

Metropia Incentive-based Regional Mobility Management

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Metropia, Inc.

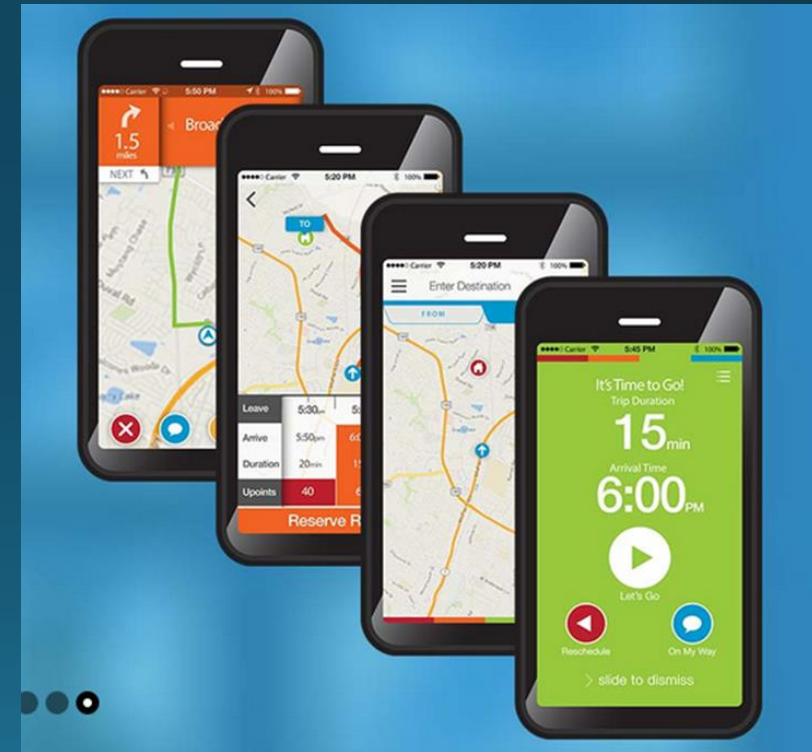
Metropolitan Washington Council of Governments
Commuter Connections Regional TDM Marketing
Committee

June 16, 2015



Metropia

- A metro mobility management system that encourages and rewards **positive change in travel behavior**
- **Utilizes Active TDM strategies to monitor, manage, influence and in the end to better handle vehicle demand**
 - Departure time choice / Flex time
 - Route choice
 - Active traffic management (information on incident, work zones, road closures)
 - Alerts Pre-trip and enroute
 - Load balancing / manage roadway capacity



The Metropia Ecosystem

Public Private Partnerships to Inspire Cooperation



- **Rewards drivers** for making smarter commuting decisions
 - Plan ahead
 - Shift departure time outside of peak traffic (Flexing)
 - Take an alternative route to avoid congestion
- **Rewards points** for every trip completed; more points for flexing departure and for taking alternative routes
- Rewards = combination of intrinsic and extrinsic

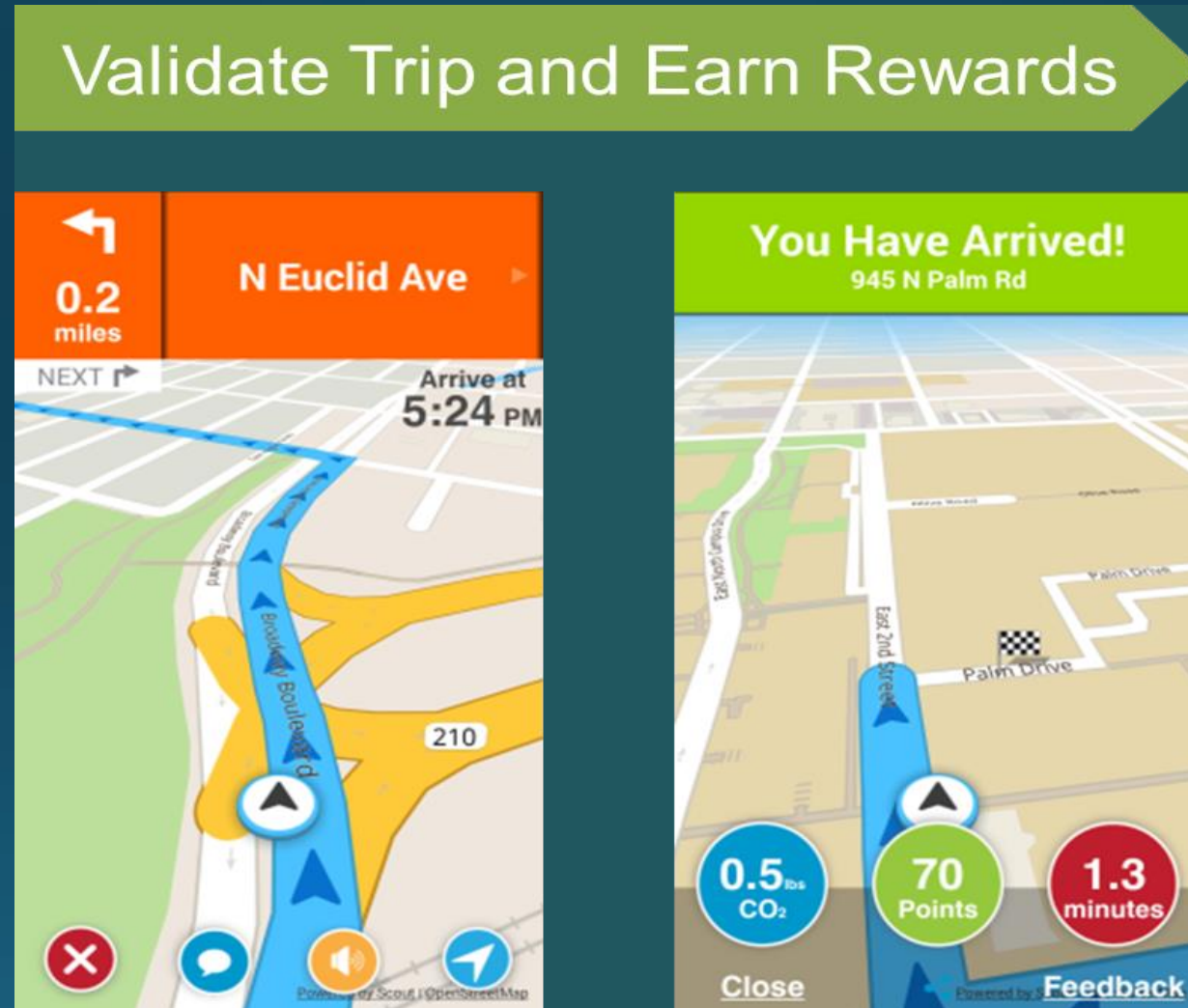
Other navigation apps herd
users to the same route



How it works

Features

- Prediction
- Plan ahead
- Behavior shifting
- Incentives
- Powerful routing
- Travel time estimation
- TMC integration

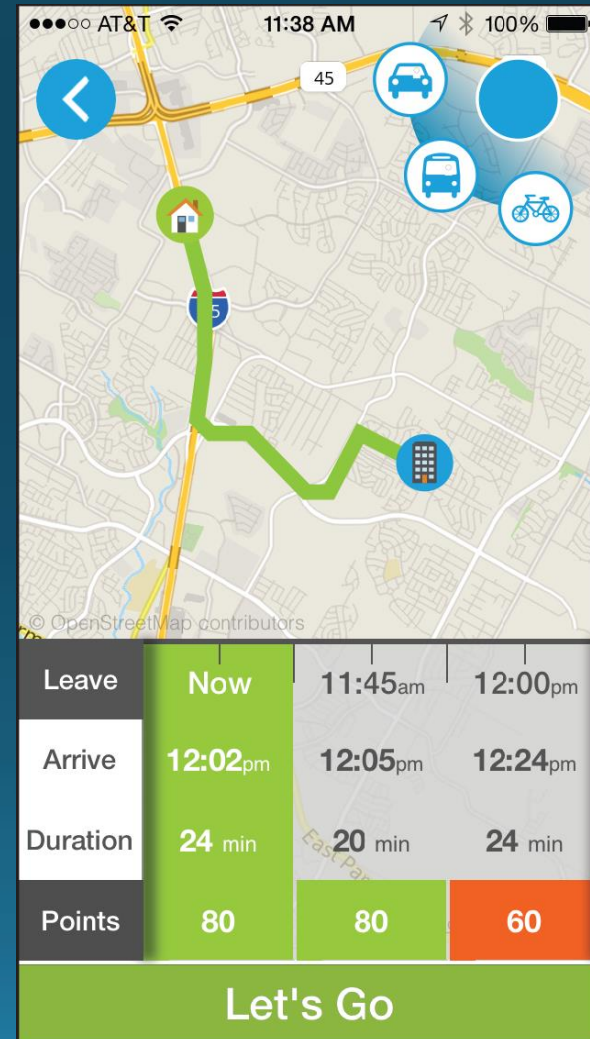


Features

- Plan ahead
- Pre-route messaging
- En-route messaging
- On my way
- Favorites
- Personalized messaging
- Reward tracking

Multi-modal Options are coming soon

- Transit
- Ride-sharing
- Vanpool
- Biking (Bikeshare)



