

# **Manchester BioFabrication Cluster Transportation Equity Study**

# About me

## **Claire Jaffe**

Community Planner

Volpe National Transportation Systems Center



Brief bio:

- Started at Volpe in November 2023
- Previously worked as a Transportation Planner in Philadelphia, focus was on multimodal planning and community engagement
- Masters in Urban Planning from University of Pennsylvania

# About Volpe



OFFICE OF THE  
SECRETARY

OFFICE OF THE UNDER  
SECRETARY FOR POLICY

OFFICE OF THE ASSISTANT  
SECRETARY FOR RESEARCH  
AND TECHNOLOGY



# Volpe's Mission

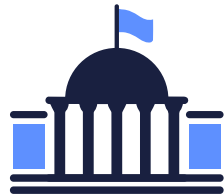
**Improve the nation's transportation system by anticipating emerging issues and advancing technical, operational, and institutional innovations for the public good.**



PROFESSIONAL  
EXCELLENCE



EQUITY



PUBLIC SERVICE



COLLABORATION AND  
PARTNERING



EMPLOYEE WELL-BEING



INNOVATIVE  
SOLUTIONS



# Agenda

- Background Research
- Current Research
- Discussion and Q&A

# Project Background and Research

# Project Overview and Goals

**Project Goal:** Connect people from underserved populations with access to education and opportunity in the Millyard / BioFabrication Industry

- **Objective 1:** Improve equitable, multimodal connections between the Greater Manchester area and the Millyard
- **Objective 2:** Improve equitable, multimodal connections within the Millyard

# Project Overview and Goals

**Project Goal:** Connect people from underserved populations with access to education and opportunity in the Millyard / BioFabrication Industry

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*The Work and Learn program “aims to have at least 30 percent of direct new jobs created filled by local area residents most in need, increasing their ability to earn a family-supporting wage.”*

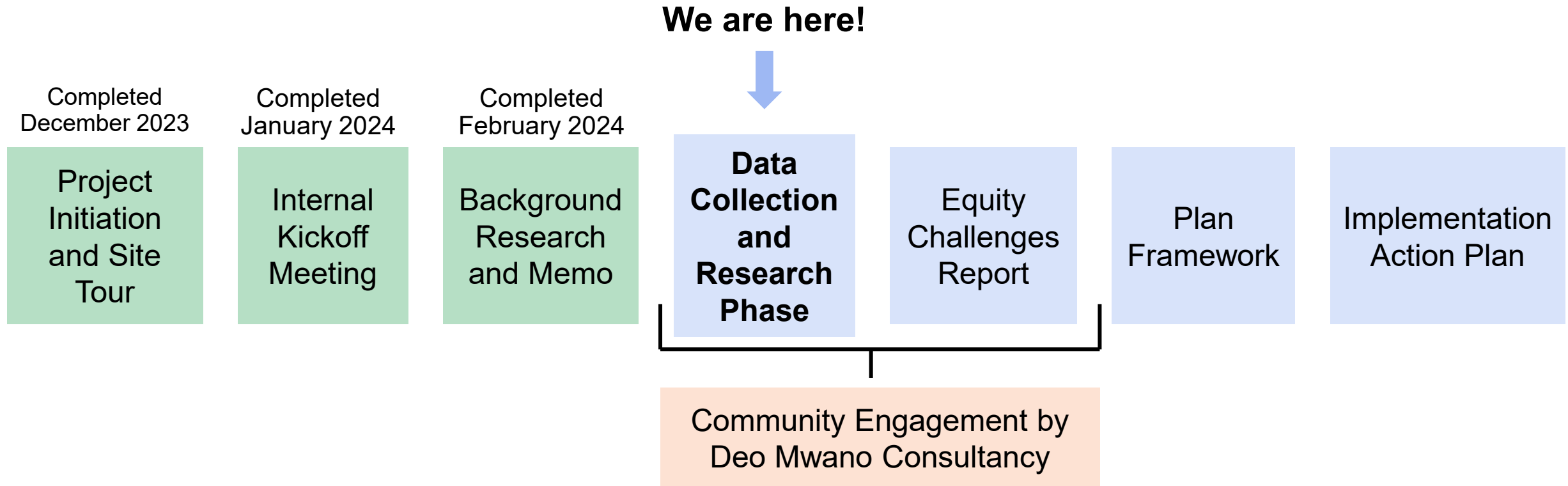


# Key Collaborators

Key collaborators and stakeholders:



