

# Technical/Advisory Committee No. 3

July 19, 2022



Engage in our land use and transportation future.

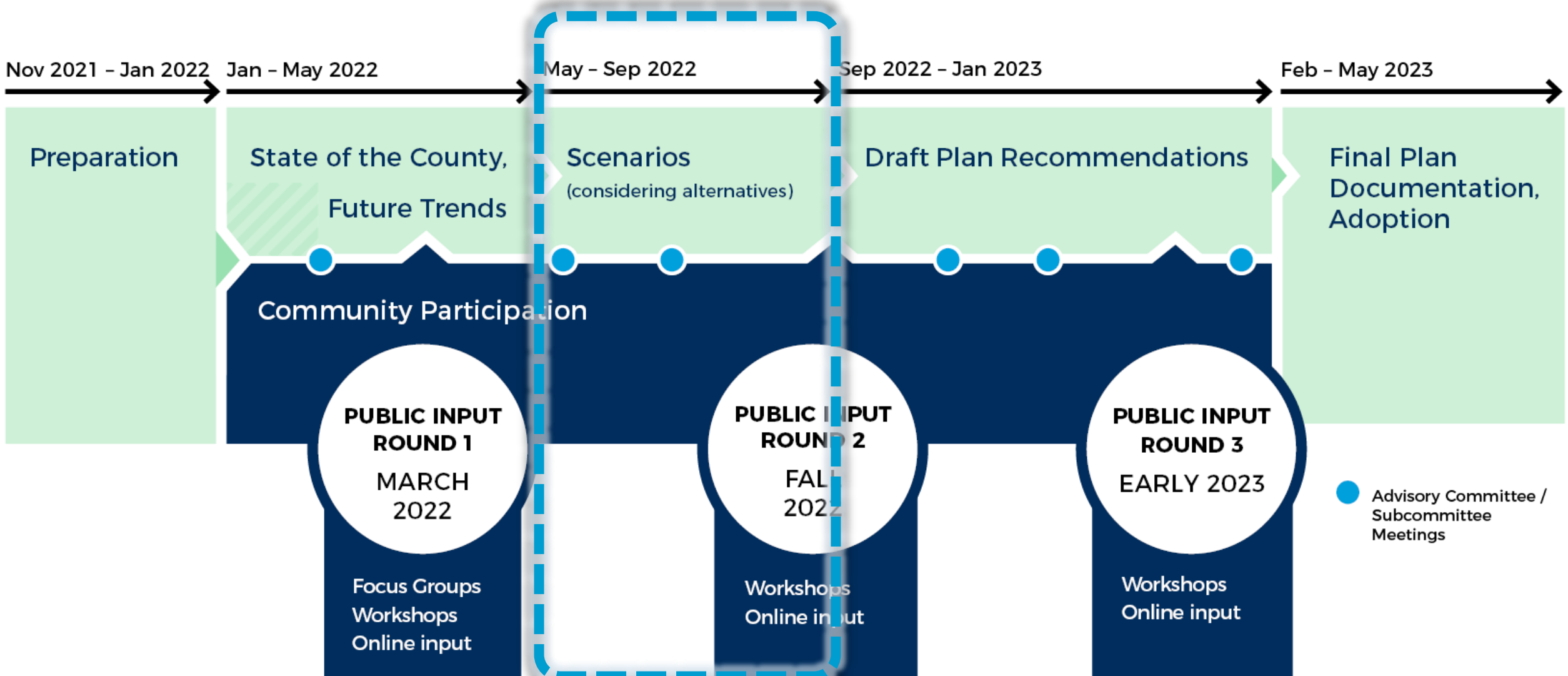


# Agenda

1. Community Feedback
2. Draft Vision and Goals
3. Future Trends Overview
4. Evaluation Measures (Indicators)
5. Scenario Planning Next Steps



# The Process





# Community Feedback



**187**

in person  
participants



**232**

online  
participants

## Welcome to **IDEAS WEEK**

**March 27 – March 30**

Ideas Week is the first series of events for Advance Knox, an effort to shape a new land use and transportation plan for the county. This event is an opportunity to let the county know what's important to you.

Complete the five activities at your own pace.

- 1 Treasures**  
What do you love most about Knox County today?
- 2 Places**  
Share your thoughts on places in the county to protect, improve, or ideas for future development.
- 3 Transportation**  
Share your thoughts related to transportation conditions, opportunities or challenges.
- 4 Other ideas**  
Share other ideas that you feel this process should consider.
- 5 Tell us about yourself**  
Before you leave, complete a brief exit questionnaire included in your handout.



