



Transportation Demand Management Primer

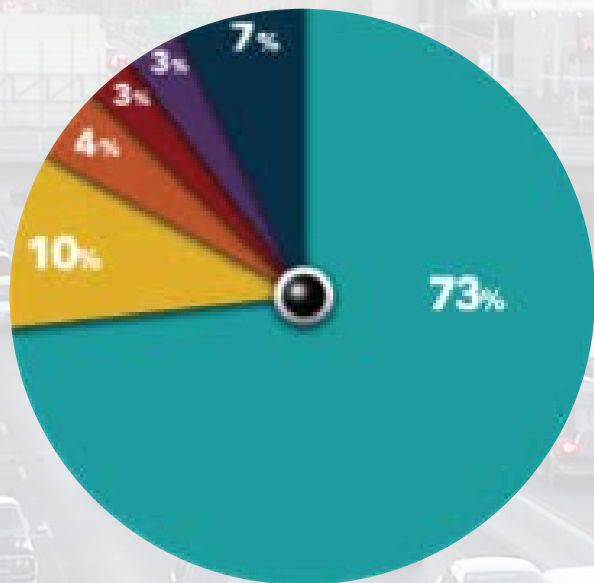
Tien-Tien Chan, AICP
Austin Transportation Department



Pedestrian Advisory Council: June 5, 2017

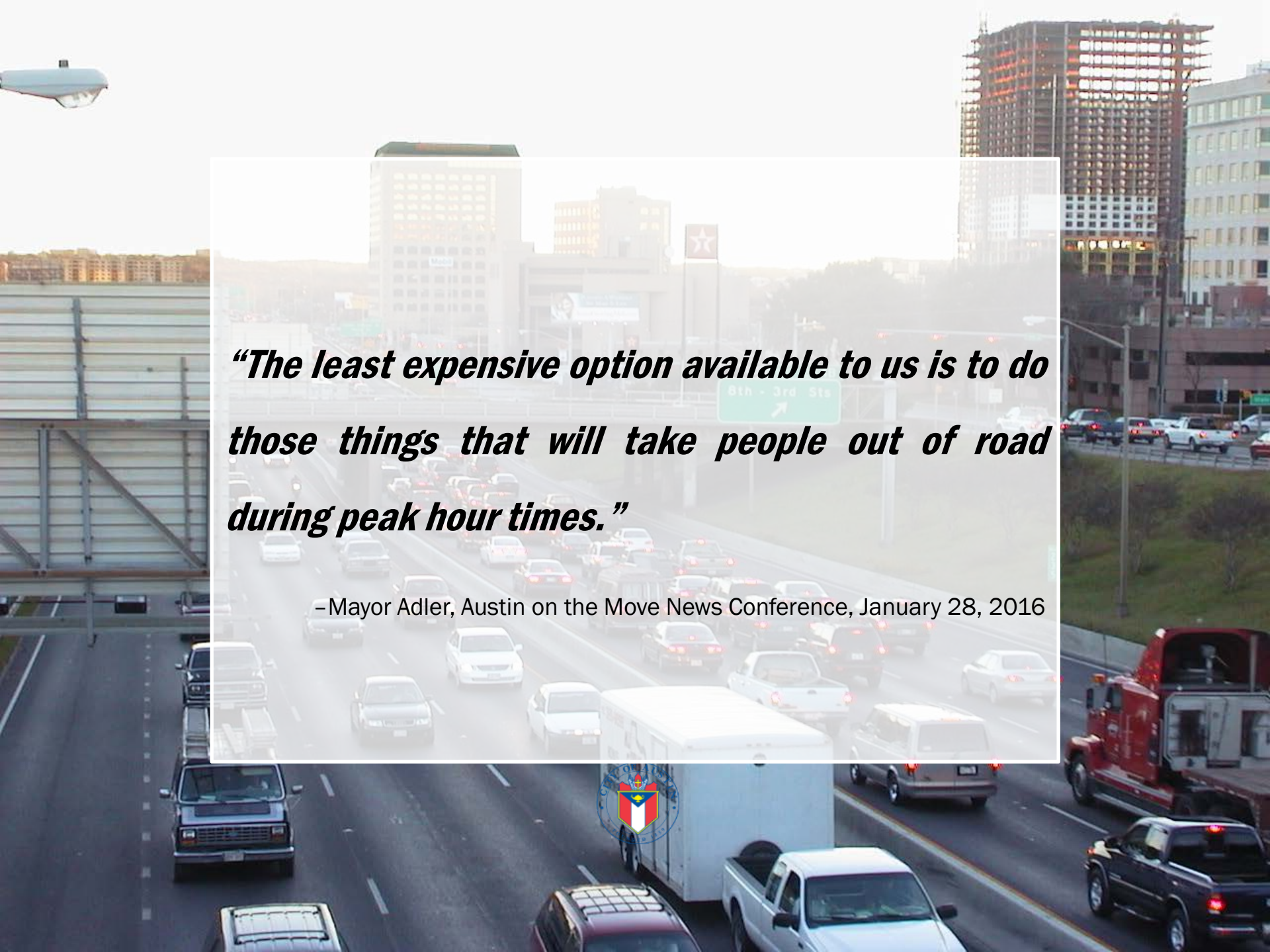
Commute Mode-Split

Austin, Texas 2014



Drive Alone	73%
Carpool	10%
Public Transit	4%
Walk	3%
Other	3%
Telework	7%






“The least expensive option available to us is to do those things that will take people out of road during peak hour times.”

– Mayor Adler, Austin on the Move News Conference, January 28, 2016





“TDM is the fastest way to realize congestion relief. TDM programs are a significantly cheaper investment than capital expenditures, like highway widening programs or new parking garages, which have been relied on in the past to expand capacity.”

–Jeffrey Tumlin, Nelson/Nygaard, International Transportation Expert



What is TDM?



EUROPE
WELCOMES
AUSTIN

EUROPE
WELCOMES
AUSTIN





TDM = using cost-effective strategies to:

- reduce driving alone trips
- increase active trips (public transit, carpool, vanpool, walking, biking)
- shift driving trips away from the most congested time periods





**Improve
Options**

Land Use

Incentives

**Parking
Mgmt**

Policy

Education

A photograph of a suburban street scene. In the foreground, a man in a green shirt and a bicycle helmet is riding a bike towards the camera. To his right, a woman is pushing a pink stroller with a child inside. Further right, a woman in a blue shirt is walking away from the camera, carrying a bag. The street has a white line marking and a yellow curb. In the background, there are parked cars, trees, and a house. A semi-transparent white box with black text is overlaid in the center of the image.

