









## Road Map

Overview of Survey **Introduce Characters** Transportation Security Index Data Data Data **Revisit the Characters Lessons Learned** More Q&A

## Challenge

No widely accepted standardization of assessing mobility needs across demographics, geographies, and time.

- No certainty in ensuring we're investing in the solutions that will close the biggest mobility gaps.
- Little ability to assess & know whether those investments are closing the gaps over time.

# Survey Objective

To create a consistent way to measure mobility gaps across the region and across time for priority populations.

# Project Steering Committee

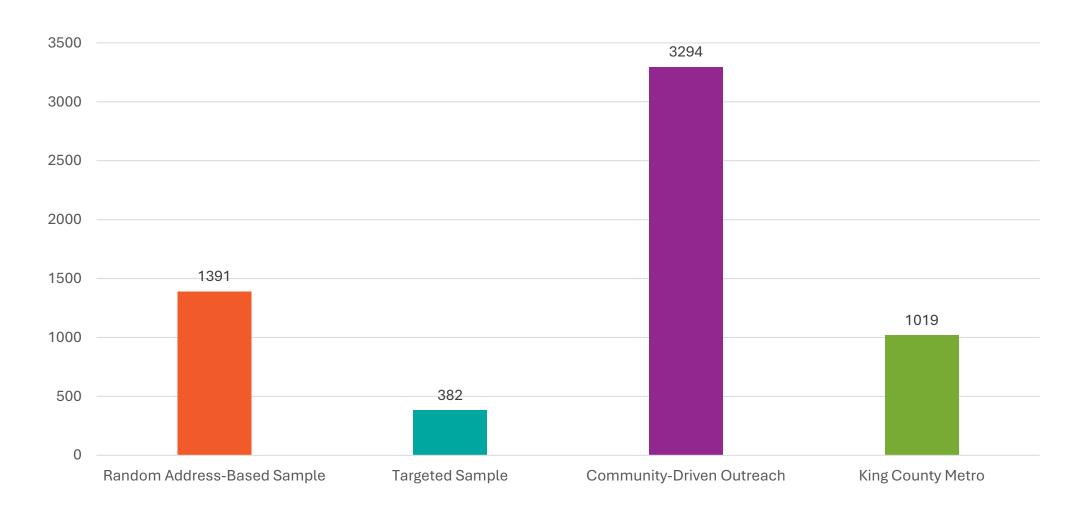
Agency / Organization	Additional Roles
Transportation Choices Coalition	Fiscal Sponsor
Snohomish County Transportation Coalition	Project Manager
King County Mobility Coalition	
Pierce County Coalition for Transportation Coordination	
Puget Sound Regional Council	
Sound Transit	Financial Contributor
King County Metro	Financial Contributor
Pierce Transit	Financial Contributor
Community Transit	Financial Contributor
Everett Transit	
Univ. of Michigan TSI Researchers	
Sightline Institute	
ReconMR	Project Consultant/Contractor

# Methodology

- Metro Survey: Incorporated 1,018 results from Metro survey
- Phase 1: Random Address-Based Sample: Postcard sent to 20,000 addresses
  - King County: 5,000 addresses
  - Pierce & Snohomish Counties: 7,500 address each.
- Phase 2: Targeted Sample: 10,000 additional records targeted toward priority populations to address potential gaps.
  - King County: 2,000 addresses, all from rural areas.
  - Pierce & Snohomish Counties: 4,000 records each.
    - 3,000 records pulled from rural areas in each county.
    - Remaining records focused on census blocks with higher proportions of BIPOC, low income, and LEP populations.
- Phase 3: Open survey via community outreach.

