Connecting Equity Requirements on Paper to Measurable Outcomes in Practice

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Motivation

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Research Questions

1. What equity requirements are included in shared mobility programs and how often?
2. How do requirements vary by location and mode?
3. To what extent are programs evaluated and monitored to determine if requirements translate to more equitable outcomes in practice?

Methods

- Policy scan, 272 cities (172 policies found)
- Case studies

Findings

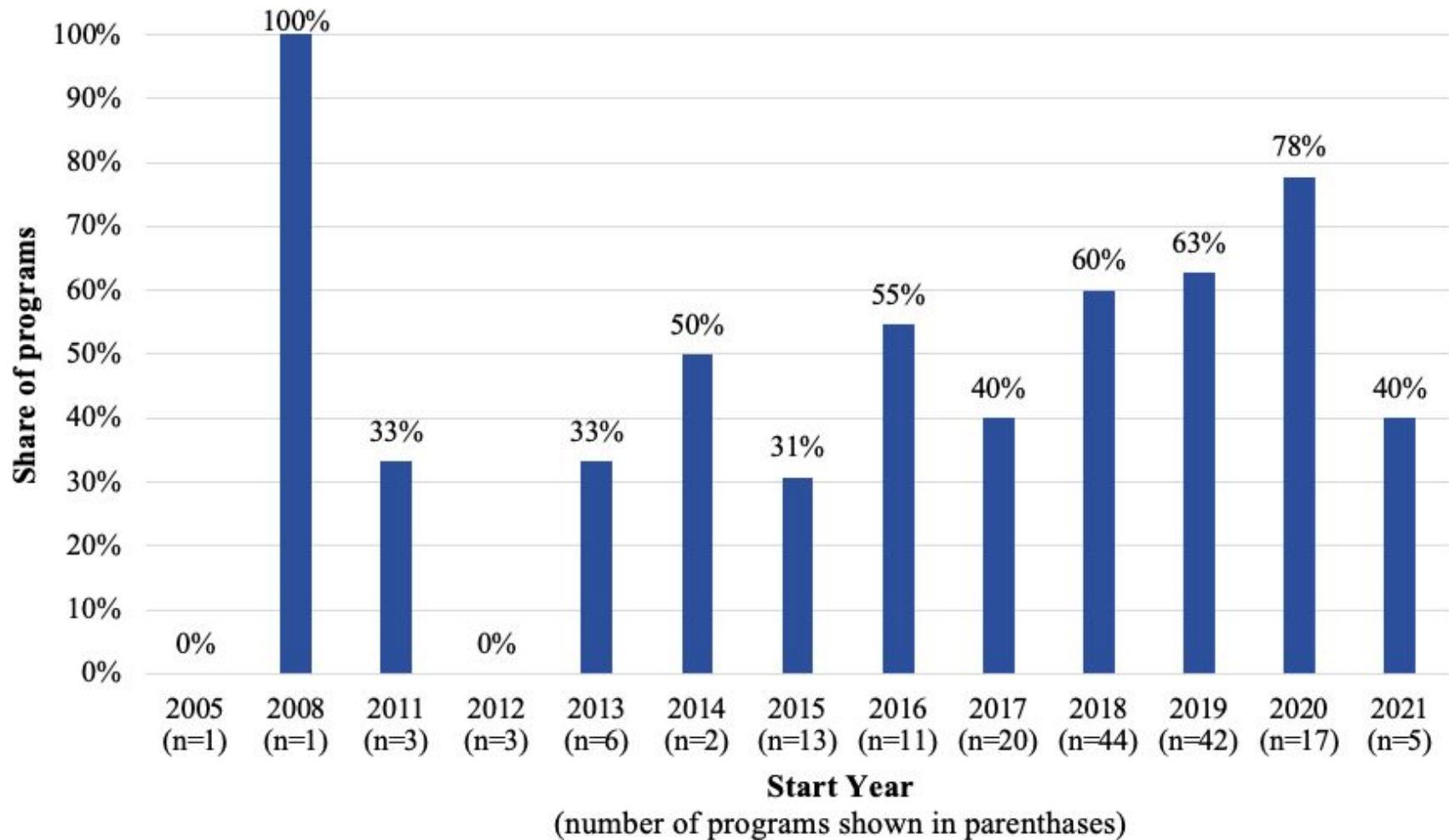**1** How prevalent & what types of equity requirements are currently in place?