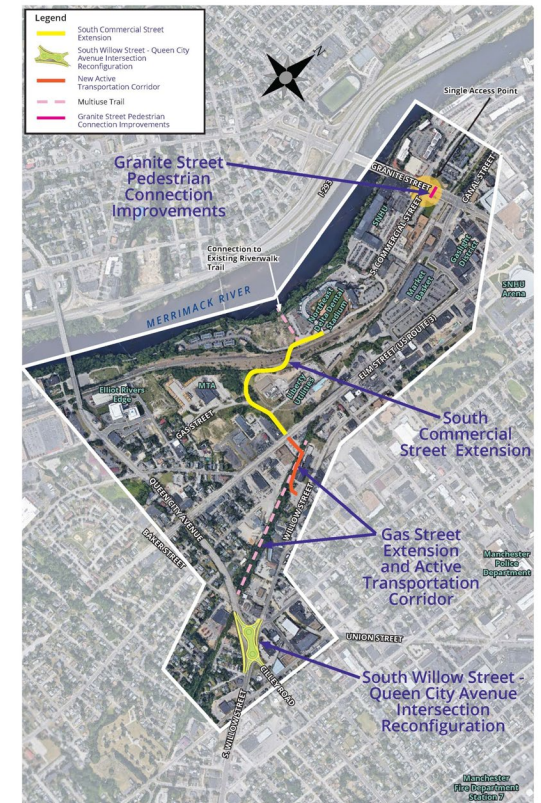
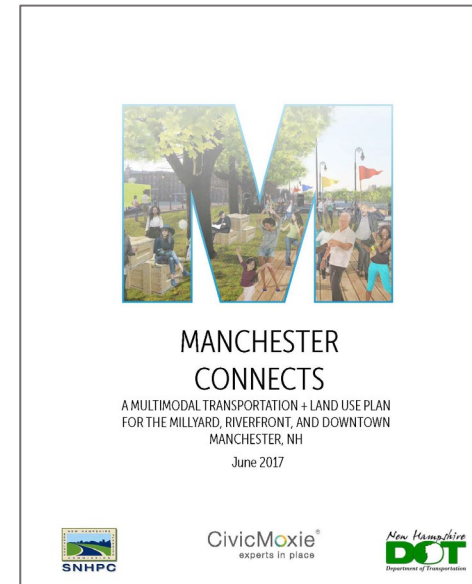
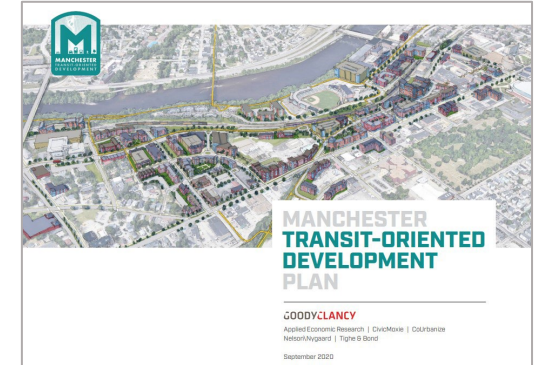
# Timeline



# Initial Research Sources

## Planning documents

- Project-specific
  - Manchester WorkLearn Project Narrative
  - EDA ReGen Valley Tech Hub Application Narrative and Announcement
- Manchester Insights
  - Manchester Connects (2017)
  - Manchester 2021 Master Plan
  - Manchester TOD Plan (2020)
- Transportation
  - Millyard People Mover P3 Application
  - RAISE grant application and website
  - Bike Master Plan (2017)
  - NH 10-year Implementation Plan Draft
- Equity
  - SNHPC Equity Analysis Reports Vol 1 and 2



# Major Projects and Priorities: Policies and Programs

Idea/Unsure of Status	Committed (Funding)	In Progress/Under Construction
<ul style="list-style-type: none"> <li>• New Pedestrian Footbridge across the river</li> <li>• Millyard People Mover</li> <li>• Discussion of efforts to move forward with update to bike master plan (long term, unsure of funding)</li> <li>• Arms Parking Lot brownfield assessment (long term – think whether there’s better/higher use)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Rail Trail Program</b> – Planned Expansions (Downtown Connector, South Manchester Rail Trail Phase 3, Crosstown Connector)</li> <li>• Reconfigured Exit 6 and 7</li> <li>• <b>RAISE</b> (funding is committed, but not enough)               <ul style="list-style-type: none"> <li>• South Commercial Street Extension</li> <li>• New Active Transportation Corridor/Multi-Use Trail</li> <li>• South Willow Street/Queen Street Roundabout</li> <li>• Pedestrian Bridge</li> </ul> </li> <li>• New Housing Developments</li> <li>• Amoskeag Bridge reconstruction</li> <li>• <b>Canal Street Complete Street</b> <ul style="list-style-type: none"> <li>• Multi-use path along Canal Street</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• <b>Expand MTA Regional Transit Service to Salem/ Londonderry</b> (began service October 2023)</li> <li>• New Housing Developments</li> <li>• Zoning Ordinance Update (public comment in June 2024)</li> <li>• <b>Multimodal Transit Hub</b> (MTA Site on gas street, with preferred location for commuter rail between multimodal transit hub and Millyard; close to exit 4 for bus operators)</li> <li>• Adaptive signals on Granite Street (between Main and Elm, almost done with construction; unsure of expanding this network in future)</li> </ul>



# Demographics

## Regional Demographic Comparison

	Total Population		% Minority		Median Household Income		Poverty Rate		% under 18		% 65 or Older	
Manchester	115,037	+102,008	22%	16%	\$74,000	\$ (57,510)	12%	8%	18%	-3%	14%	-2%
Average rates across the MPO	13,029		6%		\$131,550		4%		21%		16%	