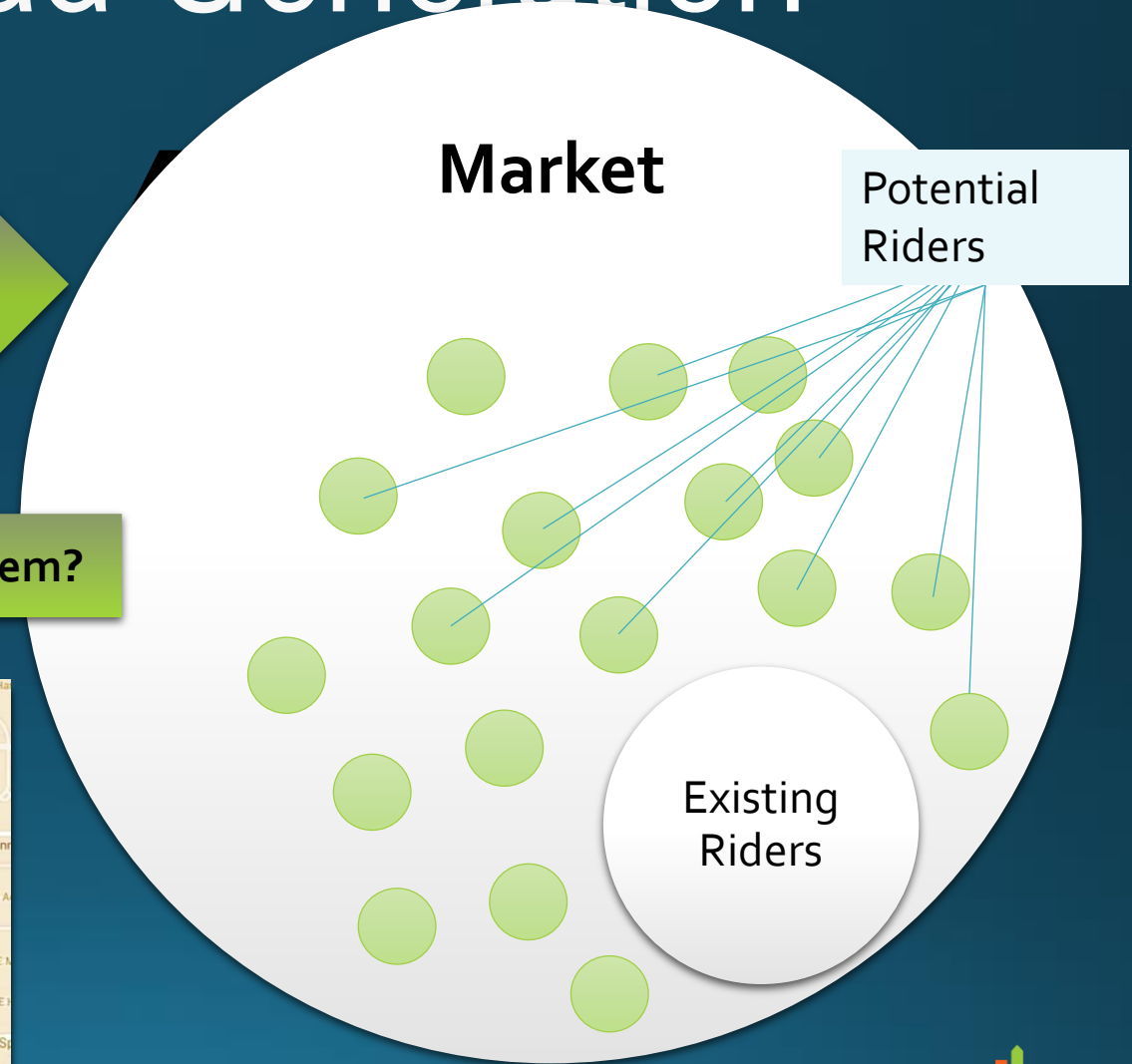
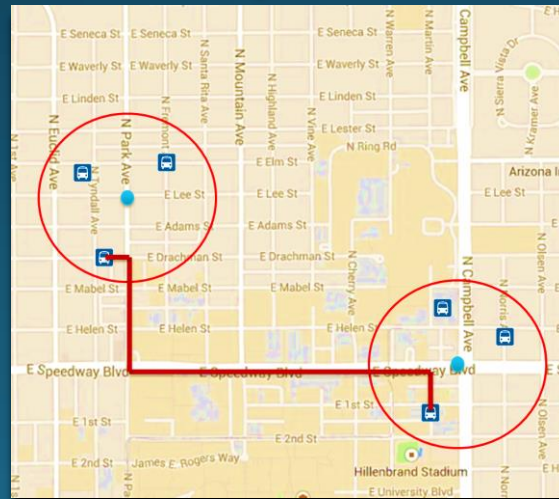
Alternative Mode Lead Generation

Targeted messaging to potential riders

Targeting

Matching with commuter's trip origins and destinations

How to Find them?



Commuter Benefits Program and Flex Time

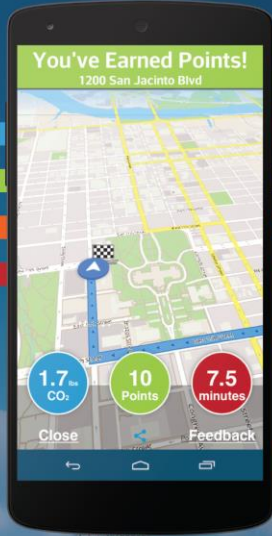
DRIVE TO WORK?
ANOTHER SMART WAY TO COMMUTE

PLAN AHEAD
AVOID TRAFFIC
SAVE TIME
EARN REWARDS

Tokyo Electron embraces flextime scheduling for employees. Using Metropia provides you with the tools to improve your daily driving commute and rewards you for avoiding traffic.

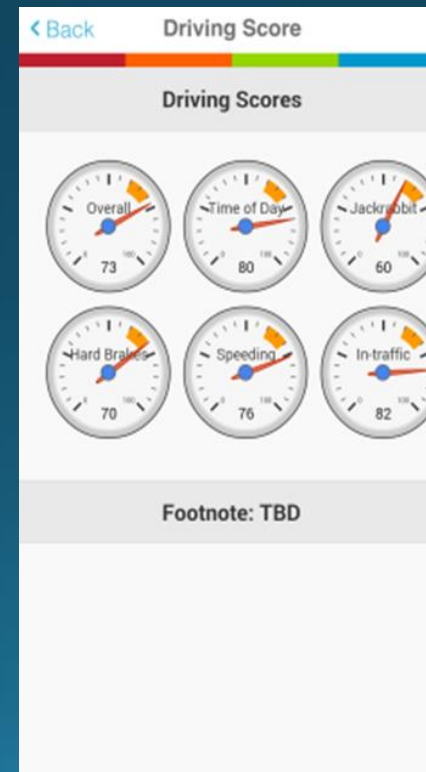
Just shift your departure time by as little as 15 minutes and everyone wins.

GET IT ON Google play Available on the App Store



metropia TOKYO ELECTRON

Service fleet Driving Safety



- Employer kit
- Employer-employee specific rewards and promotions
- Employer web-based reporting & dashboard

Venue Management

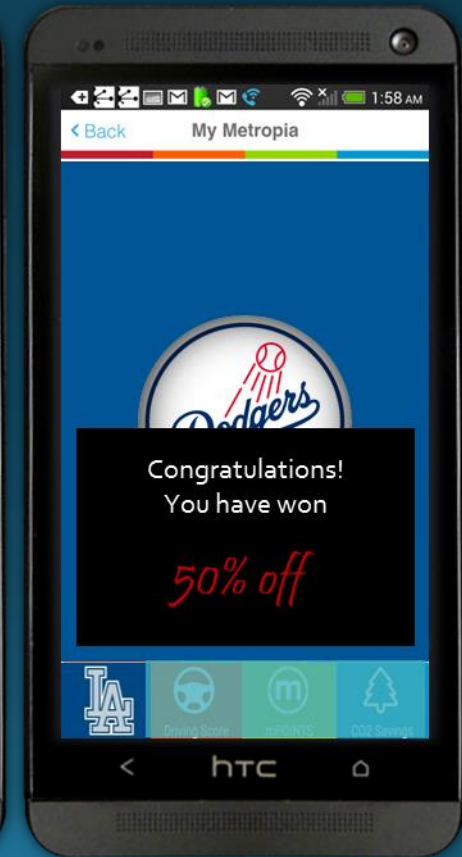
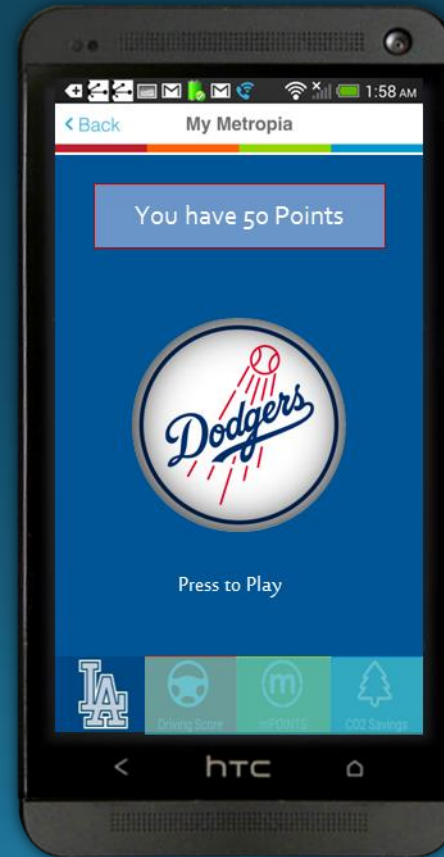
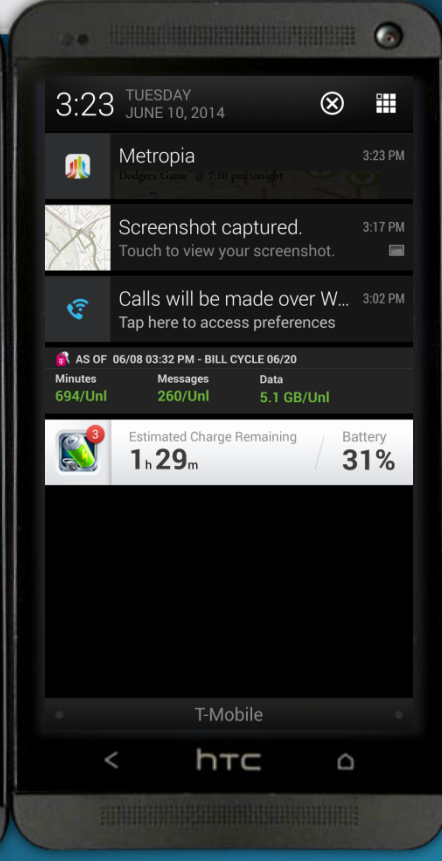
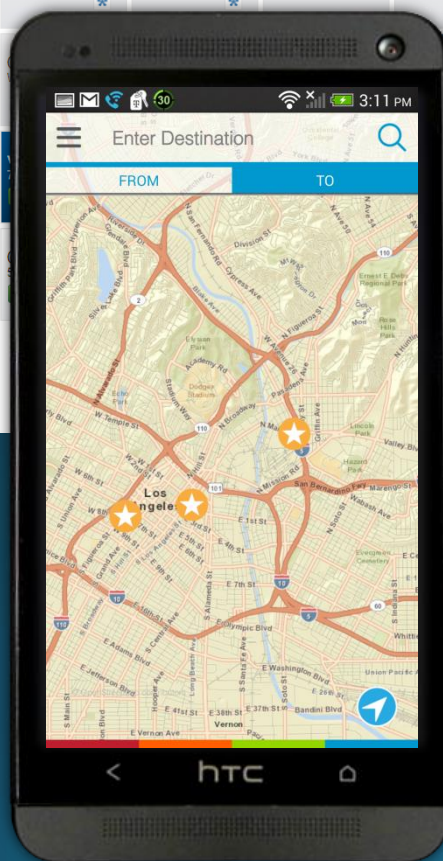
Push notifications prior to event & stagger arrival and departure

