



**CENTRAL TEXAS**  
**Regional Mobility Authority**

## AGENDA ITEM #7 SUMMARY

Discussion of Regional Solutions Addressing Transportation Issues

Board Action Required: NO

Backup: See attached

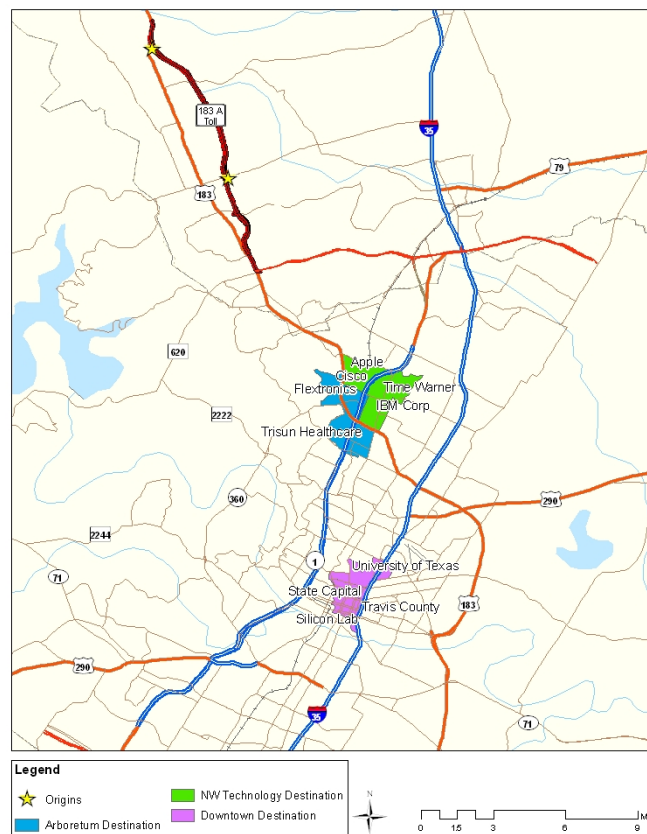
# REAL-TIME RIDESHARING TECHNOLOGY PROJECT

## FHWA – VALUE PRICING PILOT PROGRAM

### PROJECT DESCRIPTION

This project is going to examine whether the Central Texas Regional Mobility Authority, can utilize a location-based mobile application (Carma) to match commuters with empty seats in private vehicles to increase carpooling and encourage additional use of 183A and 290 toll roads. This program will also be testing real-time ridesharing as a reliable and low-cost method to automatically verify vehicle occupancy for toll pricing incentives.

Origin and Destination Centers



The project is divided by four tasks: Pre-implementation, Recruitment, Implementation and Final analysis. The study is funded at \$959,008 and is anticipated to extend over a two year period beginning with planning through final evaluation. An Advanced Funding Agreement (AFA) for this Project was approved on May 7, 2013.

## CURRENT ACTIVITIES

The Mobility Authority has completed Task 1 (Pre-Implementation) and is working on Task 2 (Recruiting) and the following activities have been accomplished:.

- Completed scoping requirements and design of the interface between the Carma Real-time Ridesharing (RTR) software and the back office tolling system.
- Completed hosting and support of the Carma software as required for vehicle occupancy testing activities.
- Completed the design to test efficacy of the Carma application with respect to vehicle occupancy.
- Field and engineering support in relation to vehicle occupancy testing activities.
- Completed training of the team in the use of the Carma product.
- Support of the development of the detailed project implementation plan.
- Participated in bi-weekly conference calls with the project team to discuss: project outreach, recruiting efforts, data transfer logistics, toll reimbursement process.
- Identify those organizations with potential to become the first adopters of the Real-time Ridesharing program.
- Successful PR launch on February 18<sup>th</sup>.

## UPCOMING ACTIVITIES

- Continue work to recruit current toll and non-tolled road users to enroll in the program.
- Evaluating local media and advertising to get the word out in the Leander/Cedar Park area.
- On-the-ground outreach, talking to local neighborhoods, employers, organizations along the 183A and 290 corridor.
- Ongoing engagement and management of the current Carma user base.

## SCHEDULE

- Employee/ Partner Outreach: January – March.
- Neighborhood Outreach: February – March.
- Public Relations Activities: February – April.
- Advertising and Social Media: February – Ongoing.

2013								2014												2015				
May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	
	Pre-Implementation																							
			Recruiting																					
			Implementation																					
																		Analysis & Reporting						

# HIGHWAY EMERGENCY RESPONSE OPERATORS (HERO)

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## PROJECT DESCRIPTION

HERO is a program designed to maintain full roadway capacity for the hundreds of thousands of travelers during periods of high traffic volume through the removal of disabled vehicles and debris from the roadway lanes and shoulders that interfere with normal traffic flow.

The project is currently funded at \$4,890,000 for a period of three years ending in July, 2015.

## ACTIVITIES

- Besides the hundreds of thousands of traveling motorists who benefit from the maintained roadway capacity during peak traffic periods, HERO provides approximately 900 direct motor assists per month.
- Direct assists by HERO patrols include
  - Tow vehicles from mainlane traffic or shoulders to a safe location
  - Change flat tires
  - Give battery boosts
  - Supply gas and water
  - Assist in accident mitigation and clearing

## PATROL AREA

- IH 35 from SH 130 in Georgetown at the north end to Yarrington Road in Hays County (53 Miles)
  - Patrol Zone #1 from SH 130 in Georgetown to FM 3406
  - Patrol Zone #2 from FM 3406 to US 183
  - Patrol Zone #3 from US 183 to SH 71 (two vehicles)
  - Patrol Zone #4 from SH 71 to Yarrington Road
- US 183 from IH 35 to Hero Way (two vehicles)

## HOURS OF OPERATION

- Patrols are conducted during two shifts between the hours of 6:00 a.m. and 8:00 p.m.