Why is TDM such a large piece of the solution?

Typical New Construction Costs

Infrastructure	Cost per Mile
Sidewalk (5' wide)	\$150K
Multi-Use Trail (along roadway)	\$320K
Off Road Trail – Improved (S. Walnut Creek)	\$1.2M
Residential Street (new subdivision w/ utilities)	\$1.0 – \$3.0M
Collector Street (2 Lane divided)	\$8.5M
Arterial – 4 Lane	\$11.9M
Add a Lane – Rural Hwy	\$1.6M - \$3.1M
Add a Lane – Urban Hwy	\$2.4M - \$6.9M
Add a Lane – Rural Sensitive	\$5.8M - \$9.9M
Add a Lane Urban Sensitive	\$7.3M to \$15.4 M
New Rural 4-Lane Highway	\$20M - \$40M
New Urban 4-Lane Highway	\$20M - \$300M
Urban Interchange	\$35M

Estimated TDM Effectiveness



MARKETING/EDUCATION
1% - 5%*



TRANSIT SUBSIDIES
3% - 10%*



RIDE SHARING
1% - 15%*



TELECOMMUTING
1% - 5%*



COMMUTE ORDINANCES
5% - 15%*



CAR SHARING
1% - 2%*



WORKPLACE PARKING PRICING
2% - 7%*



VAN POOLS/SHUTTLES
1% - 13%*



What are the existing and emerging TDM programs?



Improve Options

Bicycle and Pedestrian Connections

Transit Improvements - Connections 2025

Ride Sharing

CapMetro Vanpool

CommuteSolutions.com

Chariot



Refine Matches:

Include:



Sort By:

Best Match

Jennifer

Schedule 100% match

S M T W T F S

2 See details

Brittini

Schedule 75% match

S M T W T F S

3 Hide details

Brittini is...