Source: US Census ACS 2022 5-year

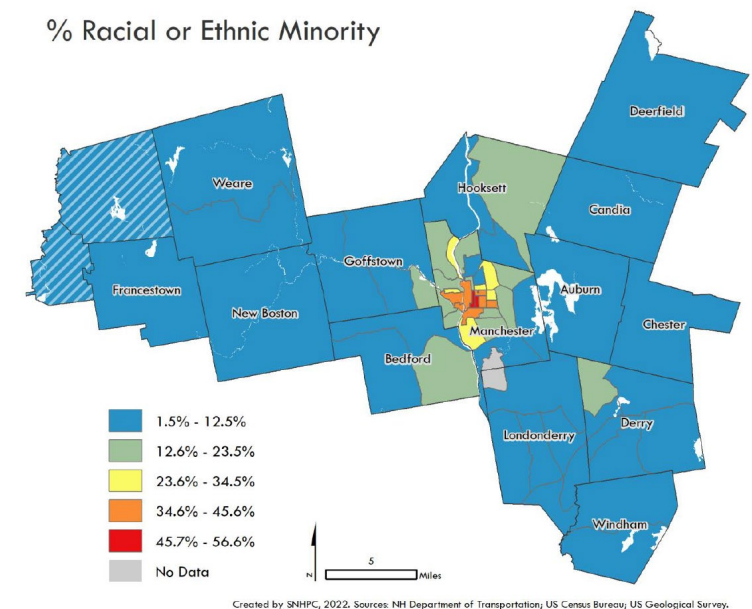
### Other relevant statistics in Manchester

- High education rates
- High employment rates
- Inequity: Poverty rates are much higher for minority populations (26% for Hispanic population, the largest non-white population)

# Demographics

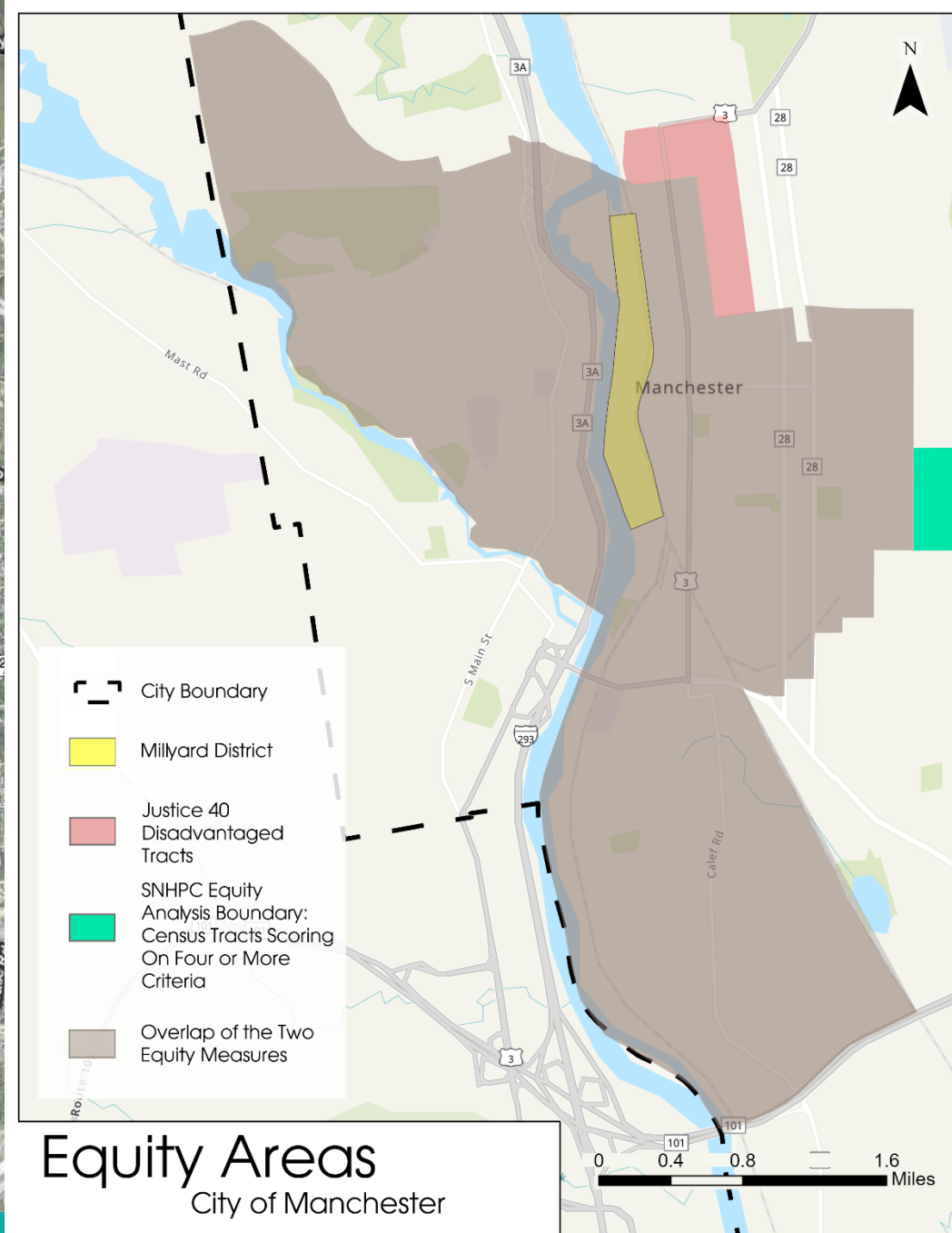
## Defining “underserved population” in the Manchester context

- Relevant equity measures (from SNHPC Equity Study)
  - % Minority
  - % Poverty
  - % Limited English Proficiency
  - % Without a car
  - % Over 65
  - % Disability
- MPO Equity Analysis Report (2022)
- Justice40