# Surveys Completed

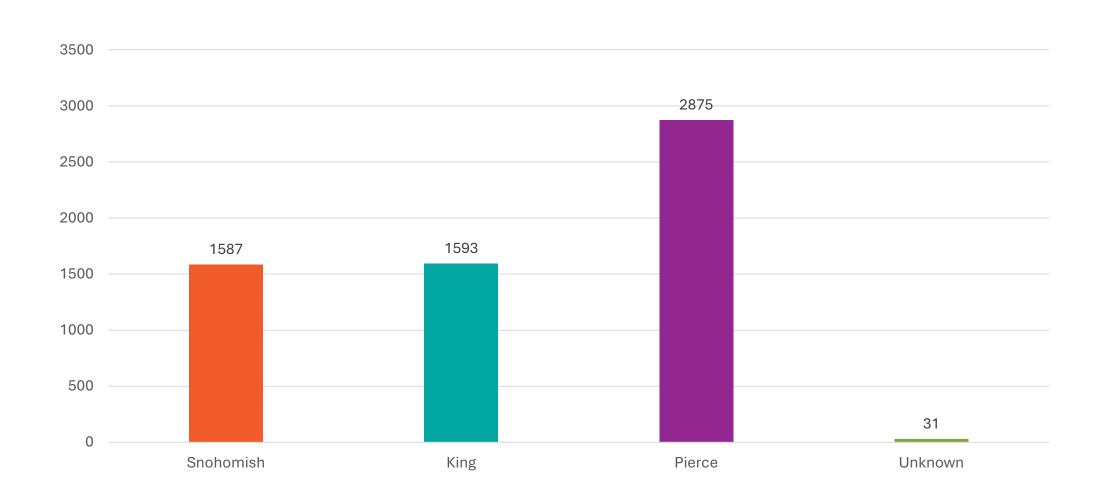
#### By Survey Method



6,086

# Surveys Completed

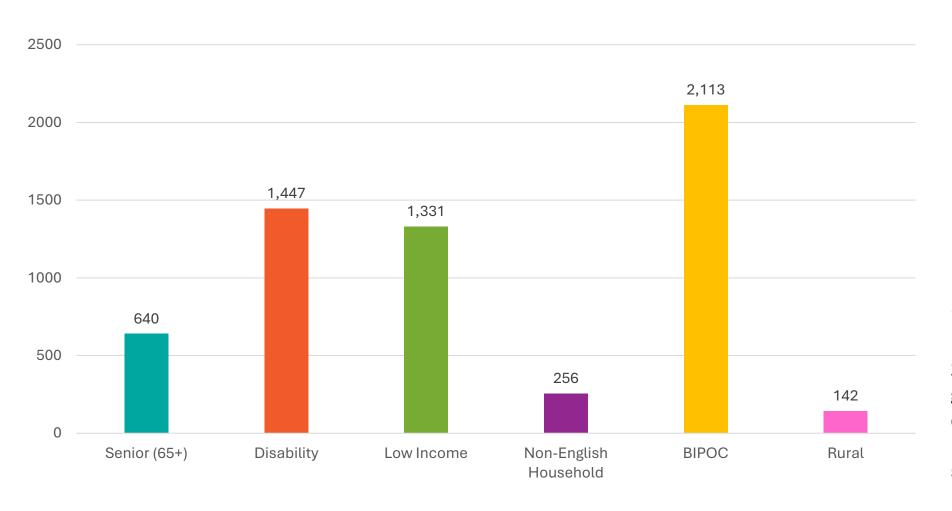
By County



6,055

# Surveys Completed

#### By Priority Population



- 1. Chart does not include Metro surveys.
- 2. Urban/Rural geographies were not distinguishable in Partner Outreach surveys.

# Survey Weighting

Survey data are not perfectly representative of the populations of interest; thus, the data were weighted based on age within gender, race, and income within region.

The table to the right shows the population distributions for age within gender for each region.

- The left section is the population statistics from data.census.gov.
- Top right shows the raw results from the survey
- Bottom right shows the survey results after weights have been applied

		King County	Pierce County	Snohomish County	Total
	Under 35	46%	47%	44%	46%
	35-64	40%	38%	41%	40%
	65+	14%	15%	15%	15%
	Male	51%	50%	51%	51%
2.66	Female	49%	50%	49%	49%
ACS Demographics	Some other gender identity	0%	0%	0%	0%
2 cograpines	White alone (non-Hispanic)	44%	35%	28%	39%
	BIPOC	56%	65%	72%	61%
	<\$100,000	43%	54%	49%	47%
	\$100,000 or more	57%	47%	51%	53%