June 2014

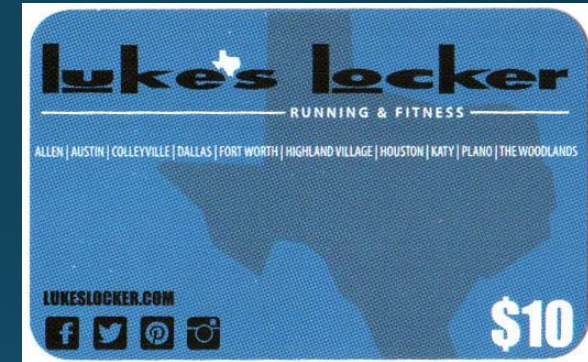
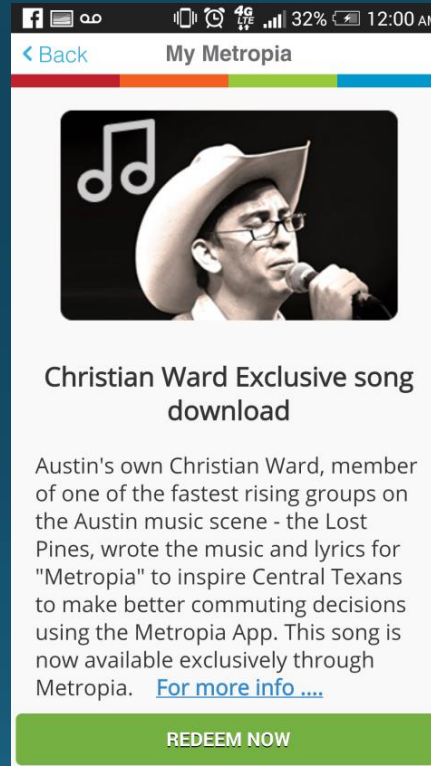
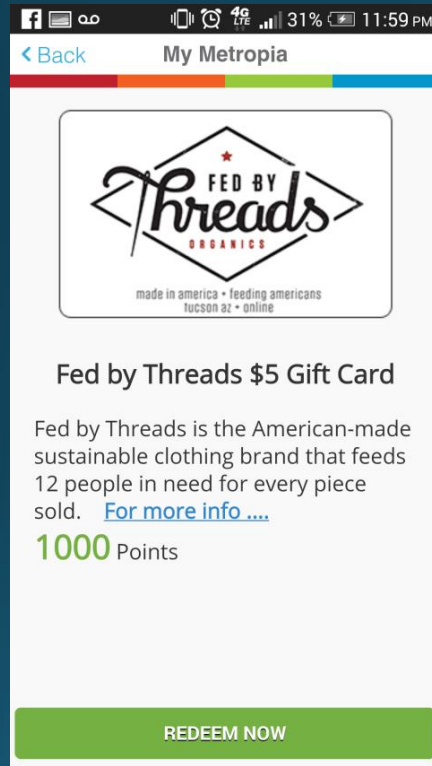
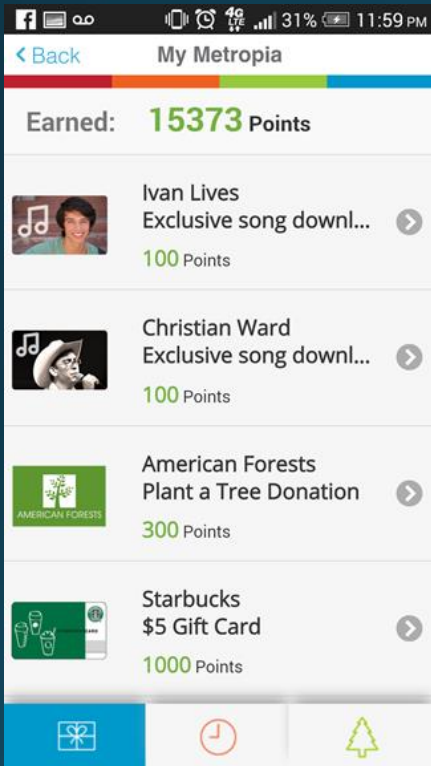
Dodger Stadium | mmm/dd/yyyy | mmm/dd/yyyy | Rooms | Hotel Search

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
vs Pirates L 3-5	vs White Sox W 5-2	vs White Sox L 1-4	vs White Sox L 1-2		@ Rockies W 7-2	@ Rockies L 4-5
@ Rockies W 6-1	@ Reds W 6-2					
vs D-backs 1:10 pm Tickets	vs Rockies 7:10 pm Tickets					
@ Padres 1:10 pm Tickets	@ Royals 5:10 pm Tickets					
vs Cardinals 1:10 pm Tickets	vs Indians 7:10 pm Tickets					

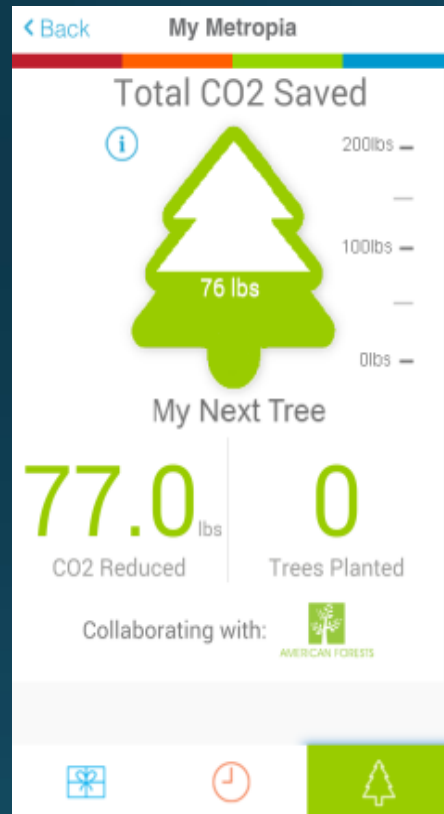
7th Inning Stretch Game



Users Earn Points to Exchange for Rewards



Also earn CO₂ and Time Savings and more



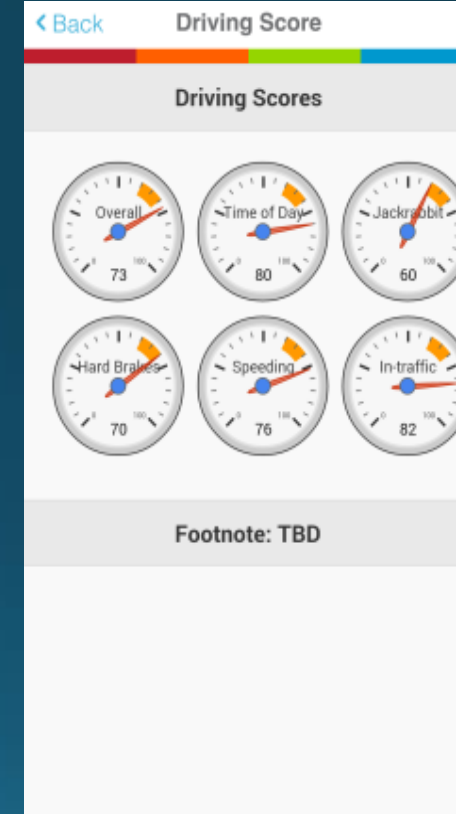
My Metroopia

Total CO₂ Saved

Collaborating with American Forests

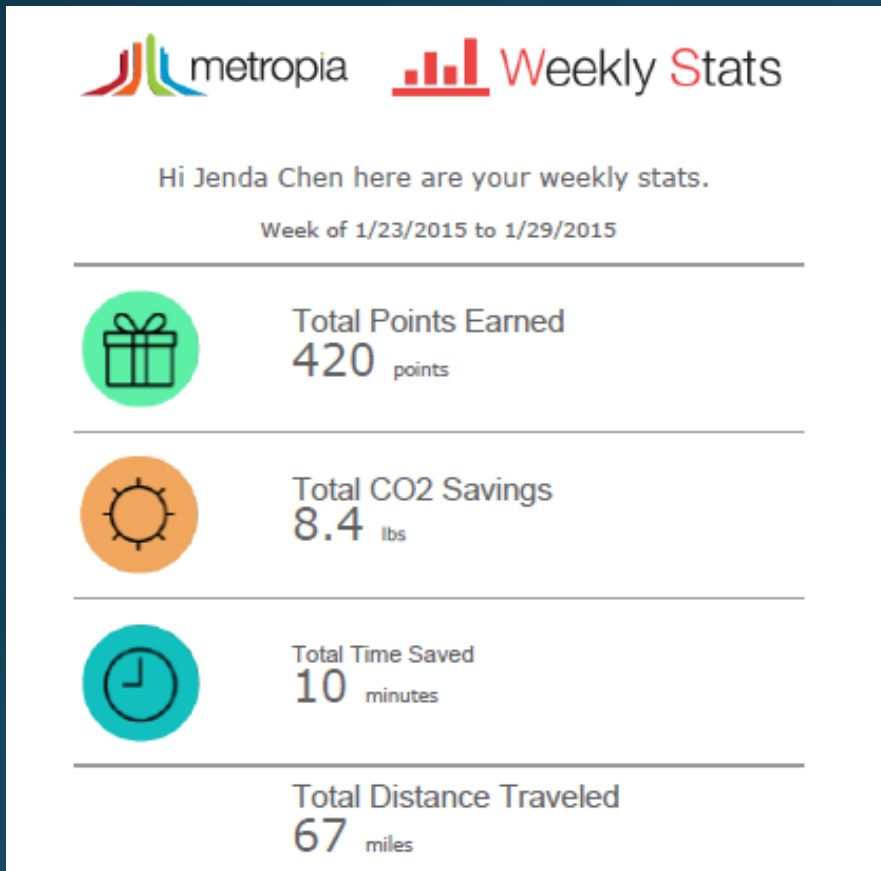
American Forests, the oldest national nonprofit conservation organization in the country, advocates for the protection and expansion of America's forests. Since 1990, we have planted more than 45 million trees. We restore watersheds to help provide clean drinking water. We replant forests destroyed by human action and by natural disasters.

