Austin Strategic Mobility Plan

MCAC August 8th, 2017

6:00PM - 8:30PM

Austin Transportation Department

Agenda

Public Engagement Summary and Next Steps

Chip Game Results

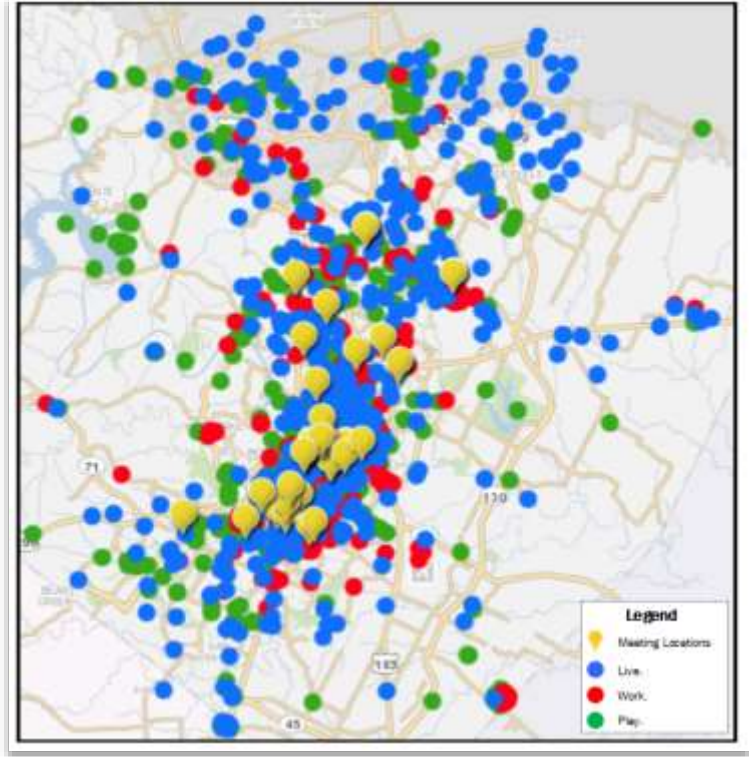Scenario Development and Evaluation

Public Engagement

Prioritizing our Goals – *Phase One*

Priority Pyramid

- Affordability
- Placemaking
- Commuter Delay
- Health & Safety
- Economic Prosperity
- Travel Choice
- Sustainability
- Innovation

Live. Work. Play.

Legend
- Meeting Locations
- Live.
- Work.
- Play.

Thought Wall

"Housing and Transportation Choice"

"Robust and equitable sidewalk network!"

"Reduce emissions and commute efficiency"

"Freedom of mobility options"

"Skinny Streets"

Priority Pyramid Results

Top Priority from all Participants *(in-person & online)*
1) Affordability
2) Commuter Delay
3) Health & Safety
4) Travel Choice
5) Sustainability
6) Innovation
7) Placemaking
8) Economic Prosperity

Top Priority from the Underserved Communities Outreach *(in-person & online)*
1) Affordability
2) Health & Safety
3) Commuter Delay
4) Sustainability
5) Travel Choice
6) Economic Prosperity
7) Placemaking
8) Innovation

Top Priority from Seniors (65yo+) *(online only)*
1) Commuter Delay
2) Affordability
3) Health & Safety
4) Travel Choice
5) Economic Prosperity
6) Innovation
7) Placemaking
8) Sustainability

Top Priority from aged 18 – 34 yo *(online only)*
1) Commuter Delay
2) Affordability
3) Travel Choice
4) Sustainability
5) Placemaking
6) Health & Safety
7) Innovation
8) Economic Prosperity

More than 3000 Pyramids and Comments

Partnering with Austin Public Health

Draft Community Health Assessment (CHA)

- Transportation was identified as one of the eight key themes
- Transportation related to other key themes (e.g. Physical Access to Services and a Healthy Environment)
- CASPER, Focus Groups, Interviews, Data Analysis

*"…**Public transportation concerns** are compounded by the fact that residents are moving further outside of central Austin to find affordable housing."*

*"Barriers to being healthy are often related to physical access, such as distance to healthcare facilities and **means of transportation**…"*

*"**Transportation** was a concern discussed in almost every focus group, by many community forum participants and in many interviews."*

Quest(ion) for Mobility – *Phase Two*

Quest(ion) for Mobility is a campaign aimed at extending the conversation about mobility and the development of the Austin Strategic Mobility Plan (ASMP). Participants' responses will help explore how well different mobility strategies push Austin towards success. The Austin Transportation Department wants to personalize the ASMP planning process with the beauty, heart, and soul of Austin. The diverse faces in our community embody the uniqueness of the ASMP.