		King County	Pierce County	Snohomish County	Total
	Under 35	23%	61%	49%	48%
	35-64	52%	28%	39%	37%
	65+	26%	10%	12%	15%
	Male	45%	52%	56%	51%
	Female	49%	43%	42%	44%
Unweighted Results	Some other gender identity	6%	5%	3%	4%
Results	White alone (non-Hispanic)	72%	54%	59%	60%
	BIPOC	28%	46%	41%	40%
	< \$100,000	42%	76%	64%	69%
	\$100,000 or more	58%	24%	36%	31%
-	Under 35	48%	48%	53%	49%
	35-64	39%	40%	37%	39%
	65+	12%	12%	10%	12%
	Male	56%	50%	49%	55%
	Female	39%	46%	47%	39%
Weighted Results	Some other gender identity	5%	5%	4%	5%
Results	White alone (non-Hispanic)	40%	45%	31%	40%
	BIPOC	60%	55%	69%	60%
-	< \$100,000	39%	57%	53%	41%
	\$100,000 or more	61%	43%	47%	59%

Age 75

Latina

Uses a wheelchair

Fixed Income?

Nondriver?

Rural or Urban?

Speaks English?



### Farmer Bob

Age 45

White Male

Able-bodied

Drives

Rural

Seasonal income



Age 55

Asian American Woman

Able-bodied

**Rides Transit** 

Nondriver?

Urban

Public Health Agency Executive



## Transportation Insecurity Index

"The TSI is the first validated measure of transportation insecurity, a condition in which a person is unable to regularly get from place to place in a safe or timely manner due to an absence of resources necessary for transportation."

## Transportation Insecurity Index

#### In the past 30 days ...

- 1. How often did you have to reschedule an appointment because of a problem with transportation?
- 2. How often did you skip going somewhere because of a problem with transportation?
- 3. How often were you not able to leave the house when you wanted to because of a problem with transportation?
- 4. How often did you feel bad because you did not have the transportation you needed?
- 5. How often did you worry about inconveniencing your friends, family, or neighbors because you needed help with transportation?
- 6. How often did problems with transportation affect your relationships with others?

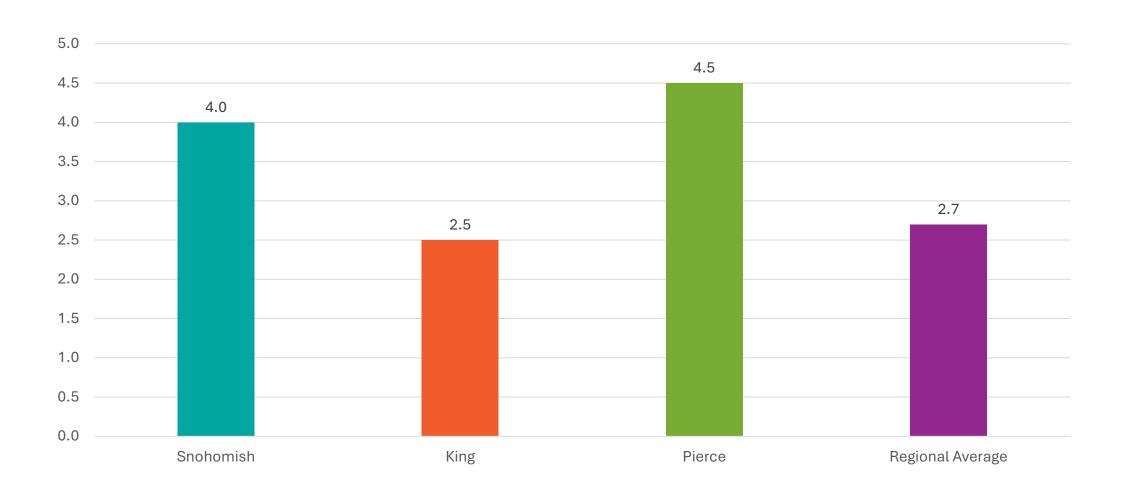
□ Often (2 pts)	
☐ Sometimes (1 pt	t)
□ Never (0 pts)	