# Understanding Common Themes



## Treasures

Natural environment,  
rural small-town  
character

People and community

Amenities and culture



## Place

Maintain rural character,  
natural areas

Create new types of  
development

More connected,  
walkable places

Maintain, improve,  
expand parks

Improve infrastructure  
before development

Create/respect plan for  
managing growth



## Transportation

Improve roads and  
intersections

Improve connectivity,  
pedestrian, and bike  
infrastructure

Expand transit options

Safety and traffic  
calming



## Other

Growing parks and  
greenways

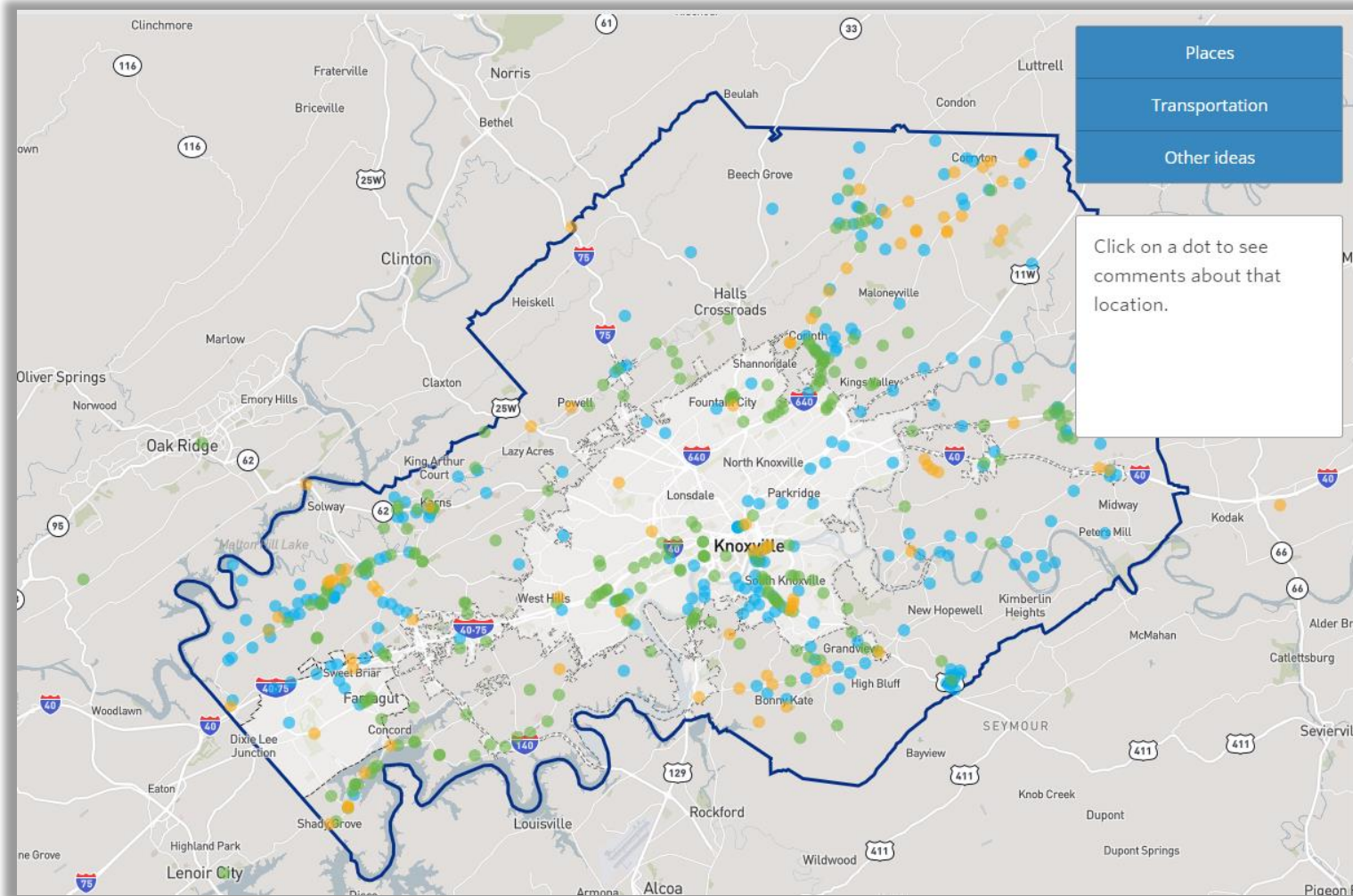
Considering schools

Protecting the  
environment

Improving housing  
options



# Mapped Ideas



**538**  
mapped  
ideas





# Draft Goals

**A mix of places** with strong identities, including natural and developed areas that range from farmland and forested spaces to town centers, neighborhoods, and rural communities.