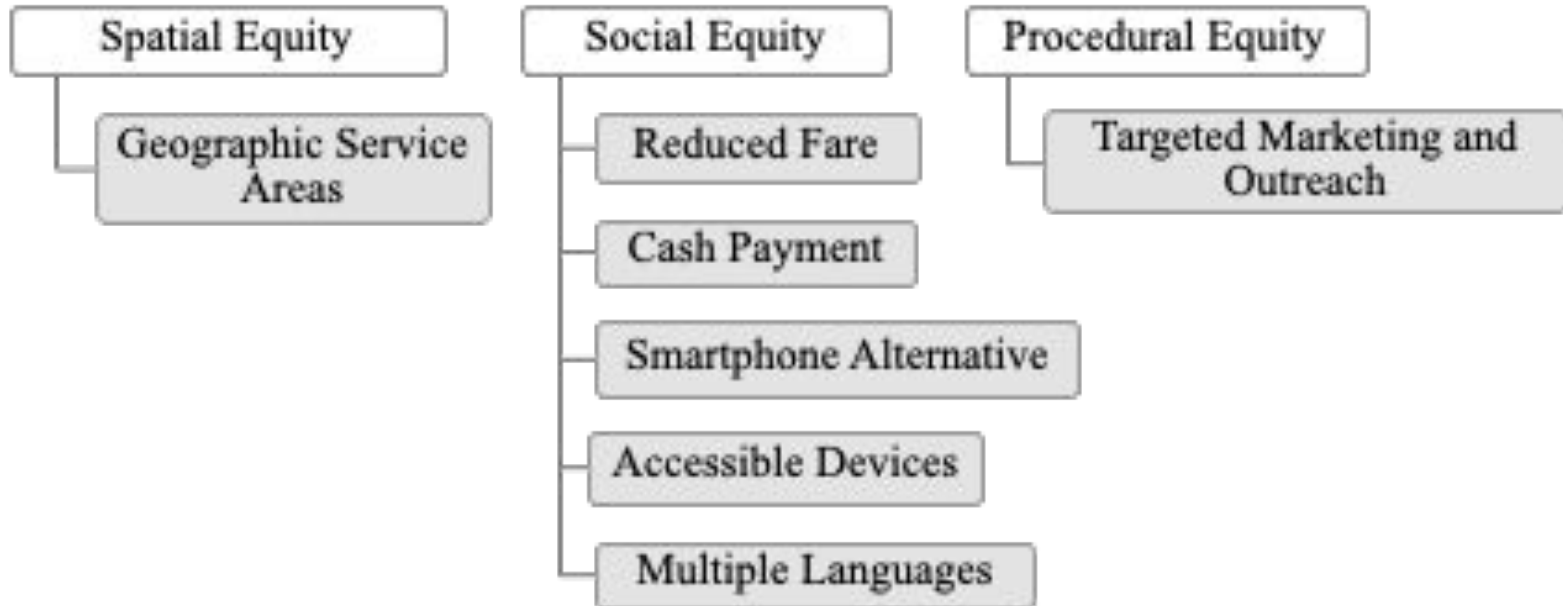**2** Why equity needs to be imbedded at each step in the process.

3 Evaluating shared mobility equity requirements in practice.

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Equity requirements in US bikeshare and shared e-scooter programs

Requirements Across 3 Dimensions of Equity

Spatial Equity
- Geographic Service Areas

Social Equity
- Reduced Fare
- Cash Payment
- Smartphone Alternative
- Accessible Devices
- Multiple Languages

Procedural Equity
- Targeted Marketing and Outreach

	Overall	Bikeshare	Scooters
At least one equity requirement	54%	47%	62%
Social Equity			
Reduced fare	31%	31%	31%
Accessible vehicles available	3%	2%	3%
Cash payment options	33%	31%	34%
Smartphone alternatives	33%	28%	37%
Multiple languages offered	17%	12%	22%
Spatial Equity			
Geographic service requirement	20%	22%	17%
Procedural Equity			
Targeted marketing or outreach	27%	19%	35%

Making Equity Real in Mobility

1 Mission, Vision, Values

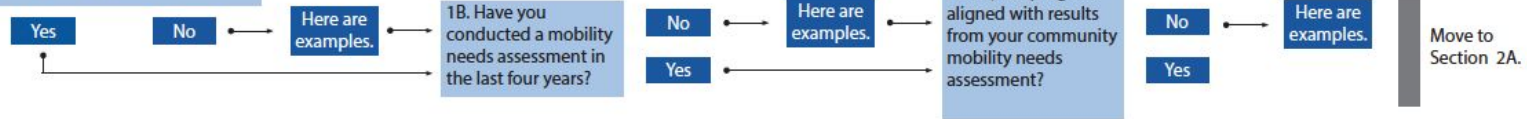**2** Process

3 Outcomes

4 Measurement & Analysis

Equity Evaluation Tool

We have created an evaluation tool to help practitioners identify where there may be disconnects between…

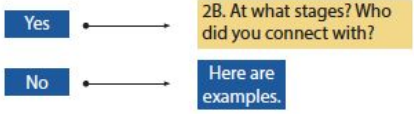1. City and/or program goals
2. Program design
3. Evaluation metrics

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1 — Equity Statement & Goals

START HERE:
1A. Do you have an equity statement/goals for your program? For your department?