## Transportation Insecurity Index

#### **TSI Ranges:**

- 0-1 = No Insecurity
- 2-5 = Marginal to Low Insecurity
- 6+ = Moderate to High Insecurity

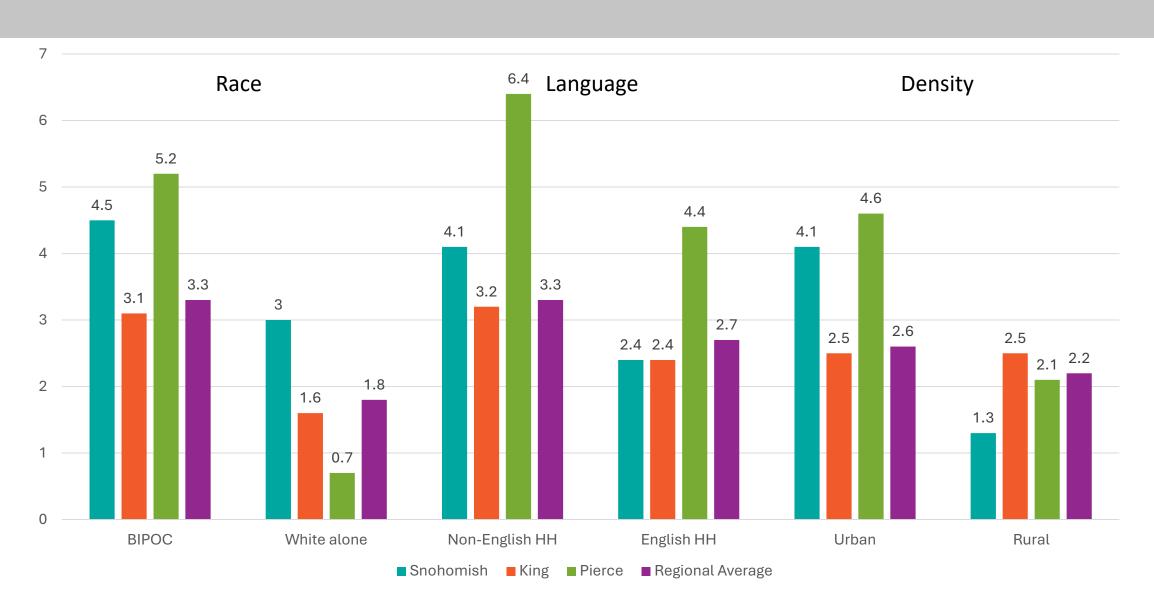
# TSI by County



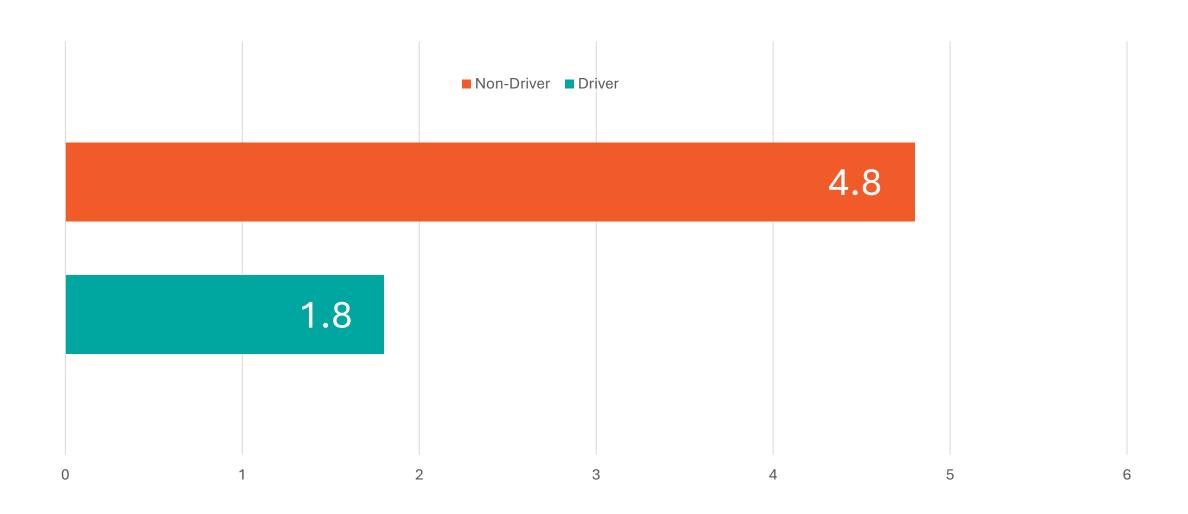
# TSI by Priority Population



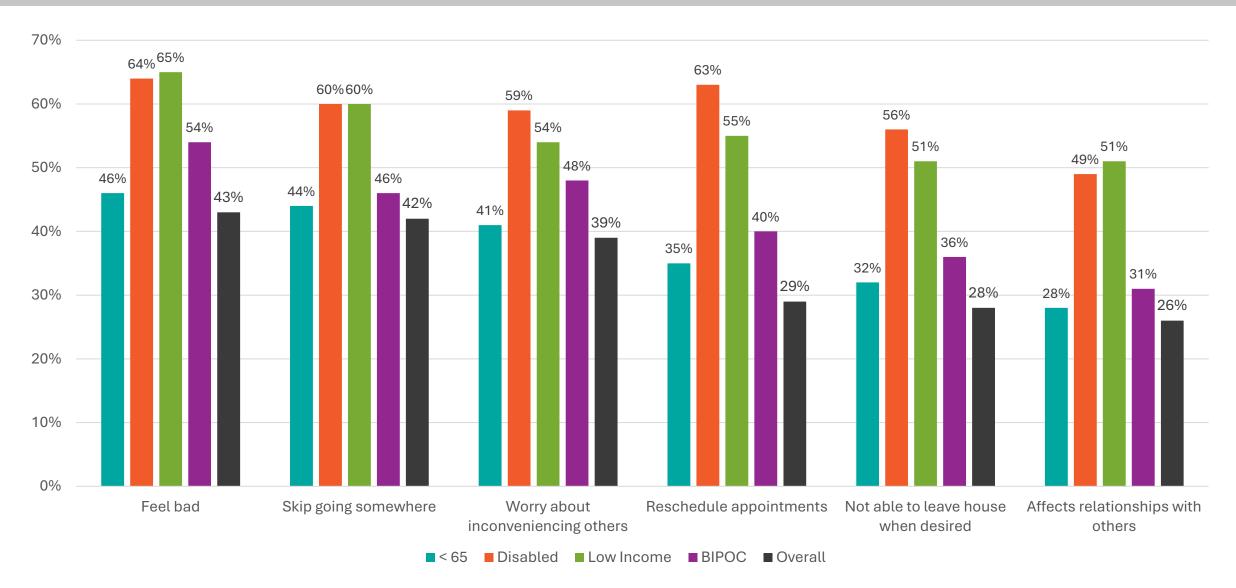
# TSI by Priority Population



### TSI: Drivers v Non-Drivers



# TSI feelings



# Summary of TSI Findings

#### **High Insecurity**

#### **Non-Drivers**

#### **Individuals with Disabilities**

 Highest levels of transportation insecurity with approximately half indicate moderate to high levels of insecurity

#### **Low-Income Individuals**

- High transportation insecurity, with roughly half experiencing moderate to high levels of insecurity.
- More likely to use public transit.
- Major barriers include cost & access to personal vehicle.