**Preservation of unique agricultural & natural resources** that include prime farmland, rivers and streams, wetlands, ridges and valleys, and scenic views.

**An efficient infrastructure network** that supports growth and is maintained through strategic, fiscally responsible decisions.

**Economic and fiscal vitality** to sustain employment, grow business investment, and support county services.

**Educational opportunities** that include high quality, diverse options to foster and retain a growing workforce.

**Housing and neighborhood choices** to meet the needs of a diverse population.

**A transportation system** that prioritizes safety, connectivity, and multimodal options while easing congestion.

**Connected parks, greenways, and water trails** that provide recreational opportunities accessible to residents and visitors.





# Draft Vision Statement

A great place to live, work, and play,  
made up of vibrant communities  
where people and businesses thrive  
and scenic beauty is treasured.



# Polling Exercise



# Future Trends



Diversified  
Housing Stock &  
Affordability



Increased  
Rainfall &  
Flooding Events



Aging  
Population



Increases in  
Fuel Prices



# Diversified Housing Stock & Affordability

## Trends



Available housing inventory in Knox County declined from 1,332 active listings in 2019 to 324 by the end of 2021.

*(Knoxville Area Association of Realtors, 2022)*



In March 2021, more than 1 in 3 registered voters indicated housing affordability in the Knoxville area was a big problem. 28% said the same about housing availability.

*(Knoxville Area Association of Realtors, 2022)*



Annual new building permits have remained below the historical average since 2008 creating a housing deficit of approximately 17,000 units.

*(Knoxville Area Association of Realtors, 2022)*



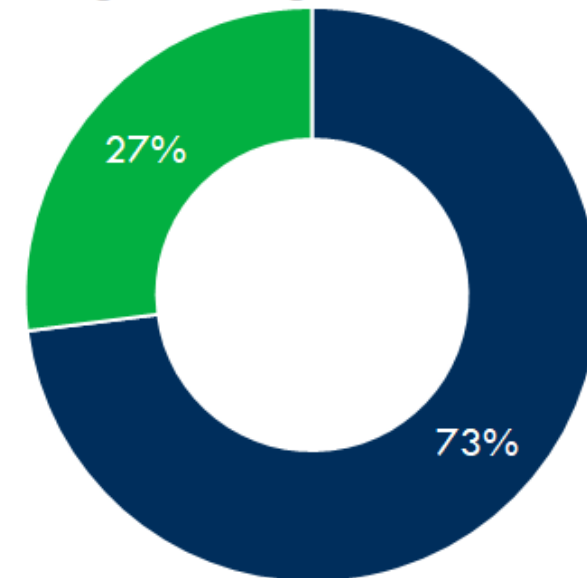
# Diversified Housing Stock & Affordability

## Intersection with Land Use

*“According to one study, the required infrastructure cost of one unit of housing on an infill site costs approximately \$50,000 less than the same development on a greenfield site.”*  
(Knoxville Area Association of Realtors, 2022)

**Knox County (Unincorporated Area)  
New Construction Housing Mix  
(2012-2017)**

■ Single-Dwelling ■ Multi-Dwelling



(Knoxville-Knox County Planning, 2018)



# Diversified Housing Stock & Affordability

## Intersection with Transportation

### Importance Level of Factors when Deciding where to Live

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**72%** Easy access to the highway

**70%** Short commute to work

**56%** Nearby public transit

**53%** Nearby bike lanes

*(National Association of Realtors, 2020)*

### Knox County True Affordability and Location Efficiency

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**56%** Income spent on housing and transportation

**0%** Location efficient neighborhoods

(places that are compact, closer to jobs, with a variety of transportation choices, allowing people to spend less time, energy, and money on transportation)

*(Center for Neighborhood Technology, 2022)*



# Increased Rainfall & Flooding Events

## Trends



The amount of rain during the heaviest storms increased by a third in the Southeast United States between 1958 and 2016

*(U.S. Global Change Research Program, 2018)*



Between 2000 and 2020, there have been 2,285 floods/flash floods in Tennessee, or one every three days

*(Tennessee Emergency Management Agency, 2021)*



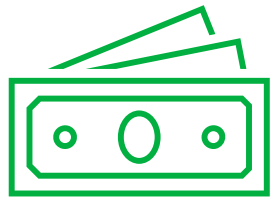
20,493 properties in Knox County are likely to be severely affected by flooding over the next 30 years.