This screenshot shows a progress bar at the top. Below it, a photo of hands holding a small tree sapling is displayed. Below the photo, the text reads 'Collaborating with American Forests' followed by a paragraph about the organization's mission. The bottom navigation bar has three icons: a blue square, a red clock, and a green tree.



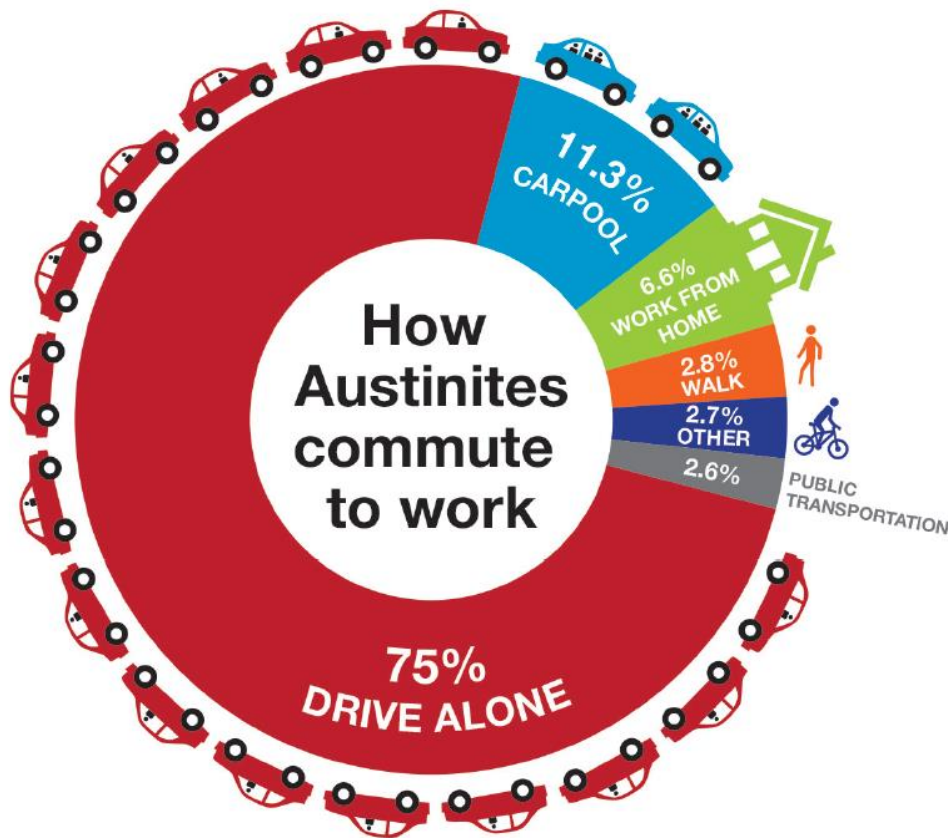
Incentivizing through Gamification

- Weekly Stats (via email)
- Weekly Leaderboards



- *Coming Soon*
 - ✓ *Brand Ambassador*
 - ✓ *Badges*

Why it works



- Drive alone is generally the largest mode share
- TDM programs have plateaued
- Baby Steps vs Giant Steps for behavior change
- Learn their commuting behaviors (OD; travel times; flex ability) then shifty to other modes

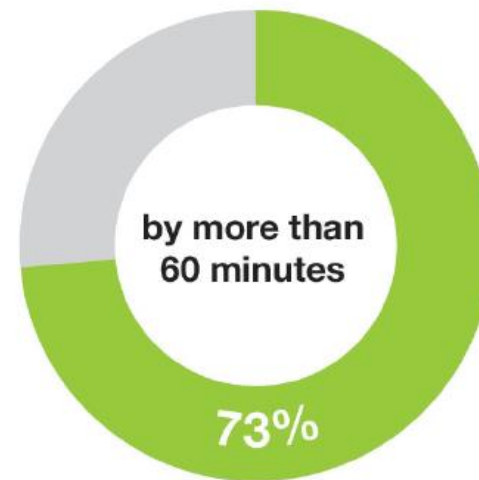
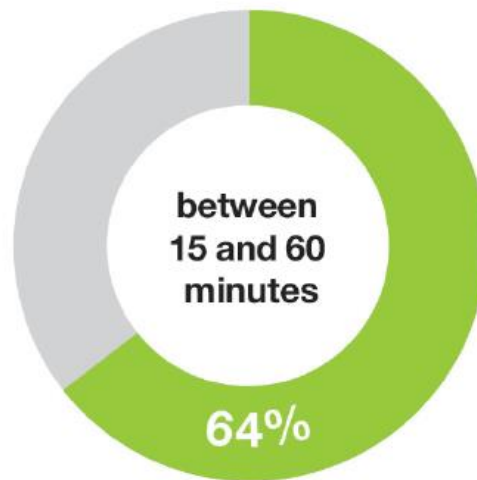
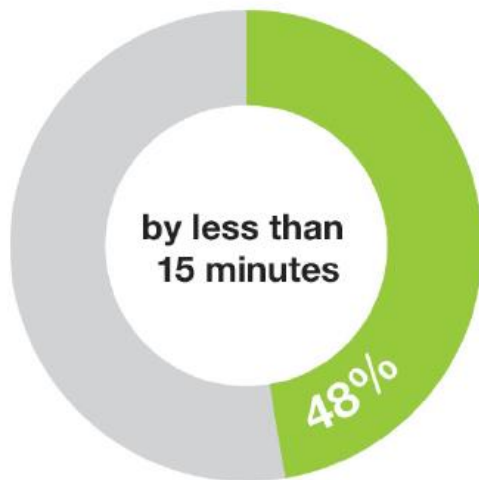
...and city-wide
average savings
reach as
high as
5%.



Simple Behavior Change: Baby Steps

Shift departure time or route

The more you plan, the more time you save!



■ PERCENTAGE LIKELY TO SAVE TIME

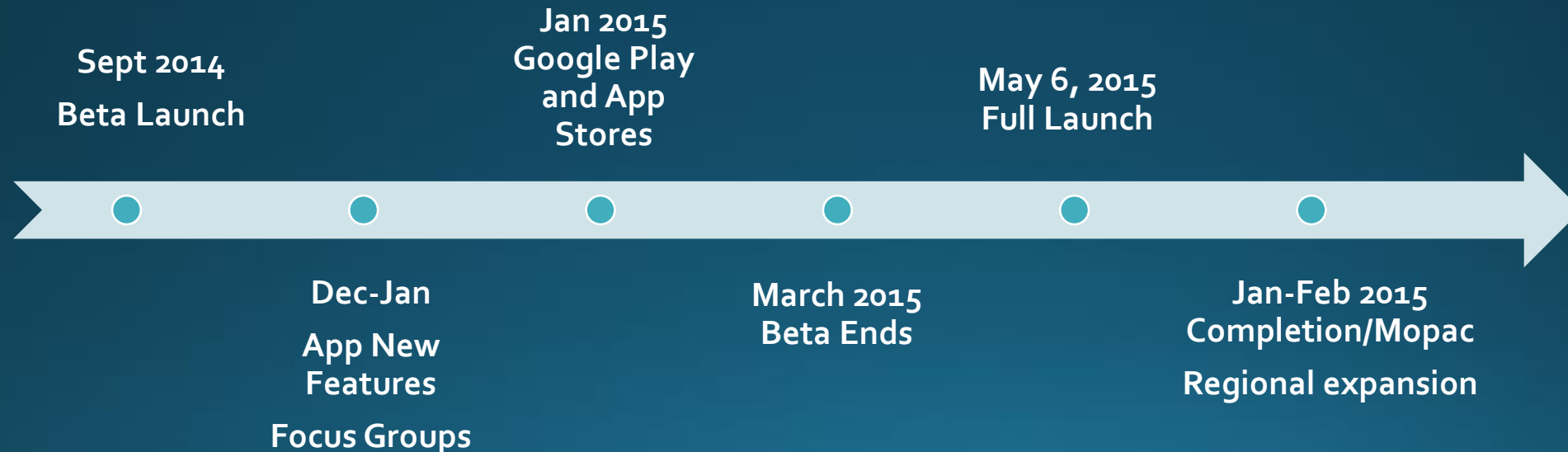
Resources—Read More

1. Hu, X.B, Y.C. Chiu, S. Delgado, et al., *Behavior Insights for an Incentive-Based Active Demand Management Platform*, *Journal of Transportation Research Board*, 2014. <http://docs.trb.org/prp/14-5595.pdf>
2. Zheng, H., E. Nava, and Y.C. Chiu, *Evaluating Active Traffic and Demand Management Strategies for Congested Tourism Traffic Corridor*, *IEEE Intelligent Transportation Systems Conference*, 2011, Washington, D.C. <http://www.metropia.com/sites/default/files/IEEE%20paper%2015.pdf>
3. Texas Transportation Institute, *Mobility Investment Priorities Project - Austin - State Loop 1 (MoPac)*, 2013. <http://d2dtl5nnlpfr0r.cloudfront.net/tti.tamu.edu/documents/TTI-2013-18.pdf>