Participants are encouraged to submit their questions, zip code and pose for pictures to be featured in the plan. The responses from the campaign will be condensed into popular themes, recurring questions, provocative ideas, etc. and used as a springboard for the Multimodal Community Advisory Committee (MCAC) membership and staff to think critically about the mobility strategies.

Chip Game Results

Chip Game: Purpose

We need your help to inform the creation of scenarios

Have the MCAC provide a variety of approaches for how best to respond to the allocation of strategies.

Have the MCAC help inform the identification of some performance targets for the Preferred Strategy by expressing a mode share expectation.

Recognize the constraints of both dollars and space and the need to engage in trade-off decisions when developing the ASMP strategy

GETTING THERE TOGETHER ASMP

Chip Game Results

Allocation of Investment Types

	MCAC Overall		Table 2		Table 3		Table 4		Table 5		Starter Packet	
New Road Connection	75	↓ 2%	0	↓ 0%	0	↓ 0%	45	↓ 4%	30	↓ 3%	180	16%
Roadway Widening	25	↓ 1%	25	↓ 2%	0	↓ 0%	0	↓ 0%	0	↓ 0%	90	8%
Rail Transit	1825	↑ 43%	650	↑ 59%	375	↑ 38%	425	↑ 40%	375	↑ 34%	375	33%
Premium Transit	1020	↑ 24%	200	↓ 18%	220	↑ 22%	300	↑ 28%	300	↑ 27%	220	20%
Premium Bike	485	↓ 11%	210	↑ 19%	150	↑ 15%	55	↓ 5%	70	↓ 6%	150	13%
Multimodal Street Conversion	825	↑ 19%	25	↓ 2%	235	↑ 24%	230	↑ 22%	335	↑ 30%	105	9%

ASMP

Chip Game Results

- Themes
  - Multimodal across the board
- Innovative Transportation
  - ITS and TDM
    - "Lots and lots of TDM"
    - Transit Priority Signals, Pedestrian Hybrid Beacons and Bike Detection
  - Automated and Connected Vehicles (AV/CV)
    - Use with Caution
- Mode Share
  - 50% SOV

Scenario Development and Evaluation

What is Scenario Planning?

Scenario Planning | *noun*

Def: A method to explore how well different **mobility strategies** make progress towards achievement of **goals and objectives**.

Projects + Programs + Policies

ASMP

Developing our Scenarios

- Learn from the Chip Game:
Themes + Strategies + Mode Share

- Learn from Imagine Austin Scenarios:

Vision Statement

Austin is Mobile and Interconnected

Austin is accessible. Our transportation network provides a wide variety of options that are efficient, reliable, and cost-effective to serve the diverse needs and capabilities of our citizens. Public and private sectors work together to improve our air quality and reduce congestion in a collaborative and creative manner.

Improving Transportation

In a well-functioning city, roadways, bus and rail transit, and bicycle and pedestrian routes work together, offering choices within a coordinated transportation system. Where we locate roads and other routes affects how our city develops. How people get around town ultimately affects the economy, public health and the environment.

Principles

↑ Transit works more efficiently when more people live and work within walking distance of bus and rail stops.

↑ Compact, interconnected development patterns support public transit.

↑ Walkable/bikable neighborhoods with shops, eateries and well-designed places around the stops can make it appealing and convenient to use transit daily.

↑ Historically, private investment has followed roads, and rail/streetcar lines.

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Scenarios

A B C

Scenario A

Assumptions: Scenario A continues the current trend of transportation programming, investments and policy in Austin. This scenario assumes implementation of projects that incorporate roadway, public transit, bicycle and pedestrian expansions throughout the city. The scenario holds a current level of investment in transit, existing levels of transportation demand management, and a small impact from automated and connected vehicles.

