PROCESS AND APPLICATION OF ANALYZING SMARTPHONE GPS TRAJECTORIES FOR TRANSPORTATION PLANNING PURPOSES

Presented to:
15th TRB Transportation Planning Applications Conference
May 19, 2015

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Metropia, Inc.
What is Metropia?

- Traditional ways of building infrastructure to increase network supply is not sustainable
- Manage the travel demand is the key

**Metropia** is a incentive-based intelligent metro mobility management system that enables commuters, businesses, employers and governmental agencies to work together for improved mobility and a better quality of life.
Austin Launch (May 6, 2015)
App could help in Tucson

TUCSON NEWS NOW

Phoenix, Ariz. – 04/11/2015 – 12:02 PM

By Craig Turf


https://www.kvoa.com/story/26438899/tucson-startup-releases-app-that-will-help-traffic-congestion

https://www.wildcat.arizona.edu/article/2013/04/new-app-to-aid-traffic-flow

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THE DAILY WILDCAT

UA-Born Traffic App Launches in Tucson

By Paul Turack, Tech Launch Arizona | March 18, 2015

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Related Videos

What Flows Your Boat?

UA engineering students hosted the American Society of Civil Engineers Pacific Southwest.

Commercialization by Design

University of Arizona's Tech Launch hosts a meeting of the minds to advance the...
Predictive Optimal Routing and Load Balancing

Reserve

Validate
Austin Data Coverage over traffic network
Austin Trips Collected
Application 1 - Time-Dependent Location Pattern Analysis

Regular Commuters

Home/Office address
Generation/Attraction
Application 1 - Time-Dependent Location Pattern Analysis

Non-Commuters
Application 2 – Time-Dependent Activity Pattern Analysis

• Activity History

![Map showing Activity History with locations: Home, Work, and Shopping](image)

• Activity Pattern

![Graph showing Activity Pattern with time of day](image)

Activity Pattern
Trip time of day
• Regular Commuter
• Non-Commuter

Aggregated Activity Pattern Analysis
Application 3 – Time-Dependent Demand Pattern Analysis
Application 3 – Time-Dependent Demand Pattern Analysis

7:30am

8:00am

9:00am

8:30am

Demand Source & Distribution
Mobility Ecosystem - Working together