- Willing to drive
- Willing to be a passenger
- Female
- Non-smoker
- Along your route

4 MI from your origin

0 MI from your destination

Request Carpool

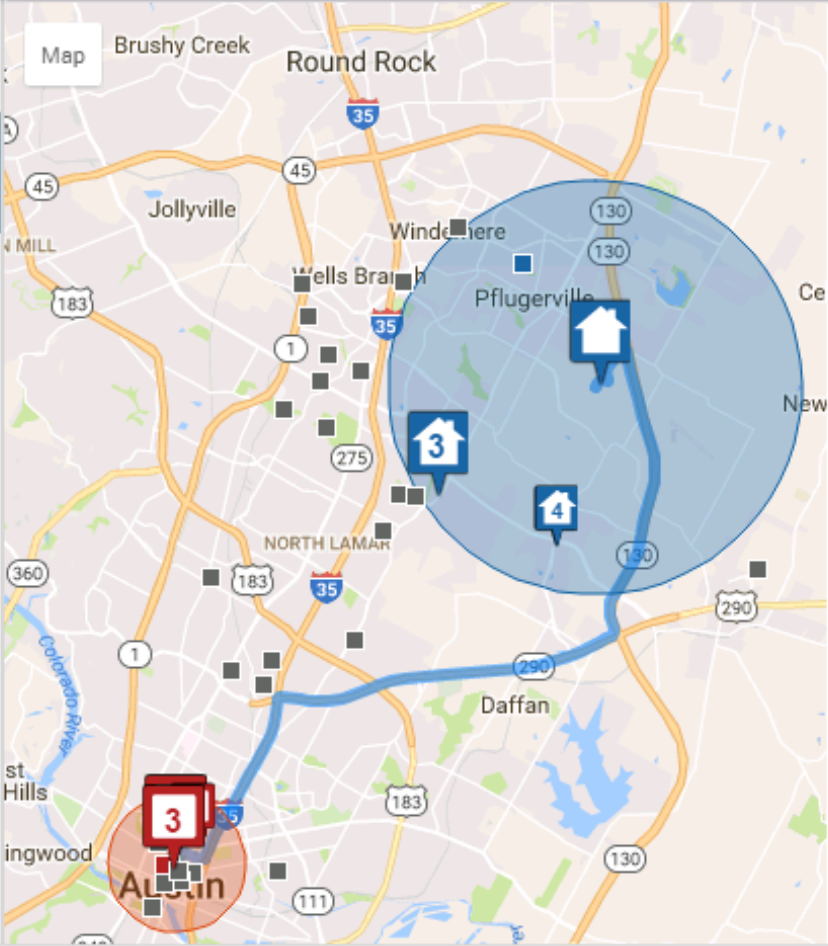
Commute Schedule:

S	±		----	----	±
M	± 5min	8:00am	5:00pm	± 5min	
T	± 5min	8:00am	5:00pm	± 5min	
W	± 5min	8:00am	5:00pm	± 5min	
T	± 5min	8:00am	5:00pm	± 5min	
F	± 5min	8:00am	5:00pm	± 5min	
S	±		----	----	±

Filter Distance From:

Origin

Destination



Improve Options

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Search

Existing

Propose

▼ Where do you start your commute?

▲ Where do you end your commute?