The Austin Experience

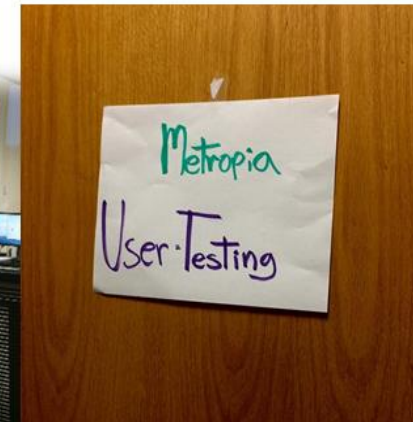
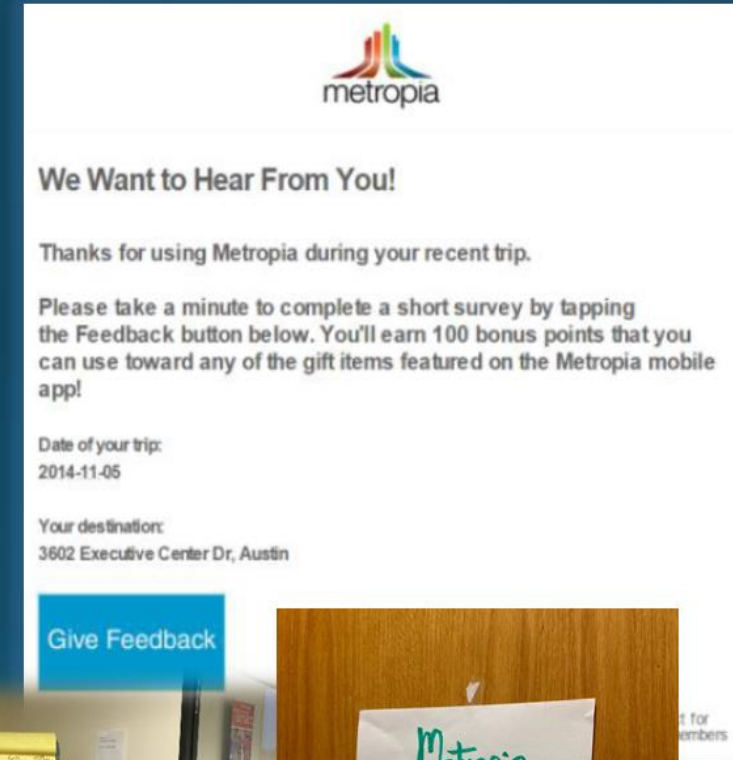
Background and Timeline

- Central Texas Regional Mobility Authority (Sponsor)
 - MoPac Improvement Project (managed lanes/express lanes)
 - Improve mobility in region
 - Make better use of existing capacity
- Timeline



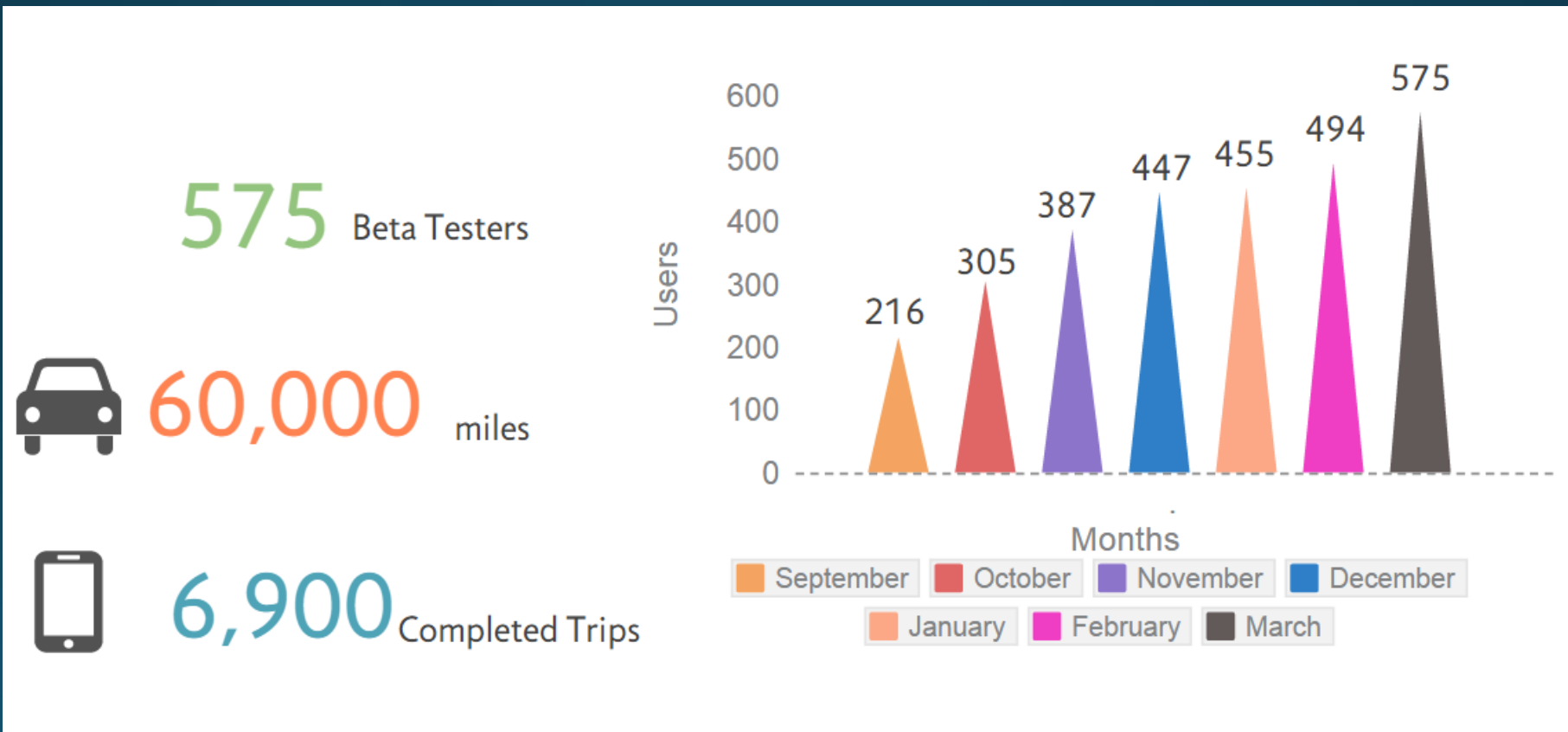
Goals and Objectives

- Beta Goal: 400 users; 24-25% retention
- Actual: 575 users; 35-36% retention
- Objectives
 - Network Optimization (3 months)
 - Feedback on UI/UX
 - Baseline on behaviors
 - Lessons for full launch

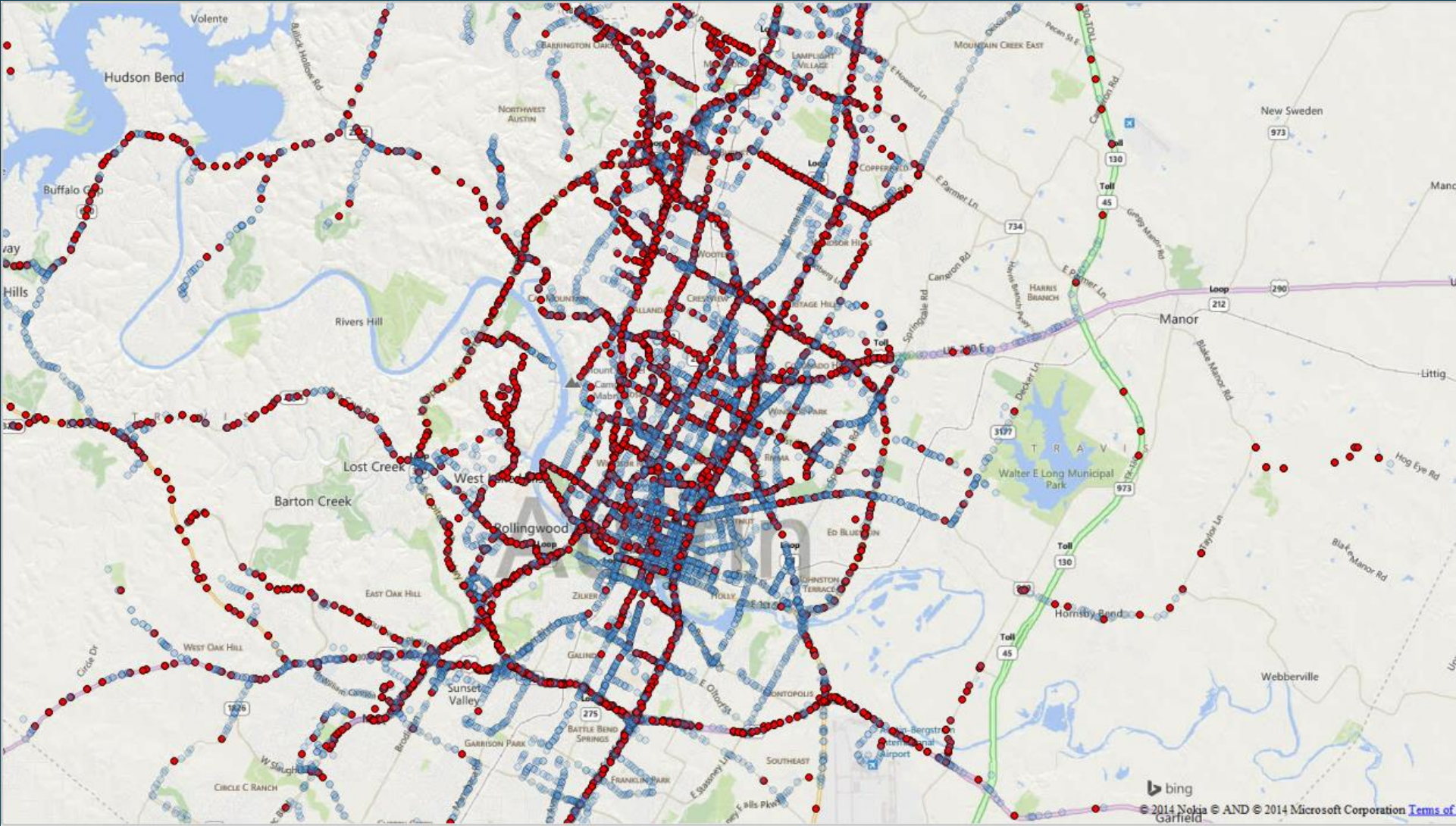


Steady Growth of Users and Data

- Easily met Beta goal with very little PR and Marketing. Initial Launch & Press coverage resulted in nearly half our users.