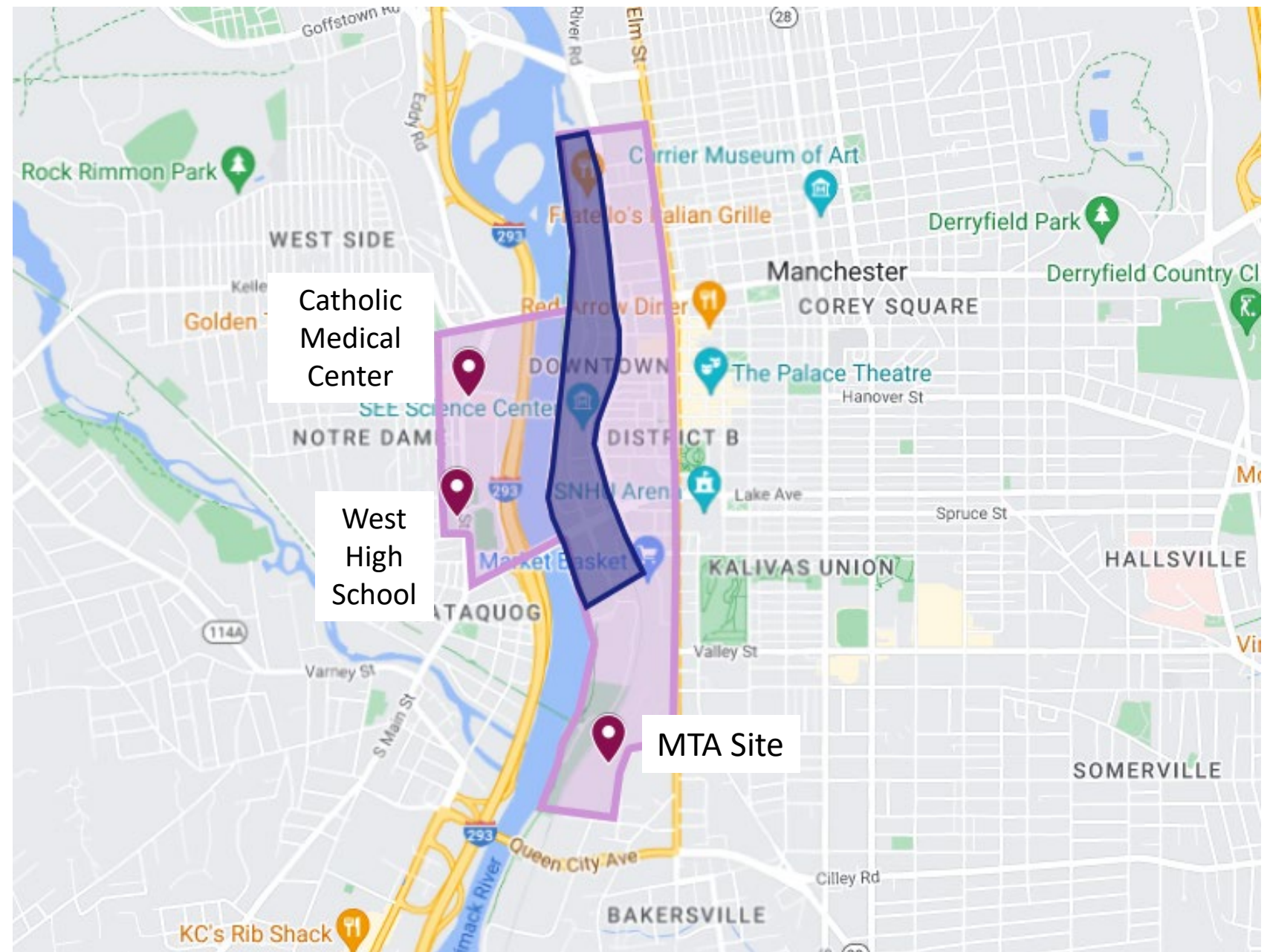
# Equity Areas





# Millyard Focus Area

Brook Street  
(north) to Stadium  
(south) and water  
(west) to Canal  
Street (east)