- Yes
- No → Here are examples. → **1B.** Have you conducted a mobility needs assessment in the last four years?
  - No → Here are examples. → **1C.** is your program aligned with results from your community mobility needs assessment?
    - No → Here are examples. → Move to Section 2A.
    - Yes
  - Yes

2 — Community Outreach

2A. Have you conducted outreach specific to this program?

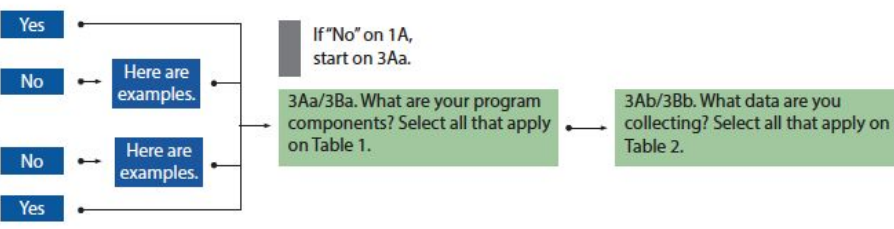- Yes → **2B.** At what stages? Who did you connect with? → Move to Section 3A or 3Aa.
- No → Here are examples.

3 — Program Design & Goal Alignment

3A. Have you identified specific groups in your equity program goals? (e.g., communities of color)

- Yes
- No → Here are examples.

3B. Do you have environmental/ economic equity goals?

- No → Here are examples.
- Yes

If "No" on 1A, start on 3Aa.

3Aa/3Ba. What are your program components? Select all that apply on Table 1. → **3Ab/3Bb.** What data are you collecting? Select all that apply on Table 2. → Move to Section 4A after 3Bb.

4 — Program Evaluation & Iterations

4A. Are you conducting ongoing/periodic evaluation?

- Yes
- No → Here are examples.

4B. Do you have compliance/ enforcement measures in place?

- No → Here are examples.
- Yes

Do you have mechanisms in place to make changes to the progam/iterate?

- Yes
- No → Here are examples.

1 Equity Statement & Goals

START HERE:
1A. Do you have an equity statement/goals for your program? For your department?

Yes   No

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No   Yes

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1C. is your program aligned with results from your community mobility needs assessment?

No   Yes

Here are examples.

Move to Section 2A.

2 Community Outreach

2A. Have you conducted outreach specific to this program?

Yes   No

2B. At what stages? Who did you connect with?

Here are examples.

Move to Section 3A or 3Aa.

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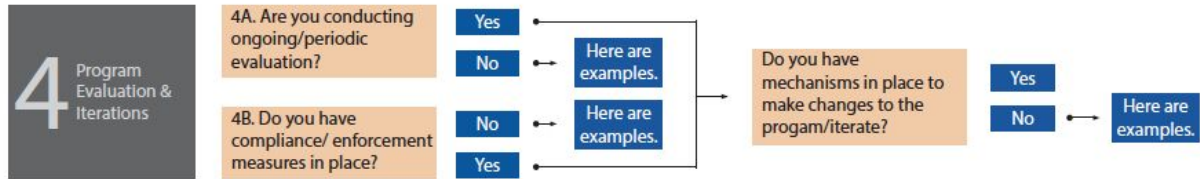
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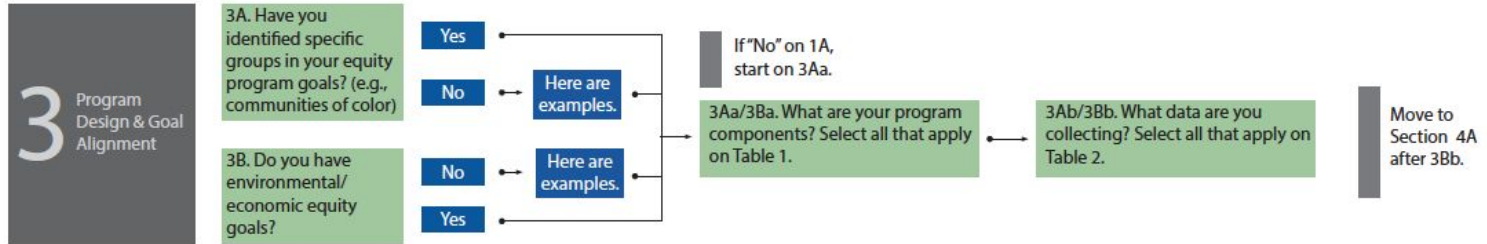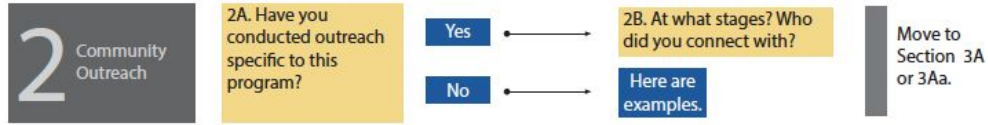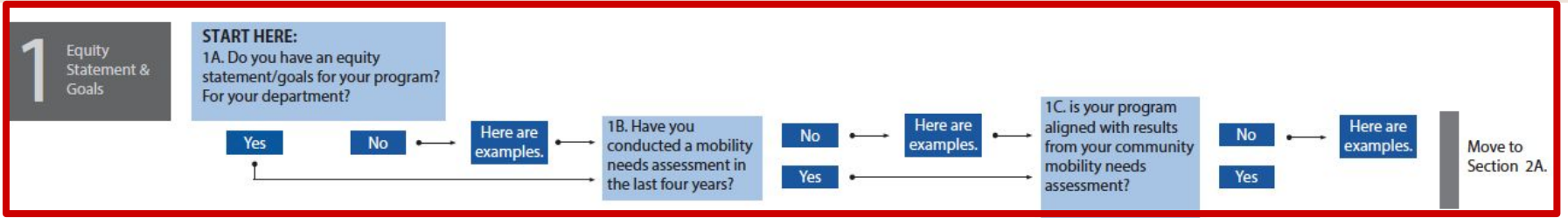3Ab/3Bb. What data are you collecting? Select all that apply on Table 2.