# STATISTICS

(For CY 2013)

Zone	Assists	
	#	%
Zone 1: (I-35) SH 130 to FM 3406	1,177	12%
Zone 2: (I-35) FM 3406 to US 183	2,630	26%
Zone 3: (I-35) US 183 to US 290W/SH 71E	2,299	23%
Zone 4: (I-35) US 290W / SH 71E to Yarrington Rd	1,195	12%
Zone 5: (US 183) I-35 to Lakeline Blvd	2,736	27%

Debris	Disabled Vehicle	Abandoned Vehicle	Single-Vehicle Accident	Multi-Vehicle Accident	Fire
1,792	6,747	1,092	40	354	12

Disabled Vehicle Breakdown						
Change Tire	Fuel	Jump Start	Add Fluid	Minor Mechanical	Other	Move to Safe Location
2,113	1,860	555	220	611	830	558

# 183A VARIABLE TOLL PILOT PROJECT

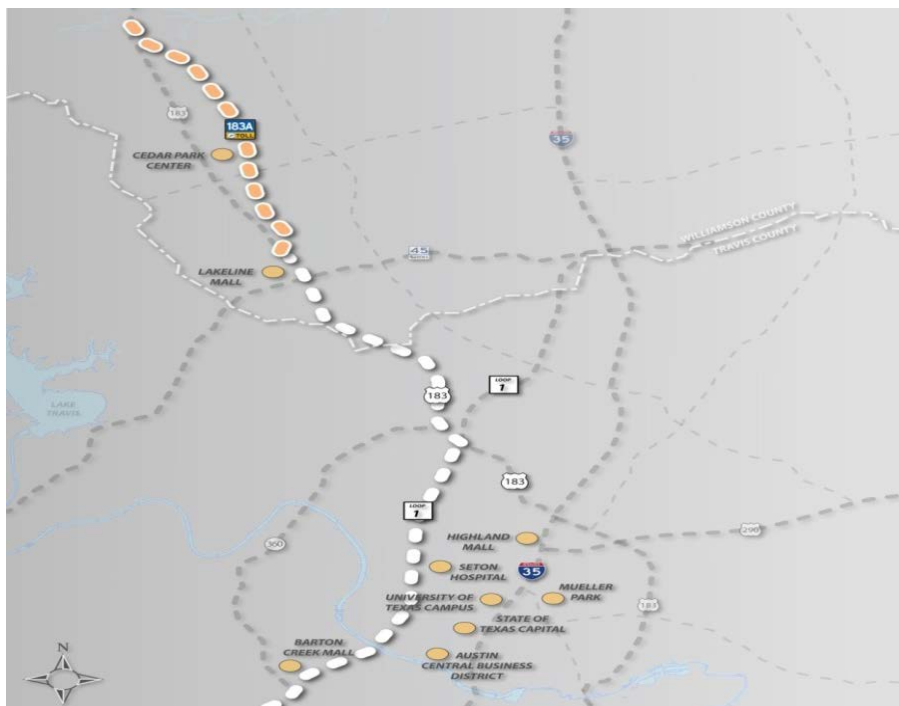
## FHWA – VALUE PRICING PILOT PROGRAM

### PROJECT DESCRIPTION

The Project is going to examine whether the Central Texas Regional Mobility can implement variable (time-of-day) pricing to indirectly affect traffic congestion on the broader highway network of both tolled and non-tolled lanes. This program is focused on converting the existing flat toll price on southbound 183A to a variable time of day pricing in an attempt to improve downstream traffic at the 183A/US183 merge during peak travel times. The project will:

- Study the effect of discounted tolls on weekdays just prior to and immediately after historically high traffic times, as it relates to downstream congestion. Rates will be reduced during non-peak traffic to
  - entice commuters to change their travel times to the less congested periods and
  - entice additional users to the toll road by typically non-users thereby mitigating the loss of revenue caused by the reduction.

#### Identification of facilities, systems or areas that are covered



This project is divided into five tasks: Stated Preference Survey, Origin and Destination Study, Network Modeling, Field Trials and Final Analysis. The study is funded at \$1,525,530 and is anticipated to extend over a 29 month period beginning with planning through final evaluation. An Advanced Funding Agreement (AFA) for this Project was approved on September 19, 2012. The AFA contains the scope for the Project.

# CURRENT ACTIVITIES

The Mobility Authority is currently working on Task 1 (Stated Preference Survey) and Task 2 (Origin & Destination Study) and the following activities have been accomplished.

- Using video license plate collection methods over a five-day period, the Mobility Authority collected vehicle license plate data at the southbound entrance ramp to US Highway 183, north of Lakeline Mall Drive, and on the US 183 to Loop 1 southbound direct connector in Austin, Texas. Additionally, license plate data was collected electronically over the same five-day period from the southbound 183A Mainlane Gantries at Park Street and near Lakeline Mall Drive.
- The license plate data is also being analyzed to determine how many vehicles utilize US 183/183A and also continue southeast to use MoPac. This will allow the Mobility Authority to better understand if a large enough target audience is available to change their travel habits to reduce peak congestion.
- Prepared a comparison of vehicles traveling on US Highway 183 versus 183A utilizing previously collected license plate data to establish a target audience for the Stated Preference Survey.
- Finalized contract and Permission-Use Agreement with Rand.
- Had conference call with Rand and Stantec regarding Regional Traffic Model.
- Finalized Stated Preference Survey questions and logic
- Completed coding of Stated Preference Survey.
- Selection of Survey Sample from population of corridor users identified in LPR Study.
- Finalized survey instrument.
- Updated the project schedule.

# SCHEDULE