#### **Moderate Insecurity**

#### **Working-Age Individuals**

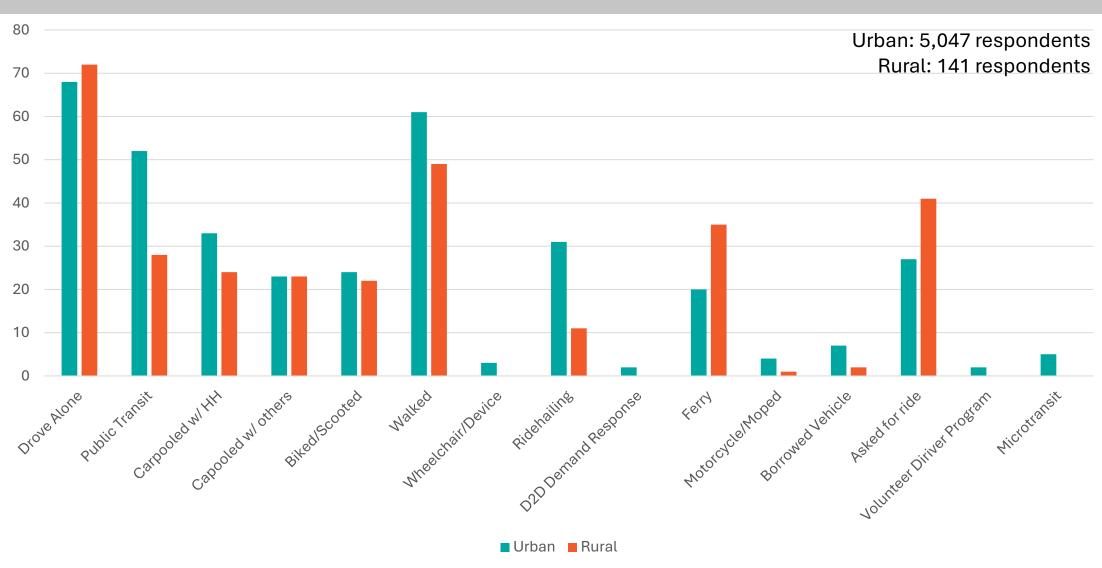
- Frequently use public transit, carpool, bike, and ridehail.
- Higher levels of transportation insecurity compared to other age groups.

#### **BIPOC Individuals**

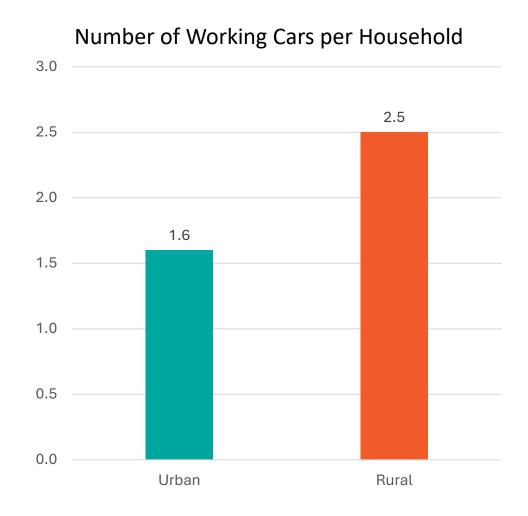
- Higher transportation insecurity levels.
- Face significant barriers to transportation, including cost and access to a personal vehicle.

