (303) 725-4160	
10/12 17:01		Garage Stop - 2855 N 63rd St, Boulder	

The right-hand pane shows the 'Unscheduled Trips' section, grouped by service. The MSAA service is expanded, showing three trips:

- 10/12 11:00 Bitzer, Lisa - 1050 Lashley St, Longmont, (303) 725-4160
- 10/12 12:00 Bitzer, Lisa - 1430 Lashley St, Longmont, (303) 725-4160
- 10/12 12:00 Bitzer, Lisa - 1430 Lashley St, Longmont, (303) 725-4160

Editing trip details on the Exchange

		AM							
Larry Dolan	Via	10/12/2017 12:00 PM	-	1159986482	Passenger : 1 WC :	Approved	Global Event	 	
Lisa Bitzer	Via	-	10/12/2017 11:00	1037855931	Passenger : 1 WC :	Available	No Claimants		



The screenshot shows a web browser window titled "Intellex Client Portal". A green success message box is overlaid on the page, containing a checkmark icon and the text: "success message", "Claim for Trip Number 1159986482 updated successfully". Below the message are two buttons: "Show Quick Summary" and "Show My Tickets". At the bottom of the page, there are dropdown menus for "Claimant Provider" and "Claim Actions".

Email notification for updated trip

Reply Reply All Forward
Thu 10/05/2017 8:53 AM
TripExchange@demandtrans.com
Trip claim is updated
To alex@viacolorado.org
If there are problems with how this message is displayed, click here to view it in a web browser.

Regards from Trip Exchange!

Hello Alex Salvo,
Claim on trip ticket 2058752047 has been updated.
Please check below details:
Proposed Fare : \$ 6.0
Notes : No Change
Pickup Time : No Change

Thank you,
Trip Exchange Team.

All rights reserved @2017 Trip Exchange

Reply Reply All Forward
Thu 10/05/2017 9:00 AM
TripExchange@demandtrans.com
Trip claim is updated
To alex@viacolorado.org
If there are problems with how this message is displayed, click here to view it in a web browser.

Regards from Trip Exchange!

Hello Alex Salvo,
Claim on trip ticket 1123024956 has been updated.
Please check below details:
Proposed Fare : \$ 10.0
Notes : Needs assistance. Please ring doorbell
Pickup Time : No Change

Thank you,
Trip Exchange Team.

All rights reserved @2017 Trip Exchange

The keys to the MSAA project success

- ⦿ Build upon past successes with Via and Call-n-Ride
- ⦿ Had a clear purpose and stuck to it
- ⦿ Committed partners
- ⦿ Persevered to find a solution
 - Coordination is complicated

Questions?