Scenarios

Scenario B

Assumptions: Scenario B modifies transportation programming, investment and policy in Austin. This scenario assumes fewer roadway expansions and more investment towards projects that support public transit, bicycle and pedestrians along Imagine Austin Activity Corridors and within Activity Centers. The scenario assumes a higher level of transit investment, a modest impact from automated and connected vehicles, but higher levels of transportation demand management.
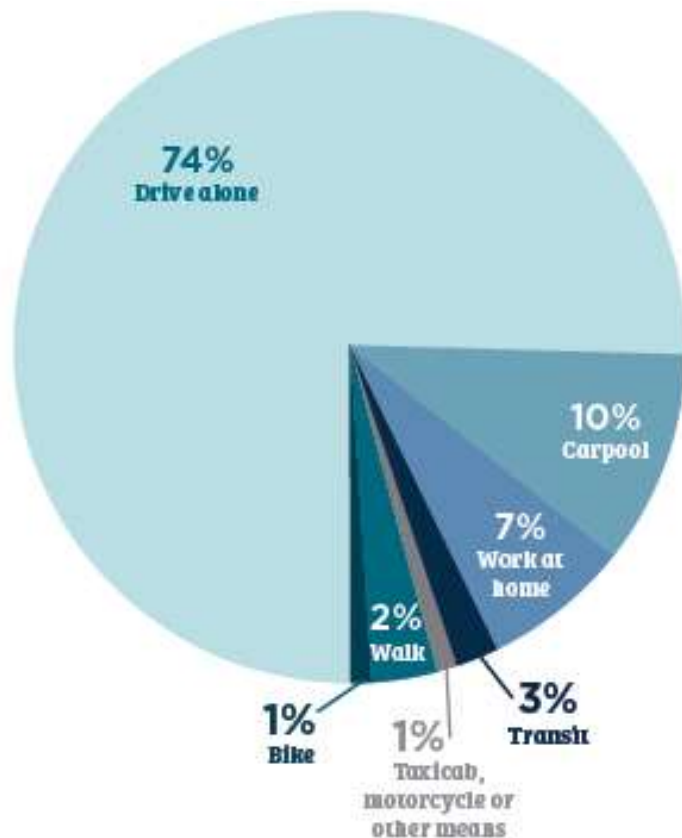
Scenarios

Scenario C

Assumptions: Scenario C significantly modifies transportation programming, investment and policy in Austin. This scenario only invests in projects that support public transit, bicycle and pedestrians along Imagine Austin Activity Corridors and within Activity Centers. The scenario assumes the highest level of transit investment, the highest impact of automated and connected vehicles on public transit, ridesharing and freight, and the highest level of transportation demand management.

Motivation behind the Scenarios

Today

Future

74%
Drive alone

10%
Carpool

7%
Work at home

2%
Walk

1%
Bike

1%
Taxicab, motorcycle or other means

3%
Transit

?