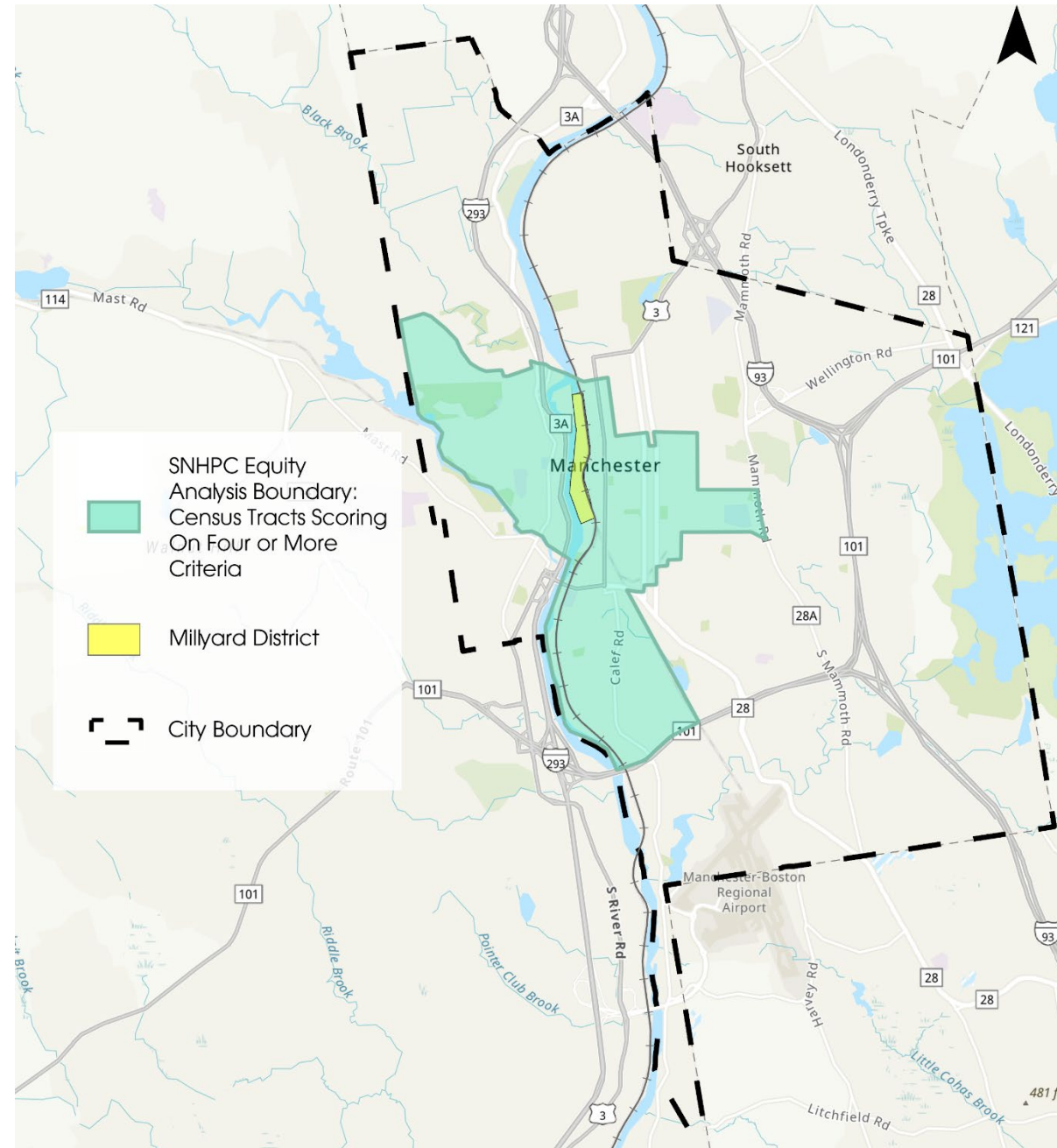


# Millyard Focus Area

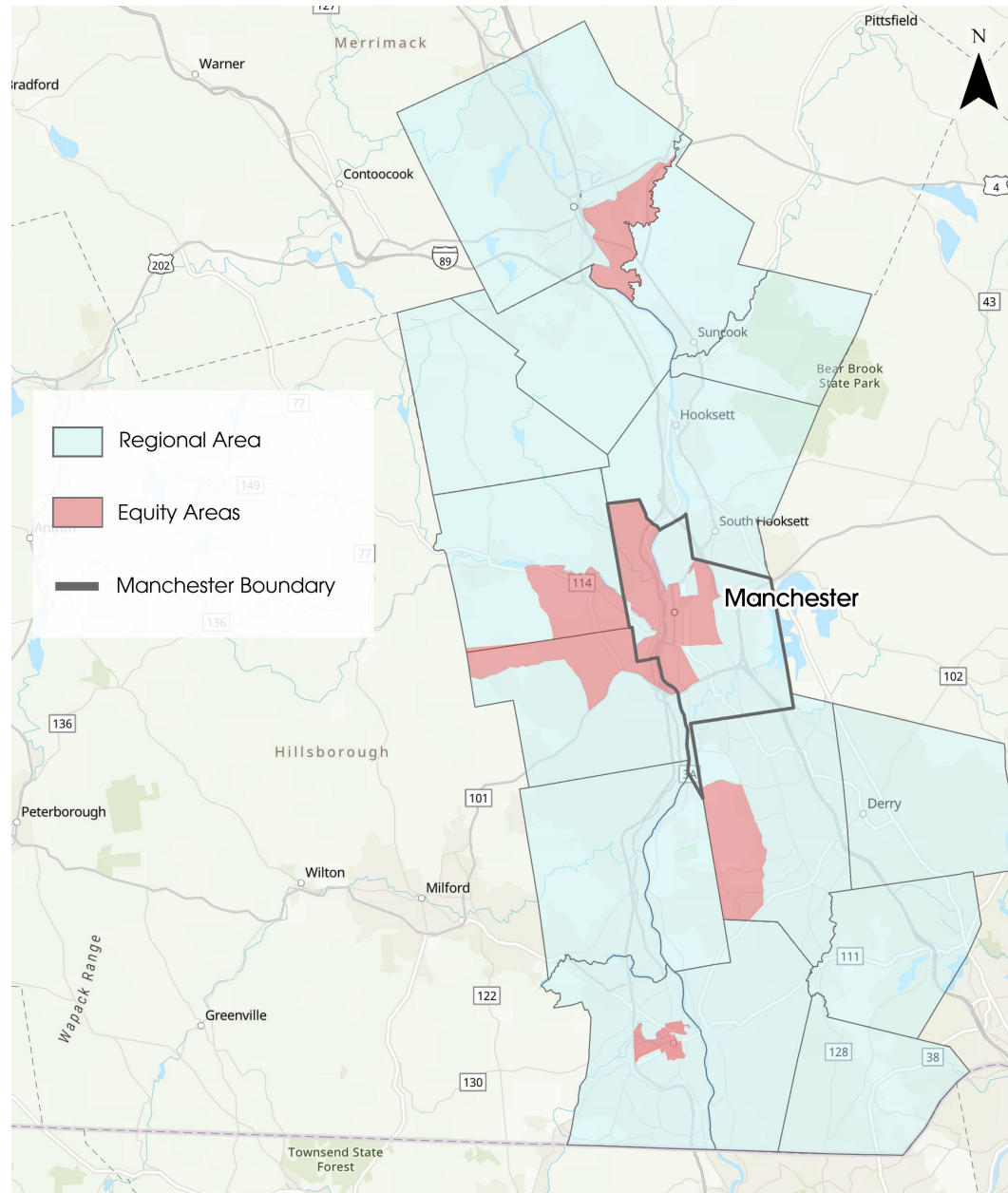




# City Focus Area



# Regional Focus Area



# Millyard & Regional Issues, Challenges, and Opportunities



# Millyard: Overcome Physical Barriers to Create Connections

- Large grade changes make it a difficult site for pedestrians to navigate – especially with respect to accessibility.
- Former canals and railroads created a fragmented street network.
- Two of the three Millyard entry points cross a railroad
- Physically separates communities of need from the Millyard

Source: [Manchester Connects](#) (2017)



MILLYARD ACCESS



Source: Nelson\Nygaard



# Millyard: Movement/Connectivity within the District

- Movement from building to building
- Distance north to south
- Perceived distances between buildings due to physical barriers
- Opportunity to connect people within while having transportation nodes on the outside