*(First Street Foundation, 2022)*



# Increased Rainfall & Flooding Events

## Intersection with Land Use



Tennessee suffers an average of \$243 million in damages from flooding every year

*(Floor Ready Tennessee, 2022)*



In Tennessee, there are 287,589 residential properties, 23,757 commercial properties, 844 infrastructure facilities, and 1,1450 social facilities with operational risk today

*(First Street Foundation, 2021)*





# Increased Rainfall & Flooding Events

## Intersection with Transportation



25% of roads in the United States would be impassable during a flood

2 million roads are affected now, and estimated to increase to 2.2 million in 30 years

In Tennessee, there are 47,017 miles of roads with operational risk

*(First Street Foundation, 2021)*



# Aging Population

## Trends



Between 2000 and 2040, the number of Americans ages 65 and older will more than double, reaching 80 million.

*(Urban Institute, 2008)*

Nearly three-quarters will want to stay in their current residence for as long as possible.

*(AARP, 2010)*

19% of Knox County Residents are projected to be 65+ in 2030.

*(State of Tennessee, 2020)*



# Aging Population

## Intersection with Land Use

1.9  
Million

The number of Americans ages 65 and older who could require a nursing home in 2030, an increase from 1.2 million in 2017

*(Population Reference Bureau, 2019)*

70%

Percentage of respondents 65 and older who said it was extremely or very important to be near where you want to go (grocery stores, library, doctor's office, etc.)

*(AARP, 2010)*



# Aging Population

## Intersection with Transportation



Seniors 65 and older who no longer drive make 15% fewer trips to the doctor, 59% fewer trips to shop or eat out, and 65% fewer trips to visit friends

*(Global Coalition on Aging, 2018)*



Americans older than 55 and those with higher incomes show an increase interest in walkability

*(National Association of Realtors, 2020)*



Between 2000 and 2015, it was estimated that the number of seniors with poor transit access would increase by 35% or from 11.5 million to 13.5 million

*(Transportation for America, 2011)*



# Increases in Fuel Prices

## Trends

**\$4.721**

National average price for a gallon of gasoline *(AAA, 2022)*

**\$4.479**

Average price for a gallon of gasoline in Knox County *(AAA, 2022)*

**44%**

Survey respondents who walked instead of driving in March due to high gas prices *(Morning Consult, 2022)*

**42%**

Percent of consumers with an annual household income under \$50,000 who reported driving less in March 2022 than in the previous month *(Morning Consult, 2022)*



# Increases in Fuel Prices

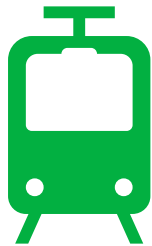
## Intersection with Land Use





# Increases in Fuel Prices

## Intersection with Transportation



For every 10% increase in gas prices, U.S. transit demand increased by 1.2%

*(Federal Highway Association, 2009)*



A 20% increase in gasoline prices with a gas price range over \$4 leads to:

- 1.67% increase in bus travel
- 2.05% in commuter rail travel
- 9.34% in light rail travel
- 1.80% in public transit use

*(SJSU Research Foundation, 2014)*



Consumers have been turning to superstores and online solutions to cut down on mileage

*(Placer.ai, 2022)*



# Indicators

A tool to help measure the impacts and outcomes of decisions.

- 1. What does Knox County value?**
- 2. What are our goals?**
- 3. How do we measure them?**
- 4. Does it resonate with the public and stakeholders?**