Evaluating our Scenarios

Scenarios

A

B

C

Technical Results

Indicator Weighting

Engagement Results

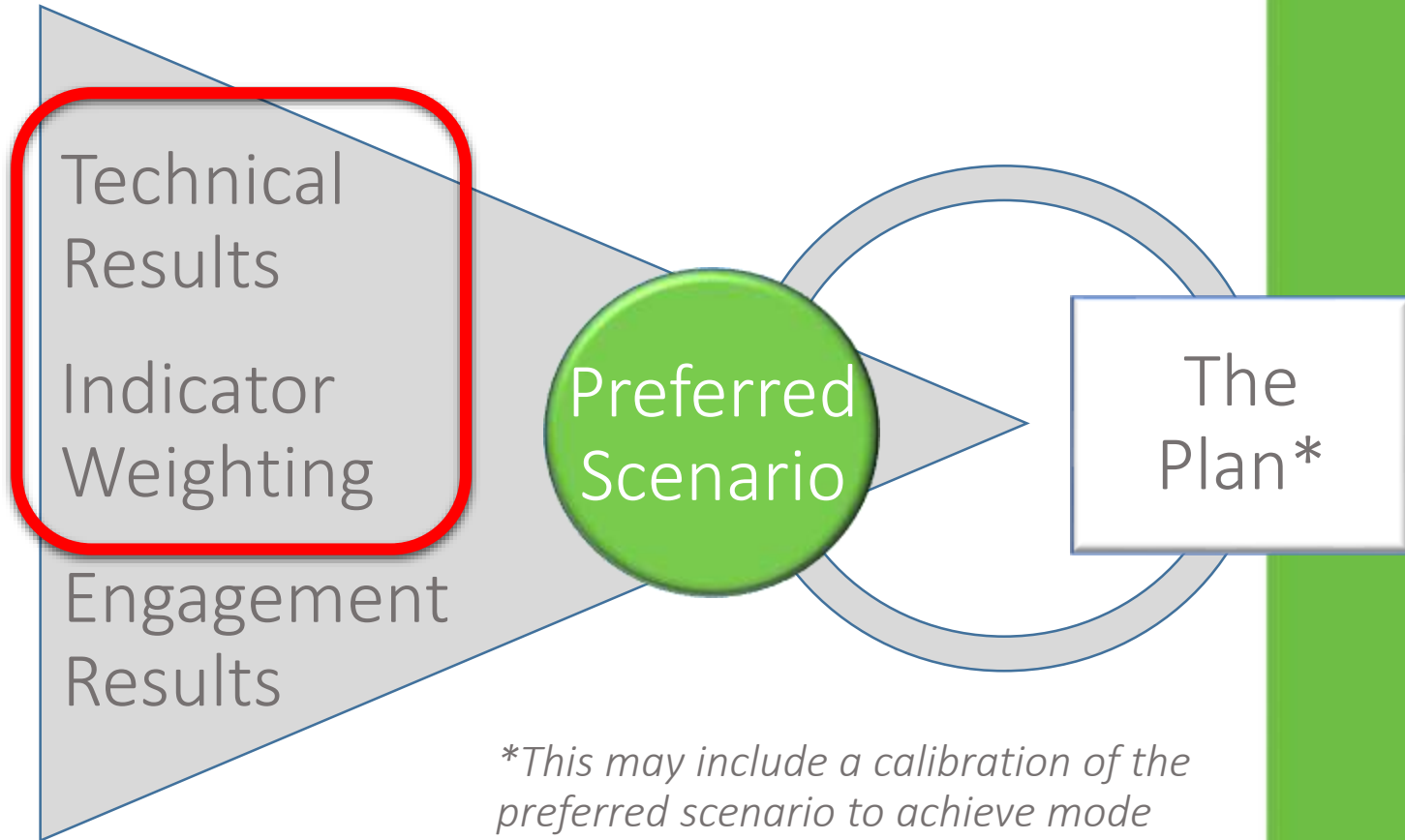Preferred Scenario

The Plan*

*This may include a calibration of the preferred scenario to achieve mode split/performance targets

Technical Results

Scenario Inputs	Input Type	Count	Miles	Cost
Inputs can be measured to indicate expected outcomes from a scenario. We can measure "how many" or "how long" for each project type and compare reletive to each scenario.	Transit Projects			
	High Frequency Transit			
	Transit Stops			
	Transit Priority Treatments			
	Bicycle Projects			
	Premium Bicycle Facilities			
	All Ages & Abilities Bicycle Network			
	Urban Trails Projects			
	Sidewalk Projects			
	Green Infrastructure Projects			
	Roadway Projects			
	New Roads			
	Expanded Roads			
	Intersection Improvements			
	Multi-modal Street Conversions			
	Access Management Projects			
	Technology/ITS			
	Transportation Demand Management			

Scenario Outcomes	Outcome	Value	
Outcomes are measurements that reflect the performance of a scenario and can be compared relative to each other.	Vehicle Miles Traveled		miles
	Mode Share		%
	Delay		hours
	Speed		mph
	Travel Time		min.
	Trip Generation		trips
	Transit Ridership		trips

Spatial Analysis	Dataset
These datasets can be used to summarize inputs or outcomes by specific geographic boundaries or are summarized by buffers of the inputs.	Street Impact Fee Land Use Assumptions - Households & Jobs
	Kirwan Opportunity Index - areas of opportunity
	Water Quality Areas
	Affordable Housing
	High Crash Network
	Imagine Austin Centers
	Imagine Austin Corridors
	Travel Screenlines
	Parks

Summary of:
- Scenario Inputs
- Scenario Outputs
- Spatial Analysis

ASMP

Developing our Indicators

MCAC Indicators Activity: Asked to select your top 4 indicators and circle your most important.