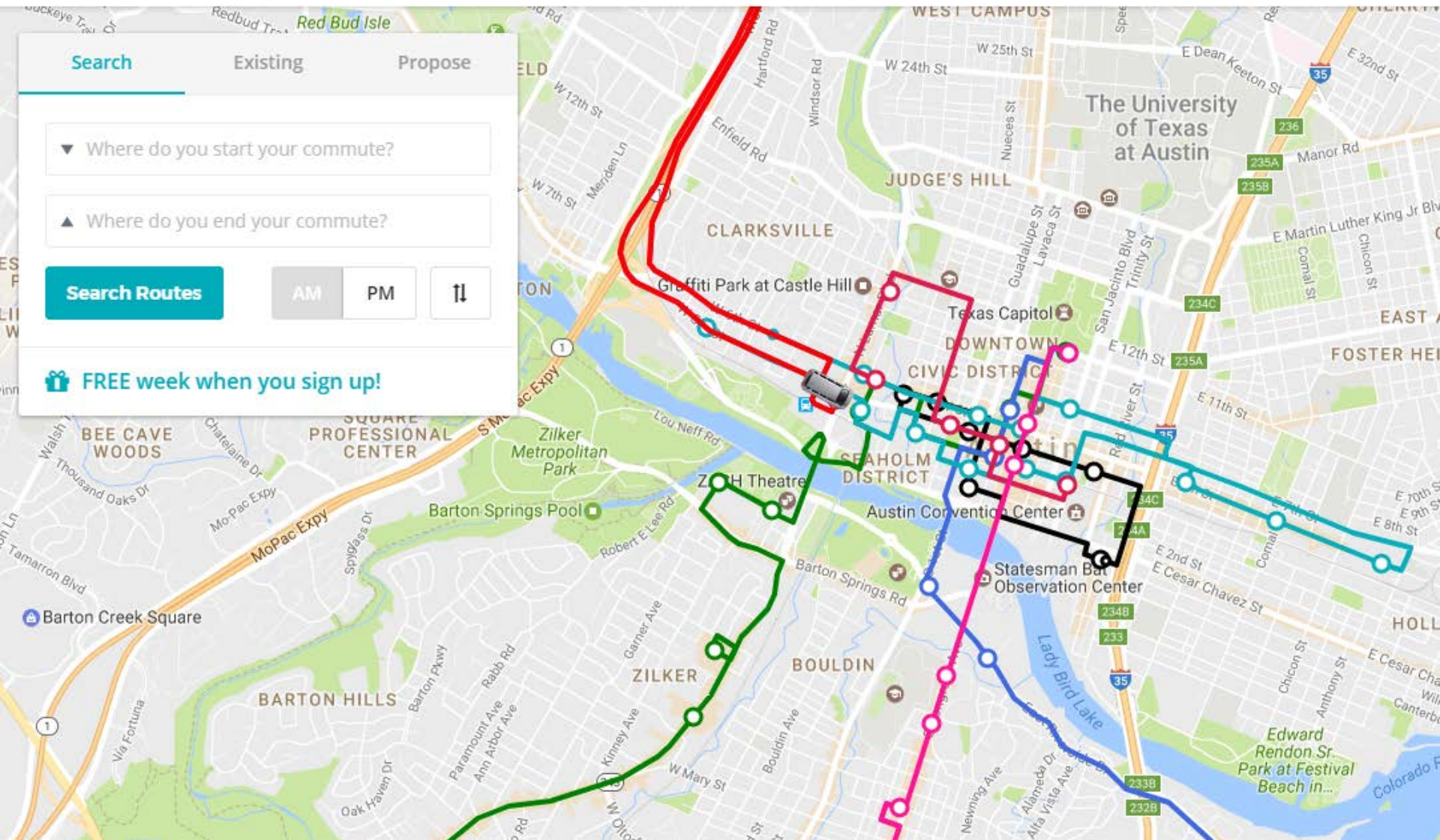
Search Routes

AM

PM

↕

📅 FREE week when you sign up!





Parking Management

Downtown Austin Alliance Parking Study

Parking Enterprise

Metered Parking

Technology

CoA Parking Program



RECOMMENDATION	ALIGNMENT WITH PARKING GOALS					
	Supportive	Multimodal	Available	Cost-Effective	User-Friendly	Adaptable
Design and implement a performance-based parking management program.	✓	✓	✓	✓	✓	✓
Pilot a shared parking program in which City manages private parking as "public" parking. Provide technical assistance to better facilitate shared parking.	✓		✓	✓	✓	
Expand and diversify existing Affordable Parking Program.	✓		✓	✓	✓	
Enhance pedestrian access to parking facilities.		✓	✓		✓	
Explore opportunities to expand and clarify on-street supply.			✓	✓	✓	
Fully invest and implement comprehensive parking signage and wayfinding system.	✓		✓	✓	✓	✓
Define an overall strategy that ensures technology tools support broader parking and mobility goals.	✓		✓	✓	✓	✓
Continue to reinvest parking revenues into downtown and evaluate allocation of additional revenue to multimodal improvements.	✓	✓				✓
Evaluate and implement a park-n-ride or circulator shuttle to improve transit connections and access to motel parking.		✓	✓	✓	✓	
Support comprehensive and coordinated improvements in employee-focused mobility services and programs.	✓	✓	✓	✓	✓	
Revise the zoning code to better support walkable, mixed-use development within the downtown.	✓		✓	✓		✓
Require provision and enforcement of a TDM program for all new downtown development above a certain size.	✓	✓	✓	✓		✓
Revise the zoning code to incentivize sharing of parking.	✓		✓	✓	✓	✓
Create dynamic inventory and adjust on-street regulations to maximize flexibility at the curb.			✓		✓	✓
Define and implement enforcement strategy to support performance-based management. Allocate sufficient resources to parking enforcement.	✓		✓	✓	✓	✓
Establish a formal collaboration between the City, State, and other parking stakeholders.	✓		✓	✓		✓
Enhance event management practices to maximize parking system flexibility and predictability.	✓			✓	✓	✓
Plan for the future to nimbly respond to long-term trends in mobility and parking.	✓	✓		✓	✓	✓
Strategically invest in public and shared parking supply in key locations.	✓				✓	