Move to Section 4A after 3Bb.

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Here are examples.

Note: The online tool we are creating is much more user-friendly!

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Yes

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Yes

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Program Components

Goals	Low-income or reduced fare	Multiple languages	Smartphone alternative	Geographic distribution	Accessible devices/ options	ADA compliant websites/ apps	Cash payment options	Partnerships with CBOs/ advocates	Local hiring initiative	Electric fleets	Recycle parts
User-based											
BIPOC	x			x				x			
Low-income	x		x	x			x				
People with disabilities	x		x		x	x		x			
Older adults	x		x		x	x					
Youth	x										
Limited English proficiency	x	x						x			
Unhoused	x		x				x	x			
Opportunity-based											
Access to jobs				x	x	x		x			
Job creation									x		
Access to food				x				x			
Access to healthcare				x				x			
Environmentally based											
Air quality										x	x

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Low-income	x		x	x			x				
People with disabilities	x		x		x	x		x			
Older adults	x		x		x	x					
Youth	x										
Limited English proficiency	x	x						x			
Unhoused	x		x				x	x			
Opportunity-based											
Access to jobs				x	x	x		x			
Job creation									x		
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Environmentally based											
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Job creation									x		
Access to food				x				x			
Access to healthcare				x				x			
Environmentally based											
Air quality										x	x

Potential Evaluation Metrics

Goals	# of trips by person by race/ ethnicity	# of trips by person by income	% of users on low-income plans	% of users by age/ income/ race/ ability vs. proportion of total population in each category	% of people using cash options	% of people using non-smartphone options	% of users by zip code vs proportion of total pop living in those zip codes	# of trips by person by disability status	# of users by primary language vs. total pop
User-Based									
BIPOC	x			x			x		
Low-income		x	x	x	x	x	x		
People with disabilities				x				x	
Older adults				x		x	x		
Youth				x			x		
Limited English proficiency							x		x
Unhoused			x		x	x			
Opportunity-Based									
Access to jobs									
Job creation									
Access to food									
Access to healthcare									
Environmentally based									
Air quality									

Potential Evaluation Metrics (cont'd.)

Goals	Trip purpose	Share of trips that start in historically underserved areas	Habitual vs. 1-time users by zip code vs. total population living in those zip codes	Aggregated O-D	Disaggregated O-D (by race, income, etc.)	Modal substitution	VMT	# of new local jobs created by companies	New hires by race, age, ability, etc.
User-Based									
BIPOC		x	x	x	x				x
Low-income		x	x	x	x				
People with disabilities			x	x	x				x
Older adults		x	x	x	x				x
Youth		x	x	x	x				x
Limited English proficiency		x	x	x	x				
Unhoused									
Opportunity-Based									
Access to jobs	x		x	x	x				
Job creation								x	x
Access to food	x		x	x	x				
Access to healthcare	x		x	x	x				
Environmentally based									
Air quality						x	x		

Next Steps

1 Online, searchable database of shared mobility requirements

2 Interactive, online evaluation tool

Thank you

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