# Millyard: Safety

- Commercial Street – volume and mixing of users and modes, vehicle speeds, configuration of street parking
- Lighting, night vs. day
  - “Scareway” – stair to pedestrian access on the Notre Dame Bridge
- Seasonal





# Millyard: Changes in Increasing Workforce Impact Demand for Space and Parking

- Increase of new people commuting to site and navigating within it
- Parking and parking convenience
- Changing freight demands, increasing in the future
  - Where will they pick up/drop off?



Source: Nelson\Nygaard

PARKING IN THE MILLYARD AND DOWNTOWN



Millyard Building Square Footage:

~3,697,000

Millyard Asphalt Square Footage:

~11,573,000

The map at left shows how much of the Millyard and Downtown is devoted to parking.



# Millyard: Site Layout/Urban Design

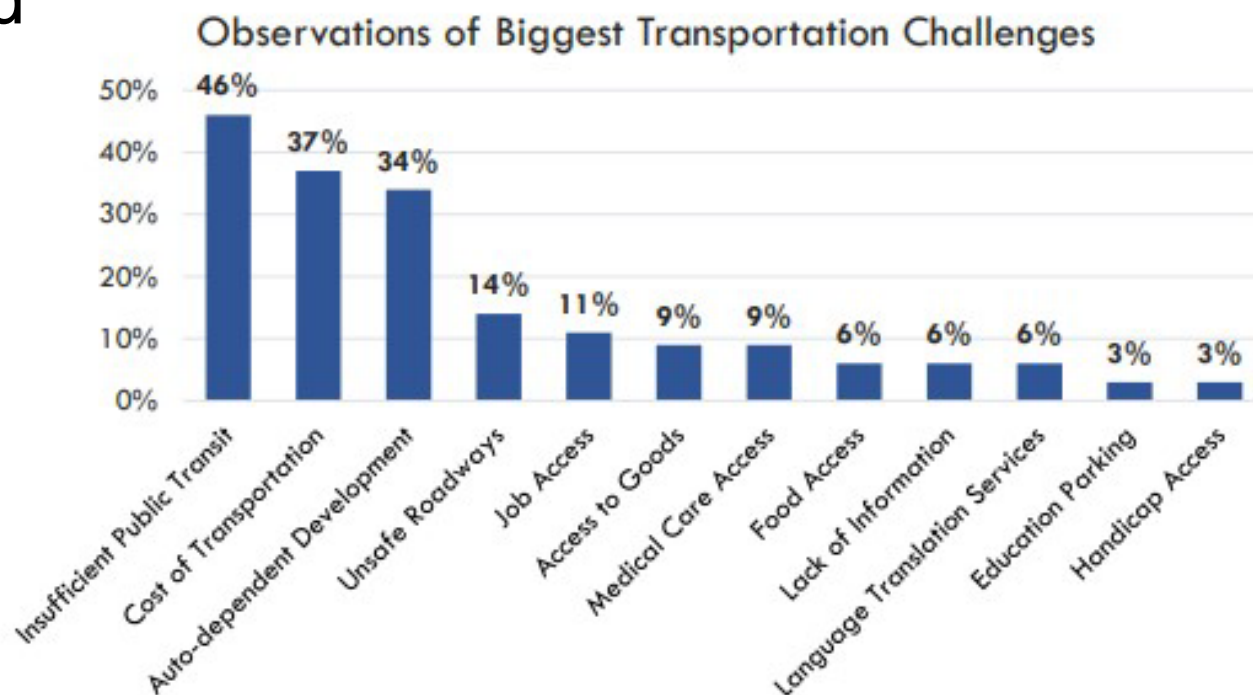
- Frontage of buildings
- Mix of users and uses (movement of people and freight)