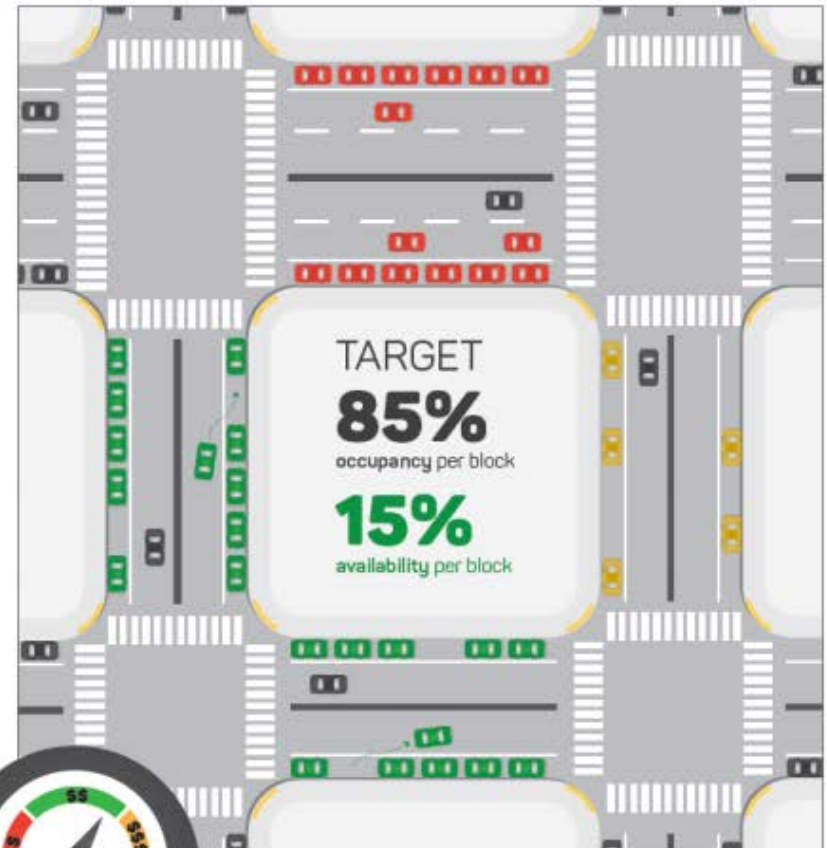
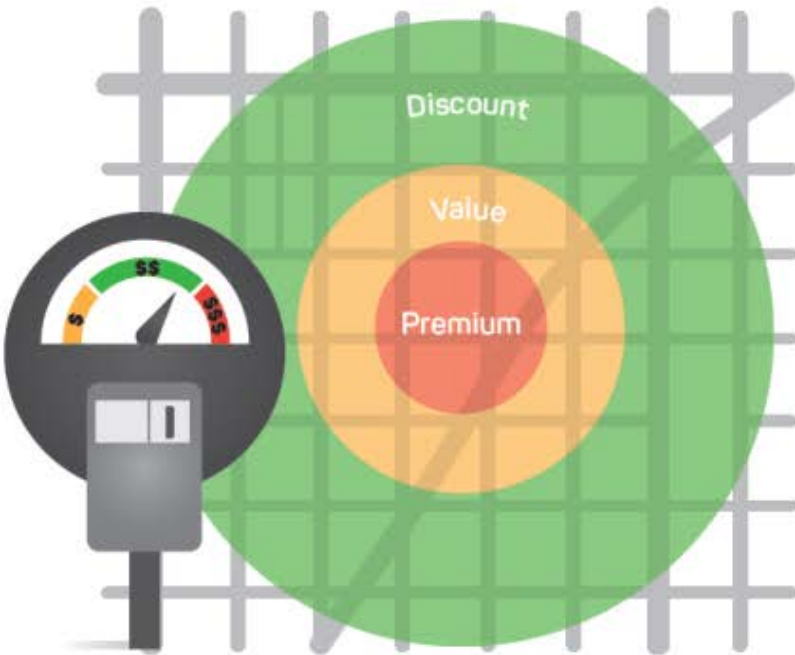
KEEP IN MIND...

There is no silver bullet.

No strategy on its own will solve the parking problem.

This is a toolkit and package of recommendations that works towards the goals together.

ADJUST PRICES OVER TIME TO MEET AVAILABILITY TARGET.