How we'll use this info:
1. Contribute to indicator selection
2. Influence the indicator weighting

Indicators

Transportation Indicators
Please select your top 4, and circle 1 item you would rank as most important

- [ ] Vehicle miles traveled (total & per capita)
- [ ] Congestion
- [ ] Right of Way Impacts (Tax Base)
- [ ] Safety
- [ ] Mode Split
- [ ] Transit Ridership
- [ ] Average transit headways
- [ ] Bicycle miles traveled
- [ ] Sidewalk (linear miles and percent of street frontages with sidewalks)
- [ ] Bicycle Lanes (linear miles)
- [ ] Special district performance (downtown/employment center/activity centers)

Community Vibrancy Indicators
Please select your top 4, and circle 1 item you would rank as most important

- [ ] Housing
- [ ] Economic vibrancy
- [ ] Households within 1/4 and 1/2 mile of distance of transit and high capacity transit (percent)
- [ ] Employees within 1/4 and 1/2 mile of transit and high capacity transit
- [ ] Social equity
- [ ] Special district performance (downtown/employment center/activity centers)
- [ ] Air quality & greenhouse gas
- [ ] Healthy communities
- [ ] Energy Consumption
- [ ] Mode split
- [ ] Households within 1/4 and 1/2 mile of dedicated bike facilities

Other Indicators

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Indicators Activity Results

Transportation Indicators	Count	% of total	Ranked #1
Transit Ridership	19	19%	4
Mode Split	14	14%	6
Vehicle miles traveled	13	13%	3
Safety	13	13%	3
Sidewalk (linear miles and % of street frontages with sidewalks)	12	12%	0
Special District Performance	7	7%	2
Average Transit Headways	7	7%	1
Congestion	6	6%	1
Bicycle Lanes (linear miles)	4	4%	0
Bicycle Miles Traveled	3	3%	1
ROW Impacts (Tax Base)	2	2%	0
Community Vibrancy Indicators	**Count**	**% of total**	**Ranked #1**
Households within 1/4 & 1/2 mile to transit	21	21%	9
Housing	14	14%	3
Social Equity	14	14%	3
Employees within 1/4 & 1/2 mile to transit	14	14%	1
Economic Vibrancy	8	8%	2
Special District Performance	7	7%	1
Healthy Communities	7	7%	0
Air Quality & Greenhouse Gas	6	6%	0
Households w/in 1/4 & 1/2 mile to dedicated bike facilities	5	5%	1
Mode Split	4	4%	1
Energy Consumption	2	2%	0

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Indicators Activity Results

Additional Suggested Indicators	Count	Ranked #1
Safe Crossings	2	1
Sidewalk Conditions	2	0
Accessibility	1	1
Average Door to Door travel time shorter than using a car	1	1
Commute Time for non-sov commutes	1	0
Households and Employees with access to sidewalks/pedestrian facilities	1	0
Overall non-sov miles traveled	1	0
travel time by mode	1	0
Walkability	1	0
Affordability Metrics (H+T Costs)	1	0
Bike/Ped Connectivity	1	0
Protected Bike Lanes	1	0
Jobs accessible in 30, 45, 60 mins of a transit ride	1	0
Competitiveness of transit vs other modes	1	0

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Developing our Indicators

- Learn from the Indicators Activity

- Learn from Imagine Austin: Complete Communities Indicators

- Coordination with other Mobility Initiatives:
2016 Bond and Council Strategic Plan