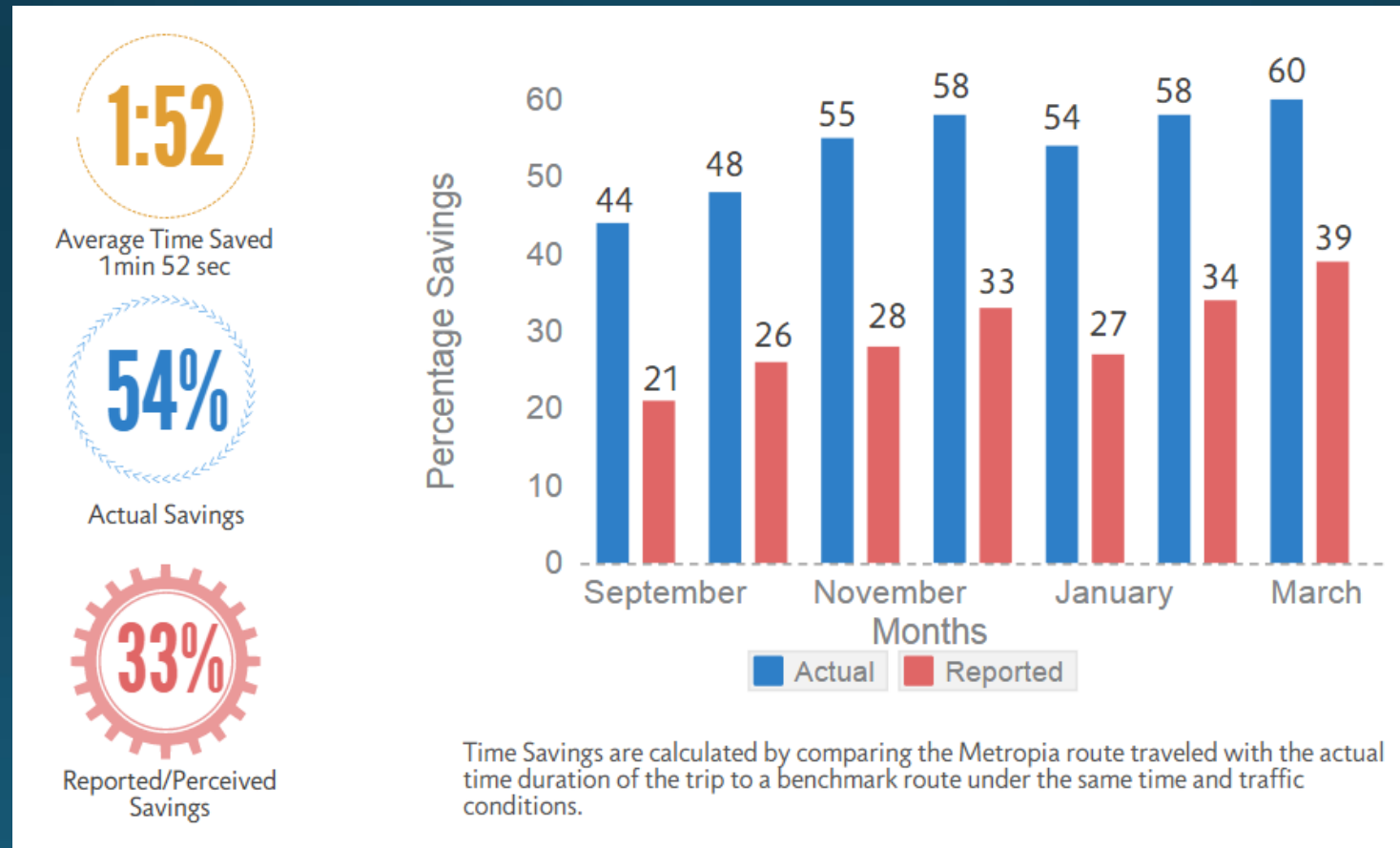
Data Coverage (Week 1-16)



1 2 3 4 5 6 7 8 9 0 1 1 1 1 1 1 1 1 1

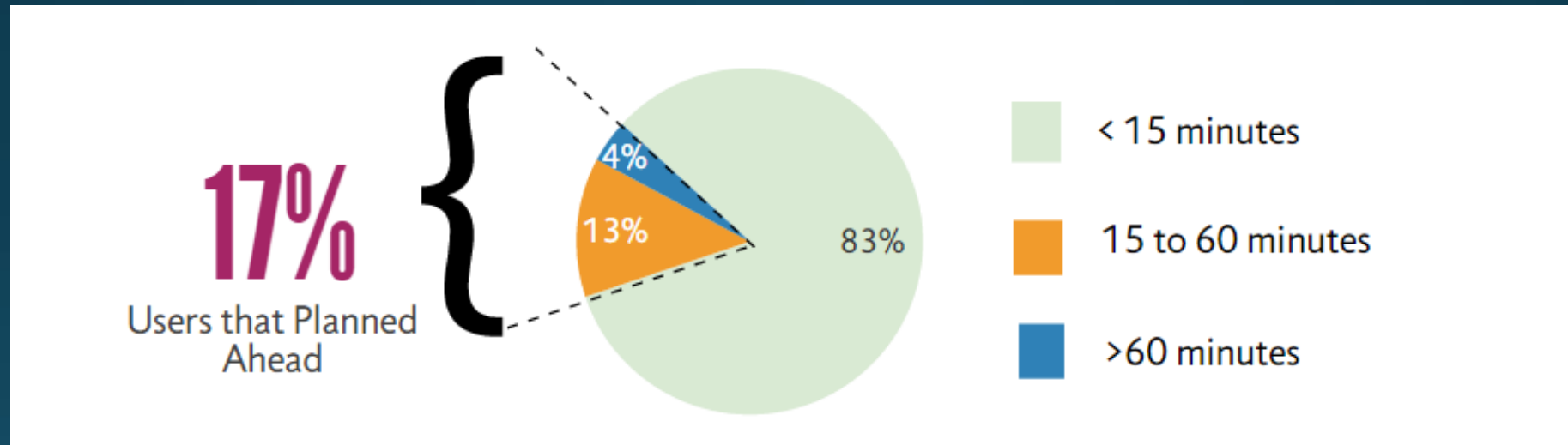
Overall Travel Time Savings

- *Most underestimate their perceived travel time savings; over time this starts to change.*

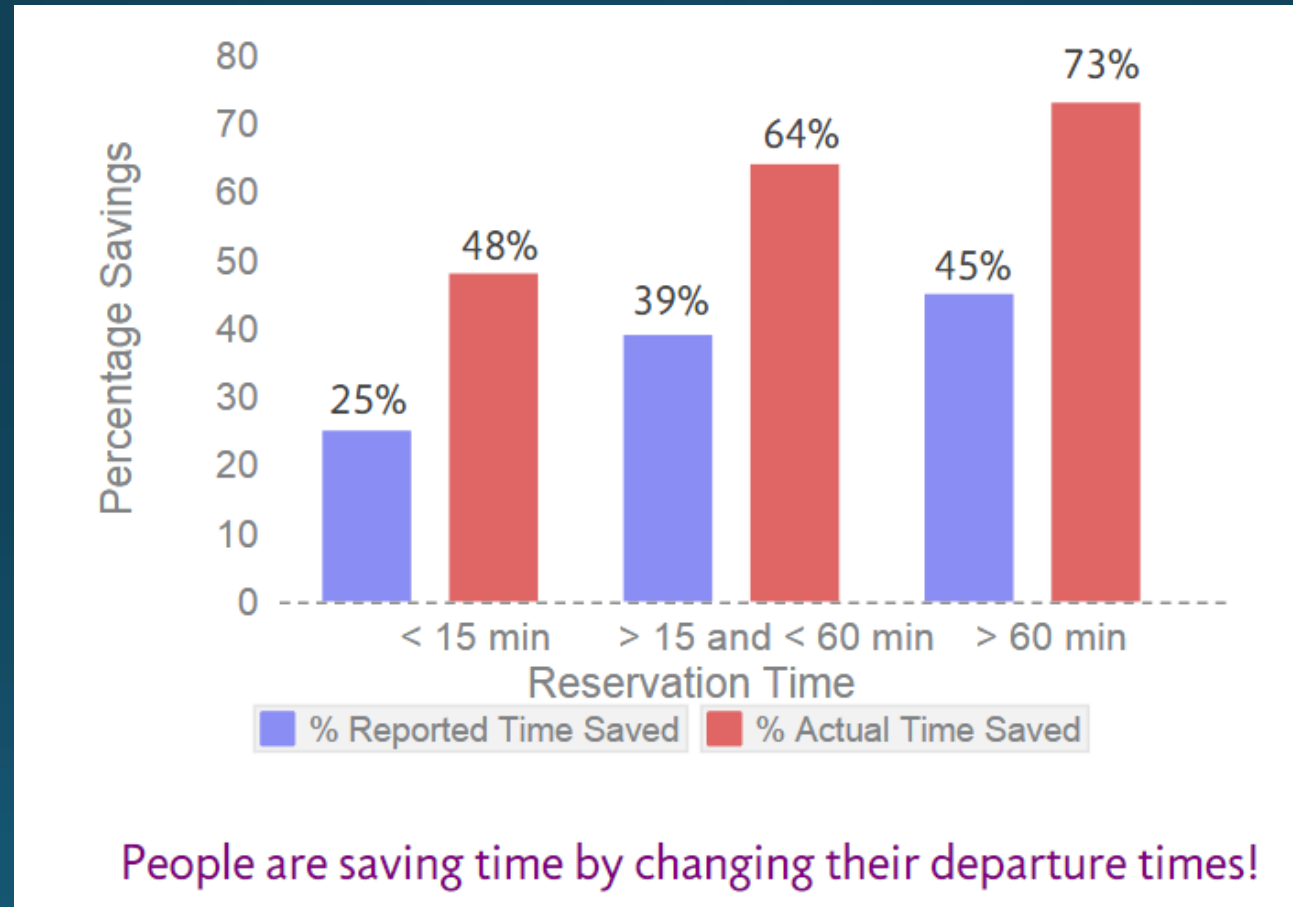


Planning Ahead = Increases Travel Time Savings

- Majority used Metropia without planning ahead; *points to need for "plan ahead" messaging*