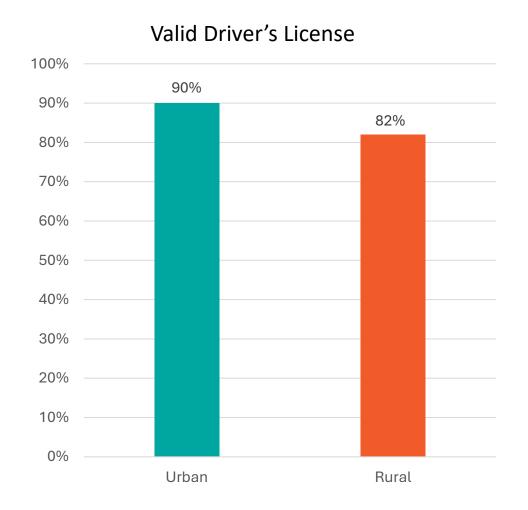
## Modes used across Region

#### **Urban vs Rural**



# Driving: Urban v Rural



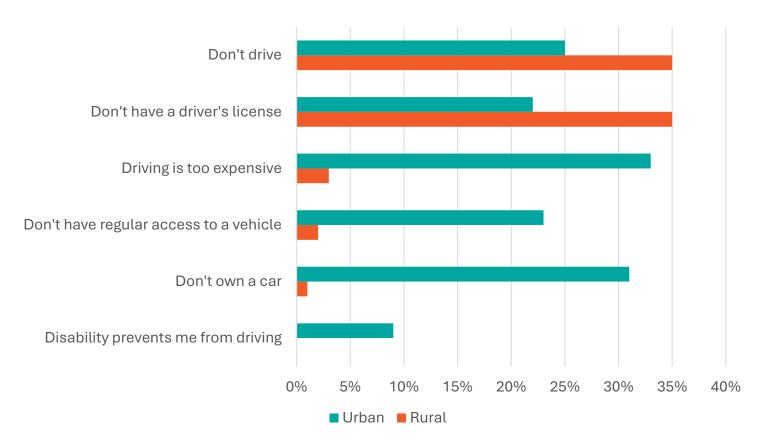


Urban: 5,047 respondents Rural: 141 respondents

# Driving: Urban v Rural

#### Of respondents who had a TSI score of 4 or more:

(3,028 respondents)



- Rural residents who don't drive are 40% more likely to be transportation insecure than urban residents.
- Rural residents who don't have a driver's license are 59% more likely to be transportation insecure than urban residents.
- Urban residents who don't own a car or don't have access to a car are significantly more likely to be transportation insecure than rural residents.
- Expense of driving is more of a burden to urban drivers than rural drivers. Urban drivers have higher parking costs, and driving may be of such a high necessity in rural areas that the expense is also deemed necessary.

# Why respondents don't ride transit

(Regionwide, Urban respondents, asked only to those with TSI 4+)

	65+	<65	Disabled	Not Disabled	Low Income	Not Low Income	ВІРОС	White only	Non- English HH	English HH	Non- Driver	Driver	Total Average
Takes too long	46%	56%	48%	57%	45%	59%	57%	49%	50%	56%	47%	64%	54%
Doesn't run often enough	27%	55%	41%	57%	46%	55%	54%	49%	52%	53%	49%	58%	53%
Physical safety	48%	43%	44%	43%	44%	42%	45%	38%	53%	41%	38%	48%	42%
Doesn't go where I need it	23%	39%	41%	37%	33%	40%	38%	38%	26%	40%	30%	49%	38%
Doesn't run when I need it	38%	36%	26%	39%	26%	40%	36%	36%	32%	36%	28%	44%	35%
N/A in my area	16%	18%	18%	17%	14%	19%	20%	10%	22%	17%	12%	27%	18%
Disability	9%	5%	17%	1%	7%	4%	5%	5%	1%	6%	7%	2%	5%

### Infrastructure: "I feel unsafe walking or biking b/c ..."

(Regionwide, Urban respondents, asked only to those with TSI 4+)

	65+	<65	Disabled	Not Disabled	Low Income	Not Low Income	ВІРОС	White only	Non- English HH	English HH	Non- Driver	Driver	Total Average
Vehicle traffic	21%	30%	21%	32%	22%	33%	28%	33%	20%	31%	30%	35%	30%
Lack of street lighting	24%	25%	24%	26%	21%	27%	28%	18%	35%	24%	20%	33%	25%
No sidewalks / bikeways where I want to go	7%	23%	20%	22%	16%	24%	23%	18%	10%	23%	19%	26%	22%
Other	13%	21%	21%	21%	24%	19%	22%	18%	10%	22%	15%	29%	21%
Sidewalks are inaccessible for mobility device	4%	10%	16%	7%	9%	9%	8%	13%	1%	10%	10%	8%	9%

# Where would you like to go w/o driving?

(Regionwide, asked only to those with TSI 4+)