# Regional Context - Transit

- Existing public transit is not meeting current and future need
- Low headways
- Green Dash isn't used despite being free
- Limited regional intercity bus routes



Source: SNHPC Equity Analysis Report (2022)

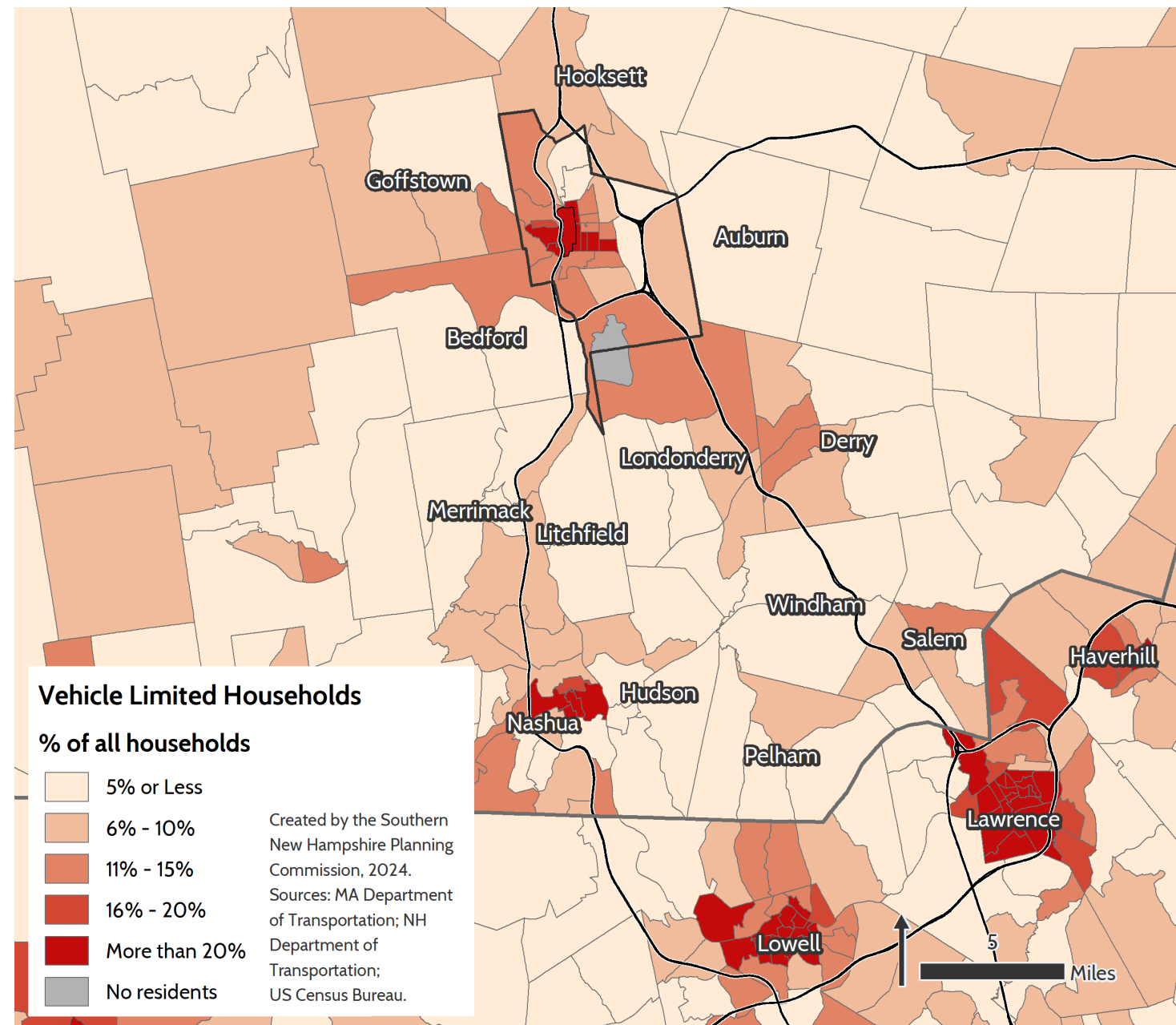


# Limited Car Access

## Vehicle limited households:

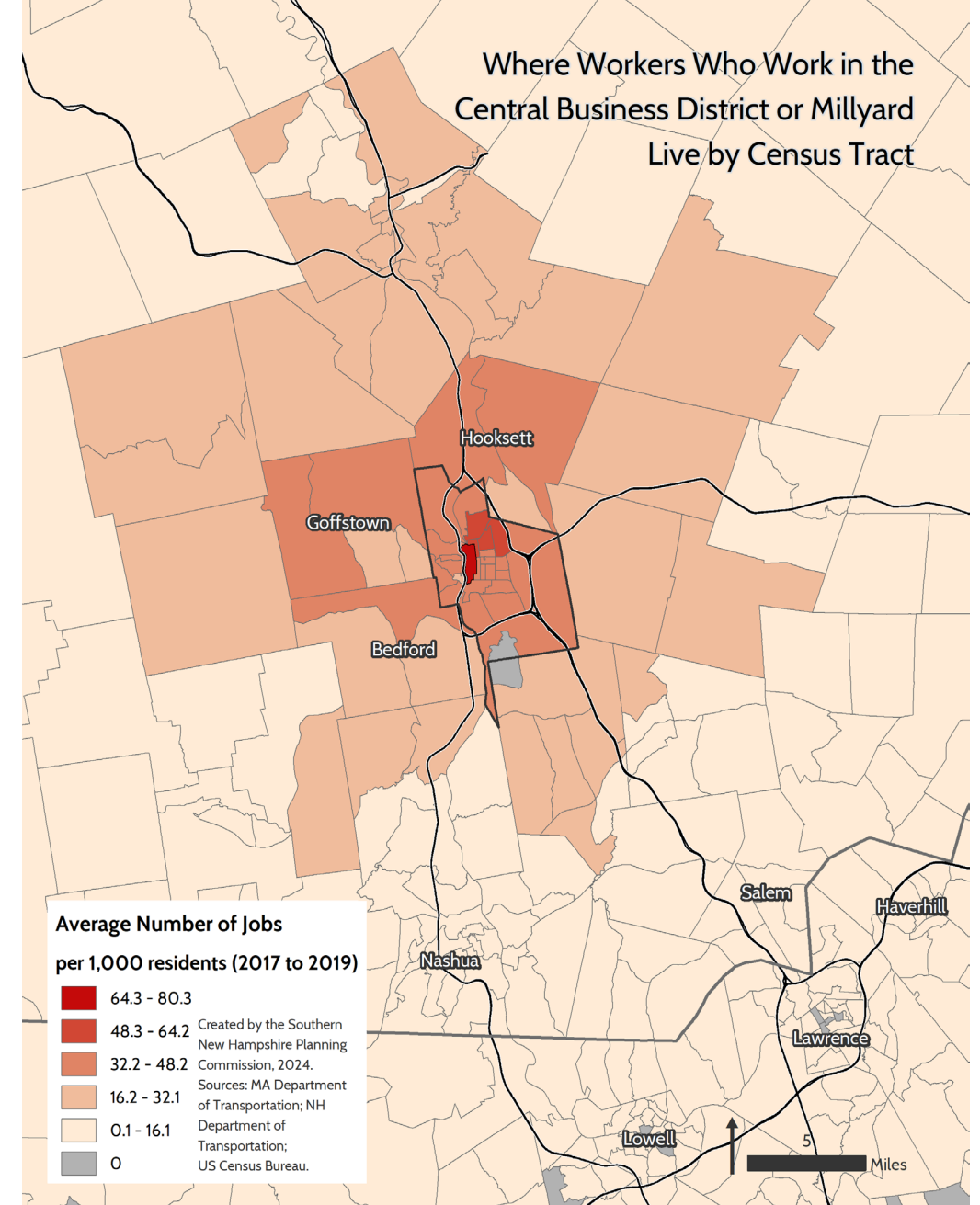
Households with no vehicle or fewer vehicles than workers

- Existing auto-oriented development



# Regional Commuter Sheds

- Workforce comes from across the region
- Talent opportunity, yet commuting challenge
- Varying densities and needs



# Major Takeaways – Issues/Challenges

## Millyard District

- Physical barriers (ADA, grade, railroad)
- Safety and comfort
- Connectivity within the site (movement between buildings)
- Increased demand for space (parking, freight, more people)
- Legacy urban design

## Regional and Citywide Scale

- Residents most in need live to the west, east, and south of the Millyard District.
- Overlapping equity needs
- Manchester is a very auto-oriented place and access to a car is seen as a necessity.
- The current transit service is underutilized and doesn't meet current or future employee needs. Regional bus service is also limited.