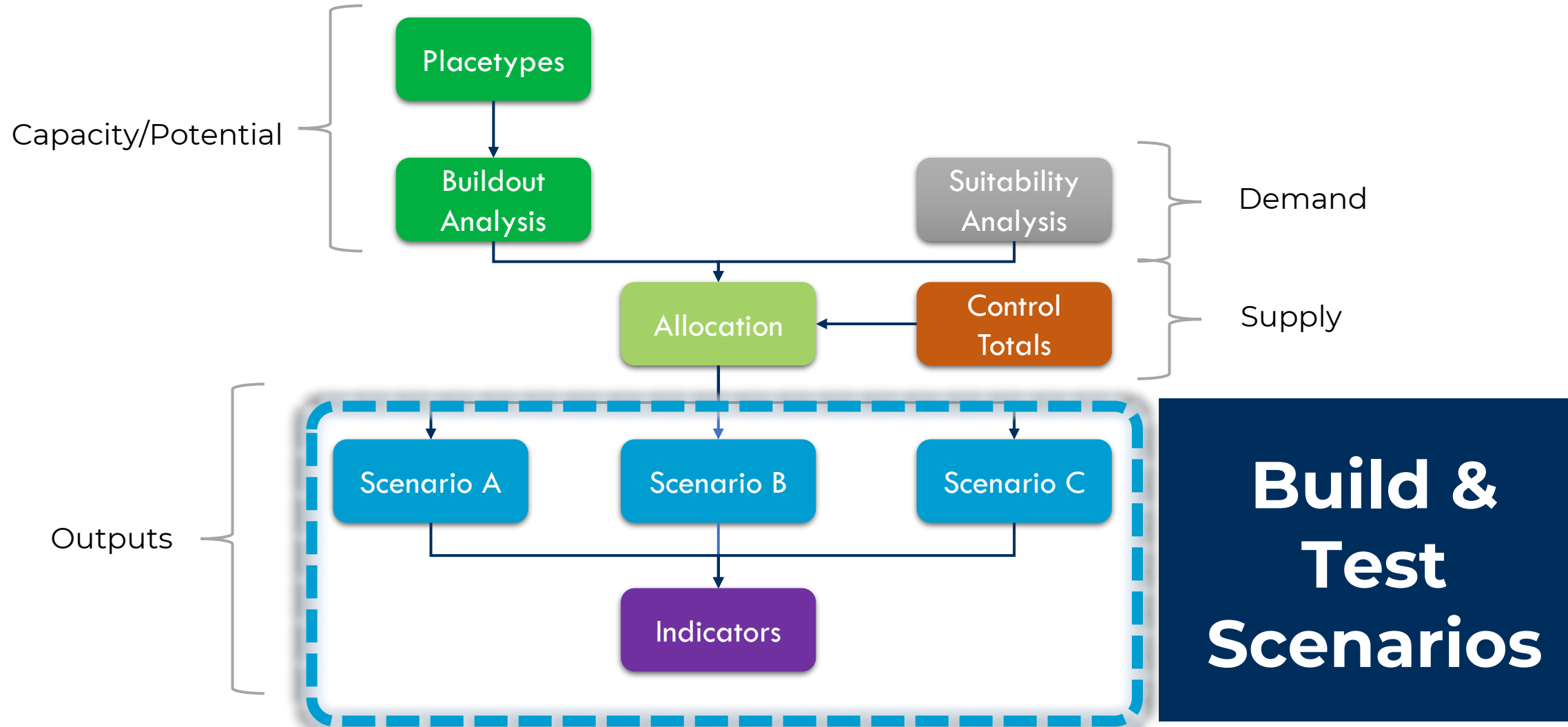




# Polling Exercise



# What's Next?





# What's Next?

Communicate Results

## Scenario Report Card

Performs WORSE than Current Plans ← - - - → Performs BETTER than Current Plans

### Quality of Place

#### Learning Centers

Proximity to libraries and schools



#### Housing Diversity

Mix of dwelling unit types within the study area



#### Access to Parks and Greenways

Proximity to parks and greenways



#### Jobs and Housing Balance

Ratio of jobs to households within urban place types



#### Walkability

Dwelling units within walkable place types



### Sustainable Growth

#### Urban Footprint

Growth in urban place types



#### Urban Density

Density within urban place types



#### Water Consumption

Average water consumption



#### Energy Consumption

Average energy consumption



### Growth Distribution

#### Context Distribution

Percent of land area by community type

	Current Plans	Compact	Dispersed
City & Town	1.6%	4.2%	0.5%
Suburban	74.4%	74.3%	79.9%
Rural	15.7%	14.1%	13.6%
Protected Green Space	2.8%	2.3%	2.0%
Other	5.6%	4.9%	4.0%

#### Household Distribution

Percent household growth allocated by community type

	Current Plans	Compact	Dispersed
City & Town	4.2%	26.6%	0.4%
Suburban	90.9%	69.0%	96.9%
Rural	2.0%	1.0%	1.2%
Protected Green Space	1.1%	1.1%	0.0%
Other	1.8%	1.5%	1.5%