Planning Head = Increases Likelihood to Save Time



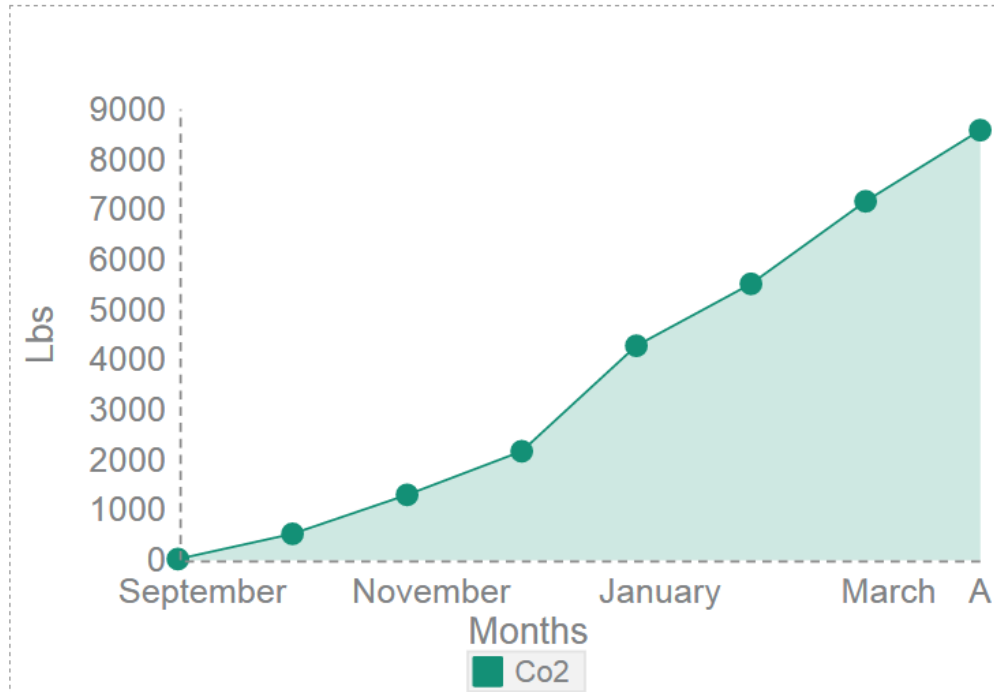
Overall CO₂ Savings

8,550

Lbs of Co₂ Saved

85

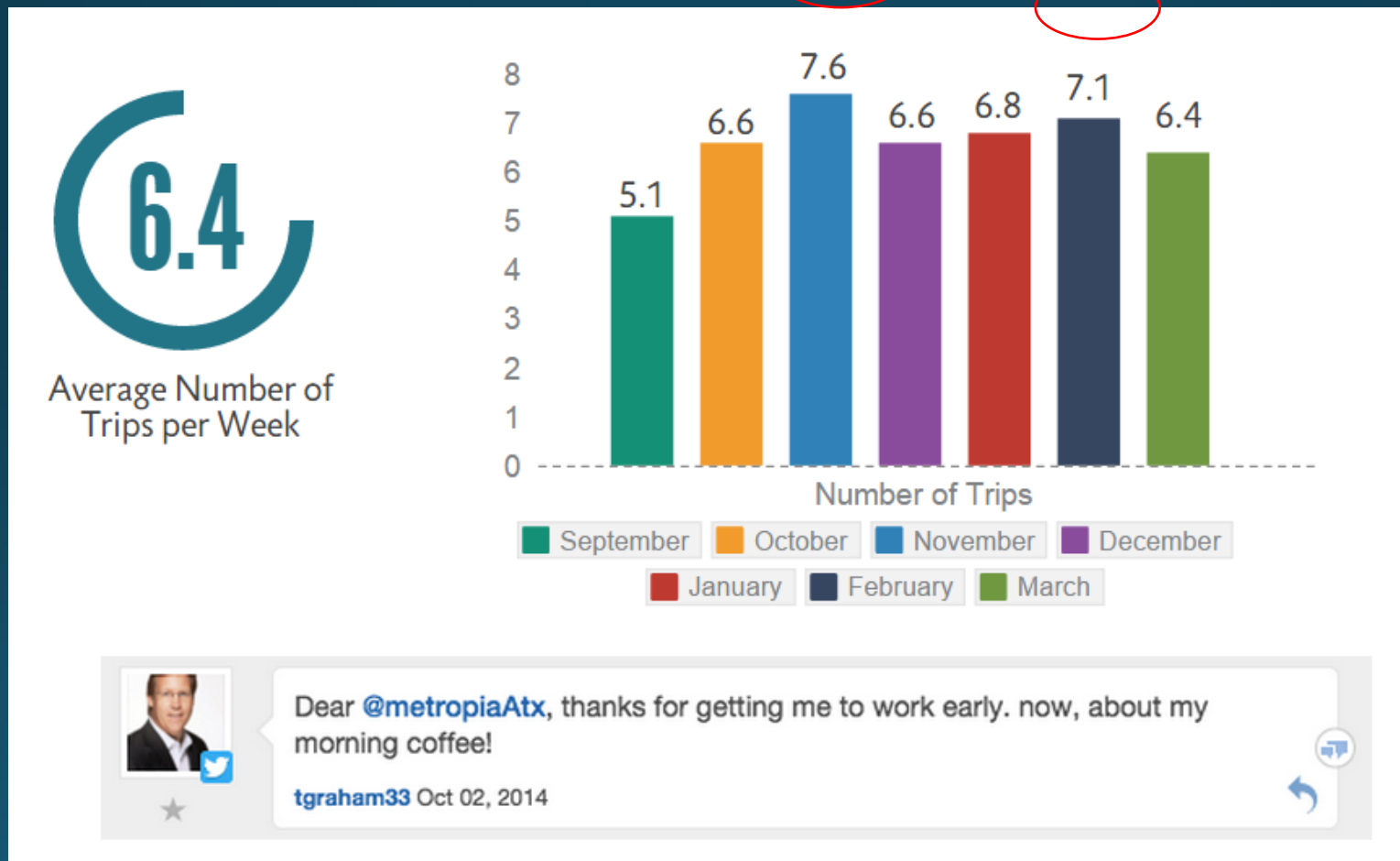
Trees Planted



CO₂ savings are calculated for each trip a user makes. This calculation is based on the known relation of CO₂ savings to the amount of travel time saved. As a Metropia user spends less time in congestion, the user saves time, thus reducing CO₂ emissions.