# Current Research



# Overview of top priorities for research

- Internal circulation (within the Millyard)
  - Shuttle
  - Access and permeability improvements
  - Transportation Demand Management
  - Parking solutions
- External circulation (to the Millyard)
  - Leveraging existing MTA routes
- Equity Solutions (wraparound services)

# Overview of top priorities for research



## MICROMOBILITY

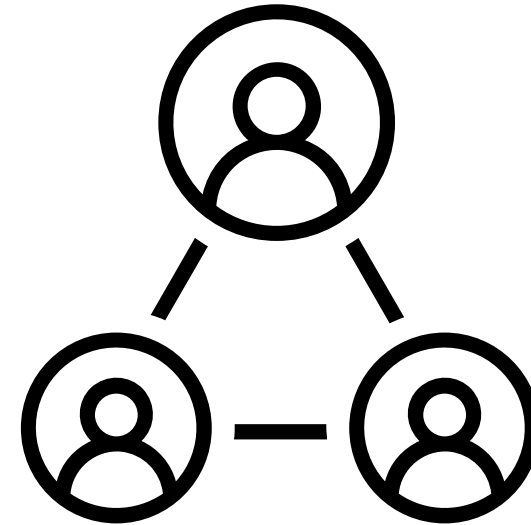


Micromobility vehicles such as shared bikes and scooters allow users to quickly get to and from areas not served by transit. Elements such as bike share stations and secure bike parking provide a seamless connection for micromobility users.



# Upcoming Engagement

- Survey to Millyard Employees
- Focus Groups with Millyard worker trainees
- Resident engagement through Deo Mwano Consultancy



# Discussion and Questions



# Discussion Questions

**Do you agree with our top issues and challenges?**

**Is there anything you would add or take away?**

**What else do we need to know about the Millyard and the region to develop equitable, implementable solutions?**

# Thank you!

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