#### Employment Distribution

Percent employment growth allocated by community type

	Current Plans	Compact	Dispersed
City & Town	15.2%	60.7%	1.2%
Suburban	55.0%	21.9%	80.4%
Rural	1.5%	0.3%	0.5%
Protected Green Space	1.2%	1.3%	0.0%
Other	26.7%	15.4%	17.9%

### Regional Transportation

#### Vehicle Miles Traveled

Vehicle miles traveled (Triangle Regional Model)



#### Vehicle Hours Traveled

Vehicle hours traveled (Triangle Regional Model)



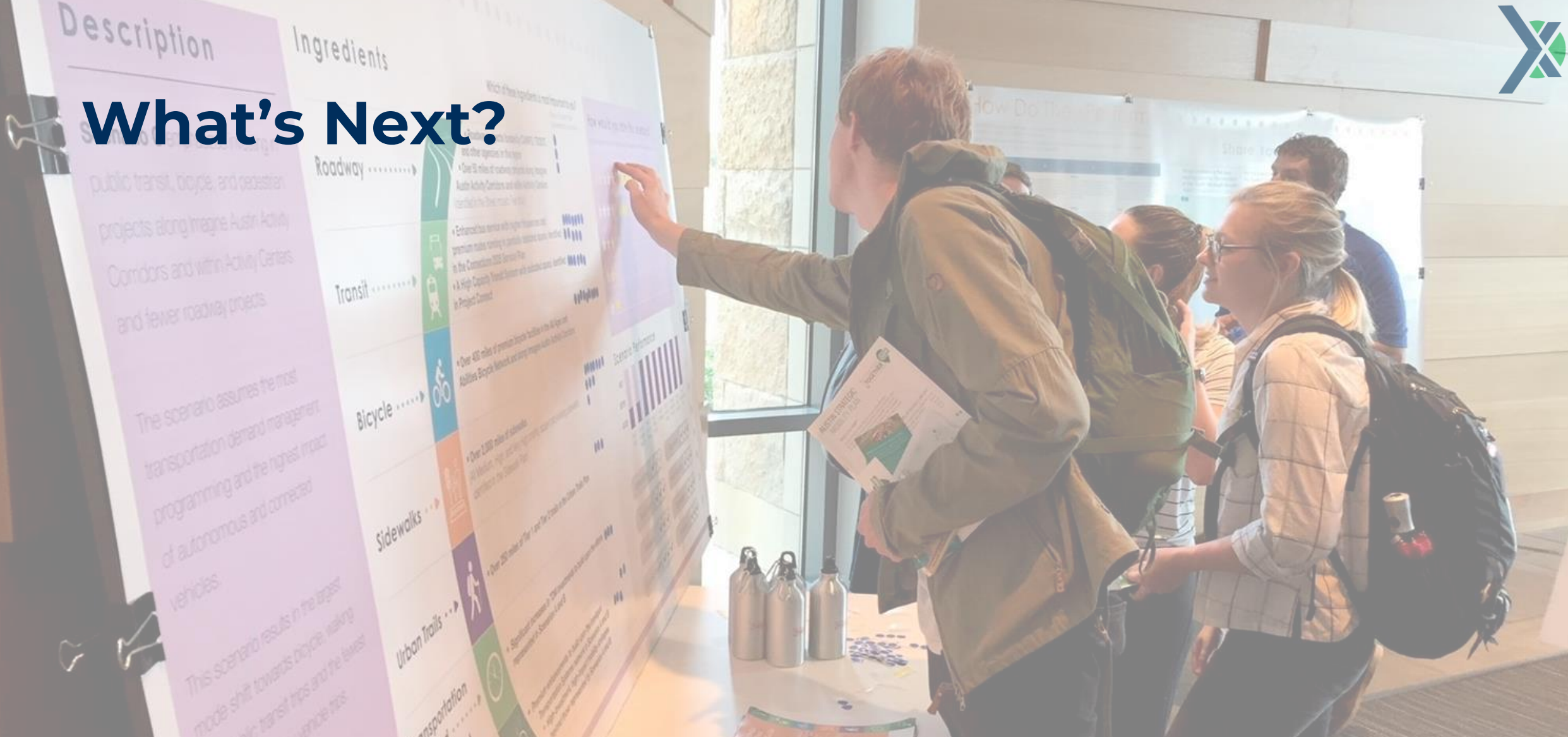
#### Congested Corridors

Miles of congested corridors (Triangle Regional Model)





# What's Next?



**Engage the Community**

**Thank you!**

**ADVANCE KNOX**

Engage in our land use and transportation future.