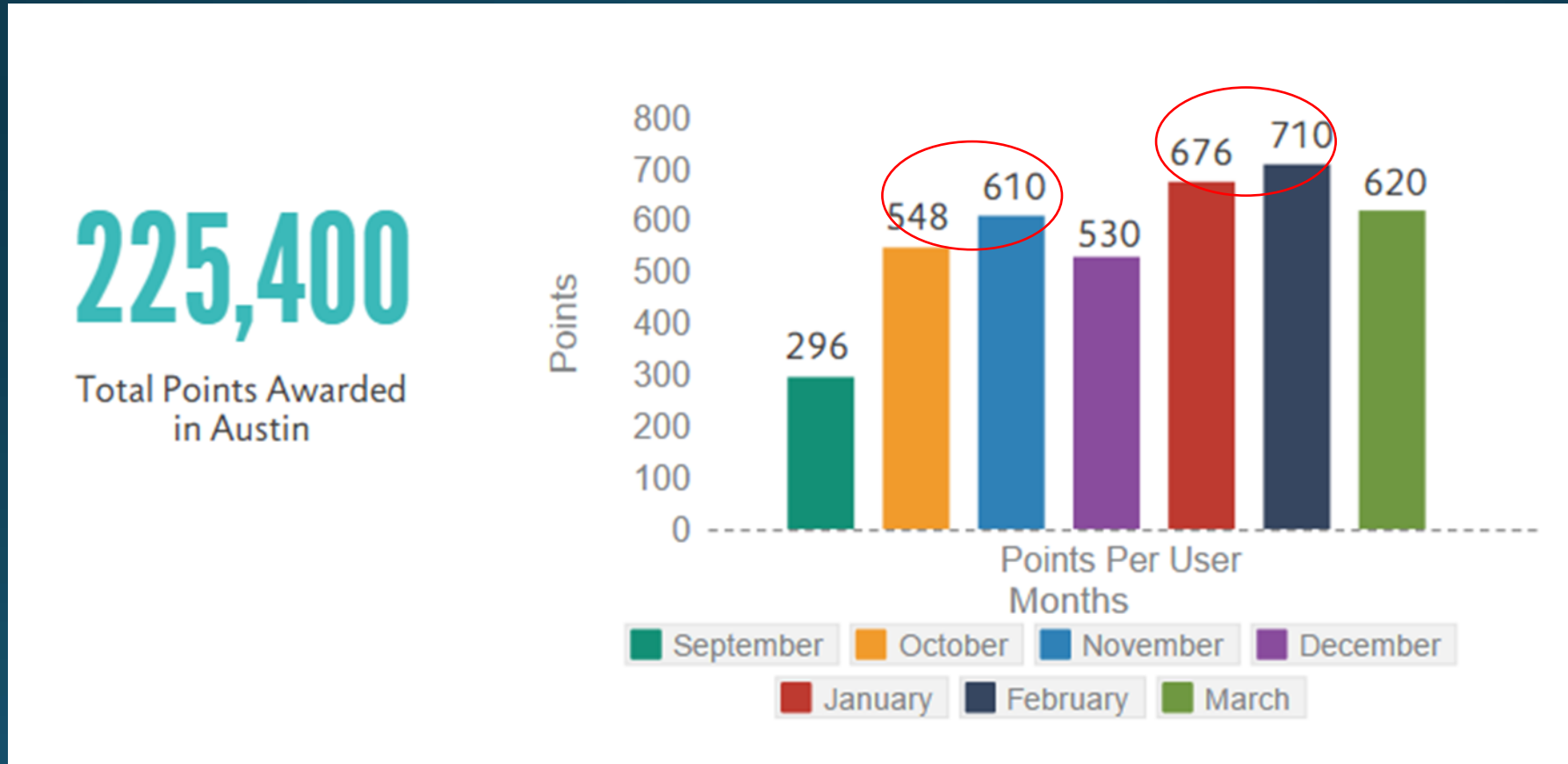
Average Number of Trips Per User

- Average Trips per week increased after major App UI/UX improvements



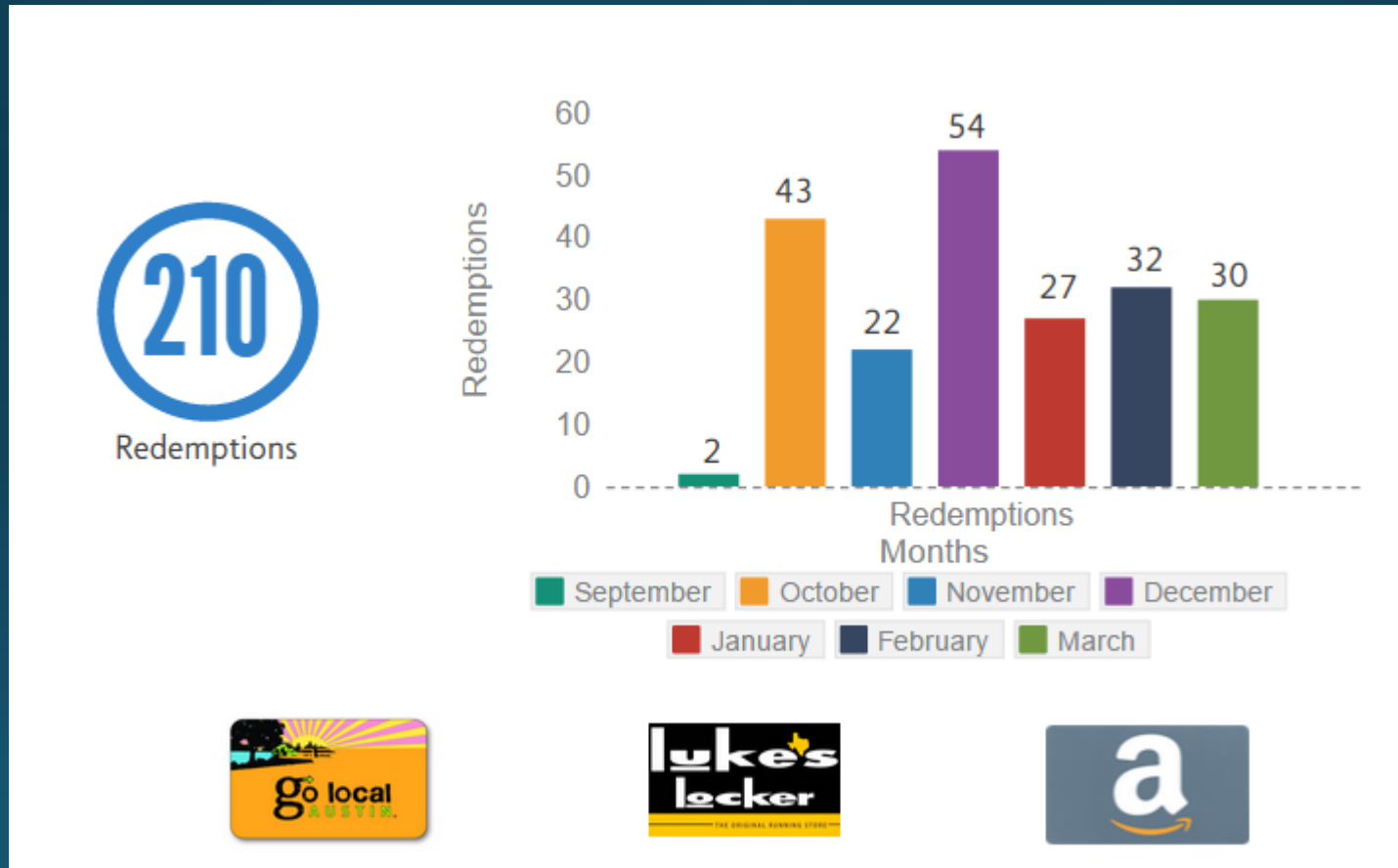
Total Points Awarded & Avg Points per User

- Average Points/User also increased after App UI/UX improvements & new features



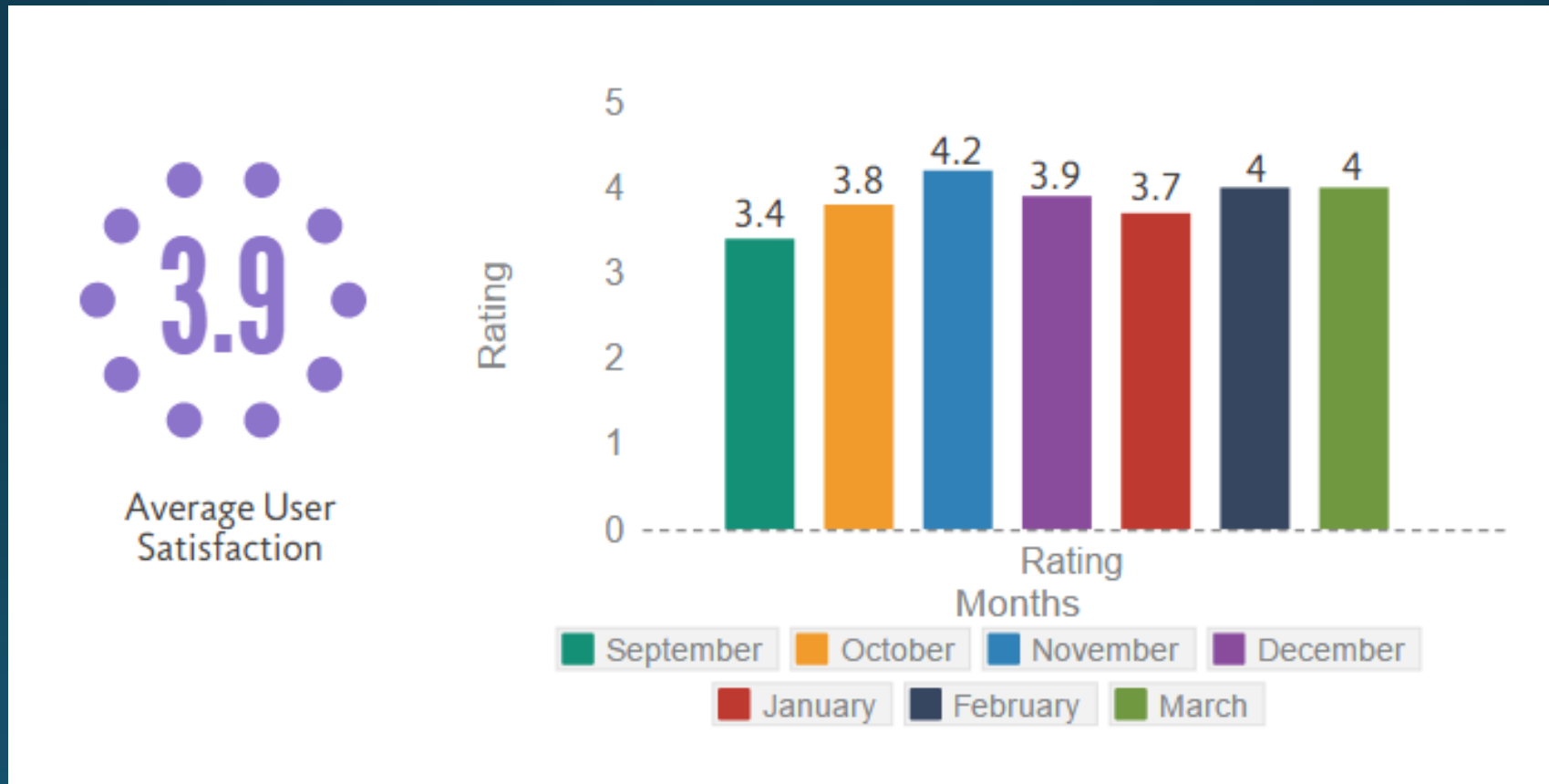
Austin Incentive Redemption Behavior

- Redemptions are highest around December holidays
- Less than one half redeem for merchant rewards



Average user Satisfaction Ratings

- Satisfaction levels also increase as users become familiar with the App and after new versions are released with features and usability updates.



Our Brand Ambassadors



My hat is off to your app!
Ron P.



"I never thought about taking this
new route home and it makes
perfect sense!"

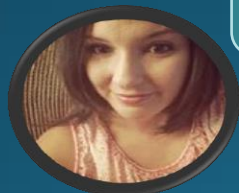
<https://vimeo.com/126622314>



I finally realized how much time I am
really saving! Laura M.



"I love that Metropia syncs with
my calendar and alerts me to
use the app. Thank you!"
April H.



"I was impressed to arrive the
exact minute the app thought I
would" Kelley G.



Thank you! You took me a
new route and I made it to
my appt - early! Scott W.



**Metropia Austin Launch and
Transportation Forum
May 6, 2015**

**Supporting Partner
Central Texas Regional Mobility Authority**

An advertisement for Metropia's 'Rewards City' program. The background is a 3D-rendered cityscape with a mix of residential houses and skyscrapers, a winding river, and a road with a car. In the top right corner, there is a 'Download Metropia' button with the Metropia logo. The main text reads 'Rewards Get Points to help your City' in orange and blue fonts. Below this is a blue button that says 'Trees for All'. To the right of the text is a single green tree. At the bottom right, it says 'Metropia plants a tree for your city'.

Download Metropia 

Rewards Get Points
to help your **City**

Trees for All

Metropia plants a tree for your city

Questions
mia.zmud@metropia.com