- Best Practice and Data Availability

Austin Strategic Mobility Plan

Draft Scenario Evaluation Indicators

Mobility Consideration	Goal	Indicator	Weighting
Commuter Delay	reduce the amount of time workers spend traveling between home and work	Vehicle Miles Traveled, total and per capita	1 x
		Person-Carrying Capacity (People Throughput)	1 x
		Vehicle Hours of Delay, total and per capita	1 x
		Average Travel Time, by Auto and Transit	1 x
		Average Speed, by Auto and Transit	1 x
		Total Vehicle Trips Generated	1 x
		Number of _____ /Miles of _____ (projects that manage congestion)	1 x
Travel Choice	promote a balanced transportation network and the ability to make informed choices based on personal needs and preferences	Mode Split	1 x
		Transit Ridership	1 x
		Miles of New Sidewalks	1 x
		Miles of Premium Bicycle Facilities	1 x
		Units within 1/2 mile of transit and high capacity transit*	1 x
		Employment within 1/2 mile of transit and high capacity transit*	1 x
		Units within 1/2 mile of Premium Bicycle Facilities**	1 x
		Employment within 1/2 mile of Premium Bicycle Facilities**	1 x
		Number of _____ /Miles of _____ (investments in alternative modes)	1 x

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Draft Scenario Evaluation Indicators

Mobility Consideration	Goal	Indicator	Weighting
Affordability	lower the cost of living, working and traveling in Austin	Number of Affordable Units within 1/2 mile of transit and high capacity transit**	1 x
		Number of Affordable Units within 1/2 mile to Premium Bicycle Facilities	1 x
		Average Travel Time to the CBD	1 x
		Average Travel Time to the CBD for areas with low/very low opportunity	1 x
		Number of_____/Miles of_____ (projects that promote affordability)	1 x
Economic Prosperity	promote future growth through strategic investments in transportation networks that meet the needs of the 21st century	Social Equity (number of projects in areas with low/very low opportunity)	1 x
		Density Map of Multiple Modes	1 x
		Share of Jobs Accessed in 20/30/45/60/90 minutes by Auto and Transit	1 x
		Number of_____/Miles of_____ (projects that promote economic prosperity)	1 x
Placemaking	build a transportation network that encourages social interaction through quality urban design, and connects users to the many places that make Austin unique	Number of projects within an Imagine Austin Center or along an Activity Corridor	1 x
		Miles of projects within an Imagine Austin Center or along an Activity Corridor	1 x
		Number of projects within 1/2 mile to parks and community centers	1 x
		Number of_____/Miles of_____ (projects that encourage social interaction)	1 x

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Austin Strategic Mobility Plan
Draft Scenario Evaluation Indicators

Mobility Consideration	Goal	Indicator	Weighting
Health & Safety	protect Austinites by lowering the risk of travel-related injury and promoting public health	Miles of Walking / Biking Trails*	1 x
		Miles of Improvements to High Crash Corridors	1 x
		Number of Intersection Safety Projects	1 x
		Emissions Reduction	1 x
		Number of _____ /Miles of _____ (projects that promote health and safety)	1 x
Sustainability	promote integrated designs and quality additions to the built environment while reducing impacts and promoting efficient use of public resources	Operations and Maintenance Costs	1 x
		Cost of Infrastructure	1 x
		Fuel Consumption	1 x
		Number of _____ /Miles of _____ (projects that promote sustainability)	1 x
Innovation	draw inspiration from forward-looking cities around the world, change the way we think about what's possible, and set an example for the rest of the country	Number of projects that incorporate Technology	1 x
		Application of Transportation Demand Management	1 x
		Number of _____ /Miles of _____ (projects that promote innovation)	1 x

* Imagine Austin Indicator ** Modified Imagine Austin Indicator

Next Steps

Next Steps

- Develop Scenario A

- Develop Indicator Weighting
  - Touchpoint with City Council

- Quest(ion) for Mobility

- Updated Timeline
  - August – December: Scenario Development and Evaluation
  - December: MCAC reviews scenarios
  - January – March: Public reviews scenarios (MetroQuest & Focus Groups)
  - April – June: Develop the Preferred Scenario and Plan
  - July – TBD: Formal Adoption Process

Questions?

MCAC August 8th, 2017

Austin Transportation Department