	65+	<65	Disabled	Not Disabled	Low Income	Not Low Income	ВІРОС	White only	Non- English HH	English HH	Non-Driver	Driver	Total Average
Work	31%	59%	47%	60%	57%	57%	57%	56%	83%	53%	62%	50%	57%
Grocery	58%	53%	62%	51%	56%	53%	53%	56%	48%	55%	50%	59%	54%
Downtown/Shopping Center	48%	54%	48%	55%	52%	54%	57%	43%	28%	57%	45%	65%	54%
Hospital/Medical	41%	45%	51%	43%	51%	42%	48%	36%	53%	44%	45%	44%	45%
Friends/Family	33%	45%	44%	44%	39%	46%	42%	48%	47%	43%	43%	45%	44%
School/College	27%	38%	34%	39%	44%	35%	39%	32%	39%	37%	42%	31%	37%
Park/Playfield	15%	33%	28%	33%	32%	32%	31%	33%	29%	32%	31%	33%	32%
Food Bank/Pantry	15%	25%	31%	23%	31%	22%	28%	16%	60%	20%	26%	23%	25%
Senior/Community Center	28%	21%	23%	21%	18%	23%	21%	24%	16%	22%	22%	20%	22%
Social Service Agency	16%	20%	23%	19%	22%	19%	21%	16%	39%	17%	21%	19%	20%

28

# Trip planning tools used

(Regionwide, Urban respondents, asked only to those with TSI 4+)

	65+	<65	Disabled	Not Disabled	Low Income	Not Low Income	ВІРОС	White only	Non- English HH	English HH	Non- Driver	Driver	Total Average
Apple/Google Maps	62%	88%	64%	89%	74%	89%	86%	86%	96%	85%	85%	86%	86%
Transit-Specific App	35%	47%	44%	46%	40%	47%	43%	50%	45%	46%	43%	47%	46%
Agency's Online Trip Planner	53%	29%	47%	29%	44%	29%	30%	34%	13%	33%	23%	37%	32%
Family or friends	10%	12%	20%	11%	9%	13%	13%	11%	1%	13%	11%	13%	12%
Agency's Physical Service Book or Brochure	24%	8%	13%	8%	9%	9%	10%	8%	8%	9%	8%	10%	9%
211 or agency's customer service center	0%	5%	12%	3%	4%	4%	5%	3%	2%	5%	5%	4%	4%
Assistance from social service agency/org	0%	4%	11%	2%	3%	3%	4%	2%	1%	4%	5%	2%	3%

Age 75

Latina

Uses a wheelchair

Nondriver?

Rural or Urban?

Speaks English?



#### **Transportation Security**

- Based on her <u>age</u>, she's likely to be more transportation secure.
- But based on <u>race and disability</u>, likely to be <u>much less</u> transportation secure.



#### Why she might not use the bus

- Fear of Physical Safety
- The bus takes too long.
  - But with her disability, she is more likely to accept the longer travel times than the average person.
- The bus doesn't run when she needs it.
- The bus doesn't go where & when she needs it.



#### Why she might not walk/roll to where she wants to go

- Lack of street lighting
- No/poor curb cuts and crosswalks
- Dangerous vehicle traffic



Age 45

White

Able-bodied

Drives

Rural



#### **Transportation Security**

• Very secure



#### Why he might not use the bus:

- The bus isn't available in his area.
- The bus takes too long.
- The bus doesn't go where and when he needs it.



#### Why he might not walk/bike to where he wants to go

• Dangerous vehicular traffic is a much bigger concern than low quality / lack of sidewalks or bike lanes.



Age 55

Asian American

Woman

Able-bodied

**Rides Transit** 

Nondriver?

Urban

Public Health Agency Executive



#### **Transportation Security**

- Lower than a rural driver she's constantly making decisions about how to get around.
- Concerned about making transit connections



#### Why she might not use transit:

Concerned about making transit connections



# Why she might not walk/bike to where she wants to go:

• Concerned about traffic violence.



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#### **BIPOC Individuals**

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# Highlights of Findings

- Nondrivers are 2.7x more insecure than Drivers
- #1 Transit competes with driving on speed/utility/convenience.

## Lessons Learned for Survey Design

- Partnerships helped secure high number of responses
- Need better definitions of
  - Rural
  - Low Income
  - Older Age (75)
- Need better outreach to rural populations
- Need to continue to use TSI as a survey tool in all needs assessments moving forward for comparative analysis purposes.

## Opportunities

- Additional analysis that calculates percentage likelihood based on multiple demographic datapoints.
- Comparative analyses geographies and populations.
- Better prioritize transportation investments to close mobility gaps and end insecurities.
- Track progress over time.
- Create TSI scores for people or census tracts.