PROGRESSIVE PARKING

If block/lot is too full, **increase the price**

If block/lot is too empty, **lower the price**

If block/lot is just right, **keep the same price**

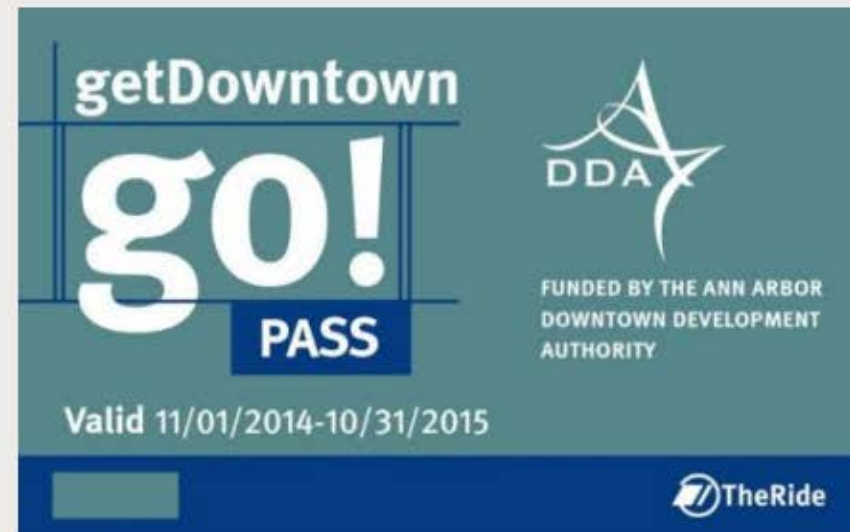
#10. COORDINATED MOBILITY SERVICES FOR EMPLOYEES.

➤ **Summary:**

Significantly expand and diversify the employee mobility programs. Allocate parking revenues to TDM programs.

➤ **Benefits:**

- **Relieves pressure** on parking supplies.
- Less employee driving = **less congestion.**
- Augments employer-provided **benefits.**
- **Employee retention** and satisfaction.
- Accommodates growth and **changing transportation trends.**



ANN ARBOR, MI – GO! PASS



Parking Management

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Technology

City of Austin Parking Program



Land Use

CodeNEXT

Development Review

The South Central Waterfront Project





SOUTH
CENTRAL Waterfront Districts

Policy

CodeNEXT

Austin Strategic Mobility Plan



Incentives

City of Austin Employee Commute Program

Mayor's Mobility Challenge



CITY & COUNTY | COMMERCE | NEWS | TRANSPORTATION

How can Austin reduce its traffic congestion? Don't drive alone to work, officials say

Mayor, companies urge employees to use alternative commute options



By Amy Denney | Posted Oct. 25, 2016 at 11:05 am

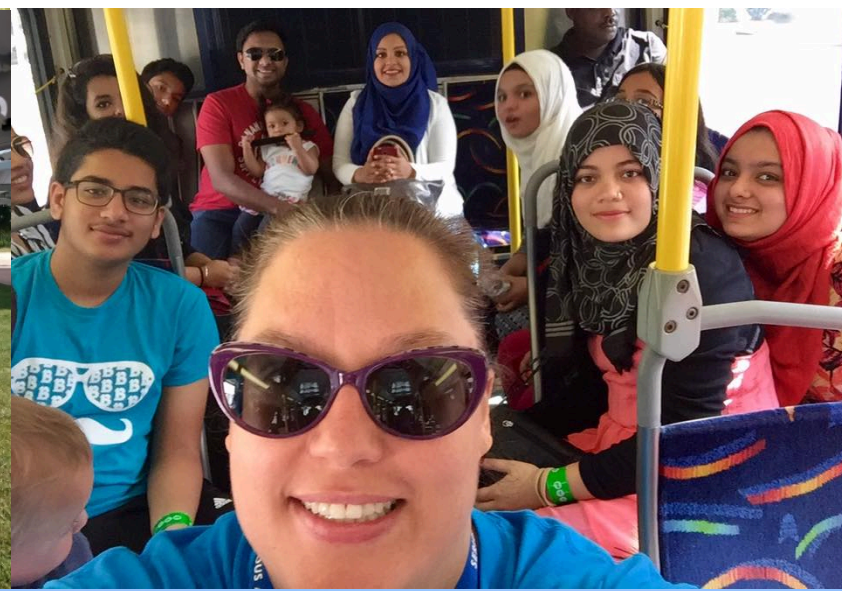
Education

Movability Austin

Smart Trips Austin







A U S T I N

What will the future of TDM look like in our region?



Thank you!

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