MARYLAND DEPARTMENT OF TRANSPORTATION

FOURSQUARE ITP
INTEGRATED TRANSPORTATION PLANNING

Fixed-Rail Transit Station Walksheds

MDOT OFFICE OF PLANNING AND CAPITAL PROGRAMMING

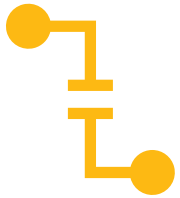
Fall 2020

Agenda

- Study Background & Purpose
- Preliminary Results
- Next Steps
- Stakeholder Survey

Purpose

Analyze pedestrian access around fixed-rail transit stations



Identify critical gaps in the pedestrian network

Prioritize stations for pedestrian improvements and investments

About

- **Part I:** Develop measurable walksheds around fixed-rail transit stations in Maryland
  - Purple Line
  - MARC
  - Metro SubwayLink
  - Light RailLink
  - Total: 103 Stations
- **Part II:** Assess conditions and quantify accessibility for each station area
- **Part III:** Develop recommendations and prioritize improvements

Methodology

- Walkshed network was built in ESRI Network Analyst using jurisdictional sidewalk/trail data and state roadway centerline data
  - Jurisdictional sidewalk/trail data was hand-digitized as needed
  - Roadways are restricted to only allow travel along those suitable for pedestrians
- Modeling uses actual station entrance/exit locations
- Looked at 1/2 mile “station area”

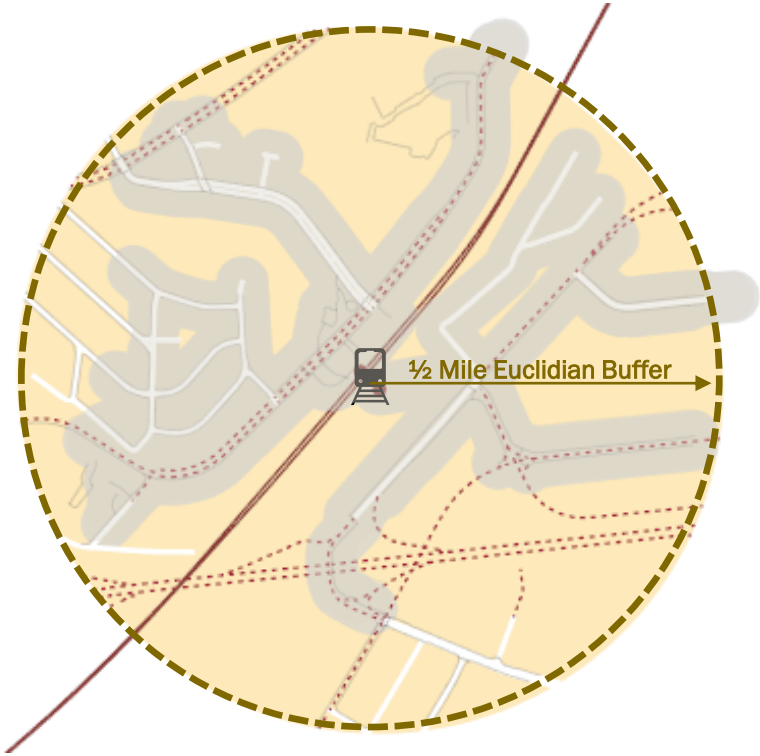
Walkshed Analysis

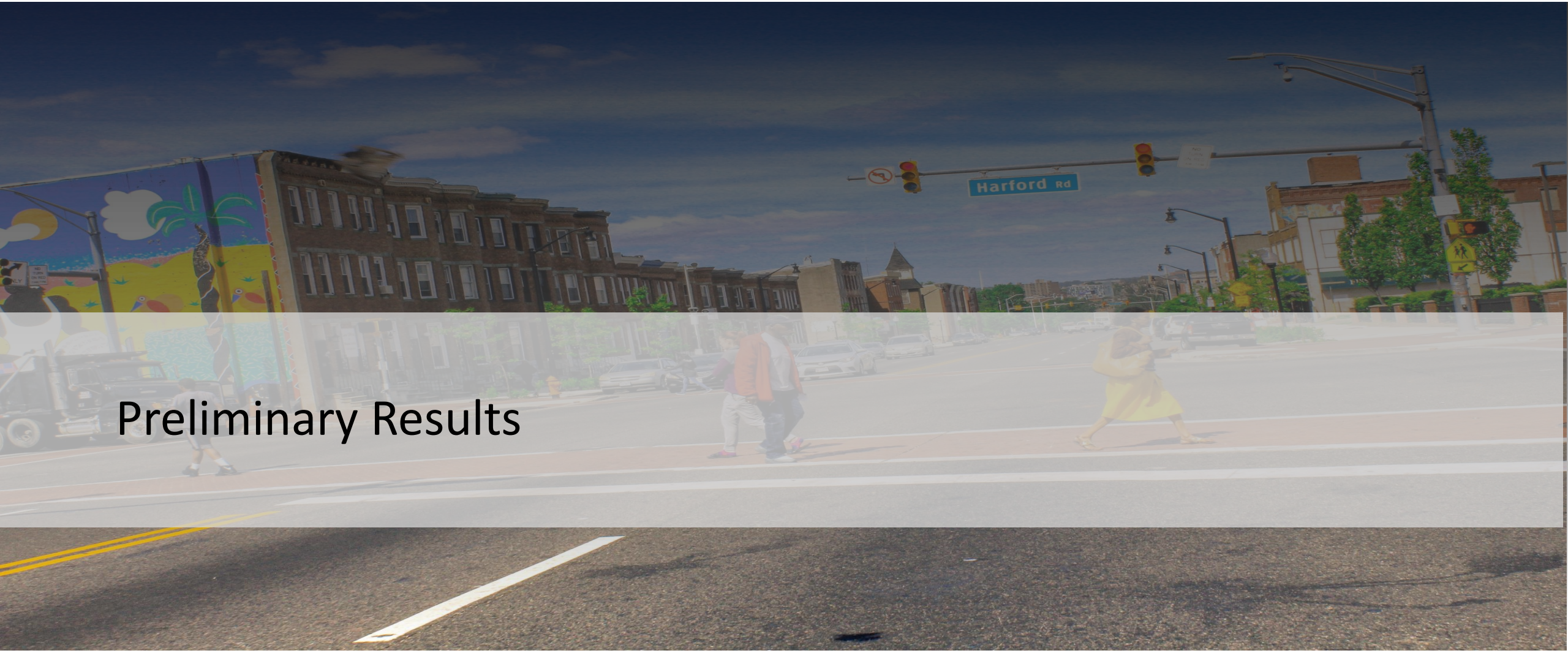
Actual walksheds will be compared to ½ mile Euclidian buffers to assess coverage of:

Jobs
- Total
- Density

Households
- Total
- 0-car
- 1-car
- Low-Income
- Density

Population
- Total
- Senior
- Minority
- Disabled
- Transit-Oriented
- Density





Preliminary Results

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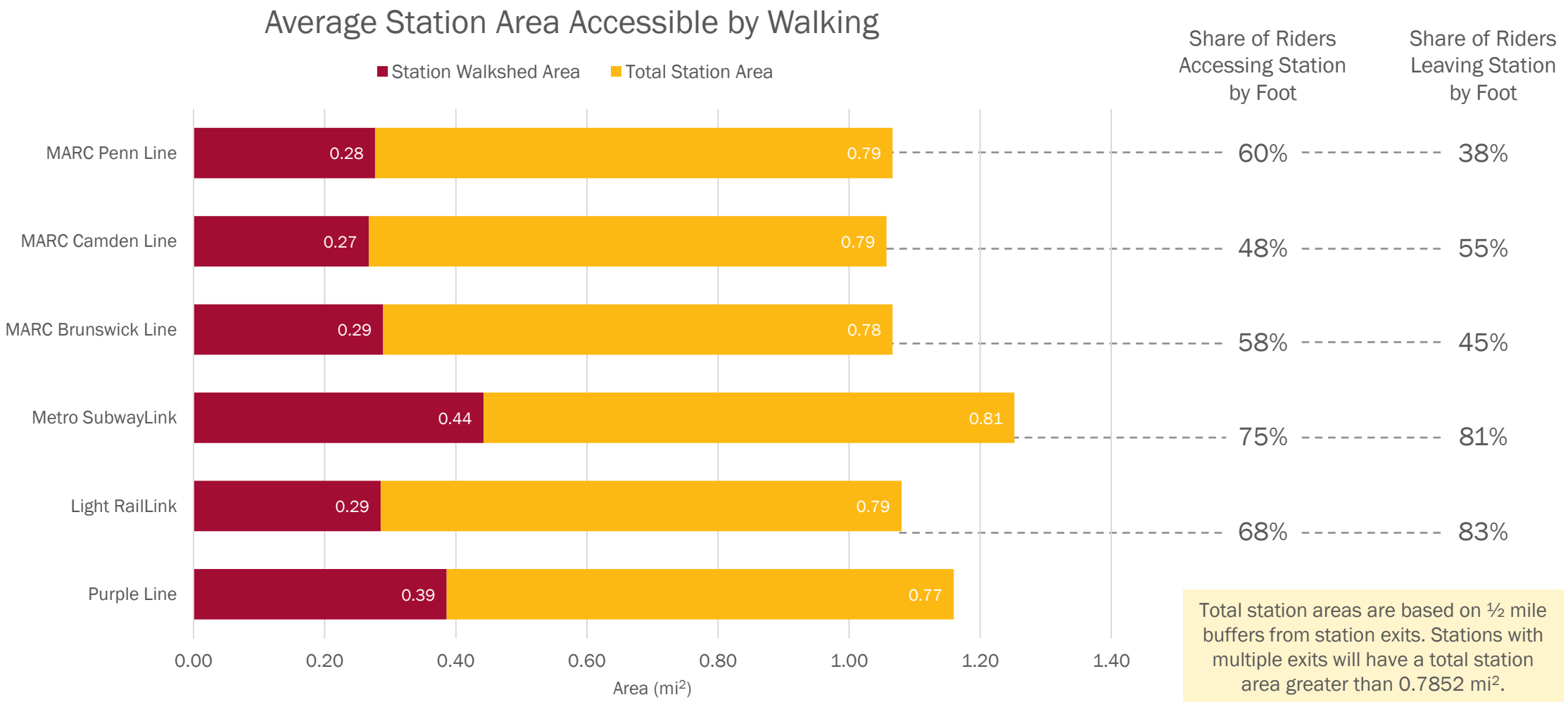
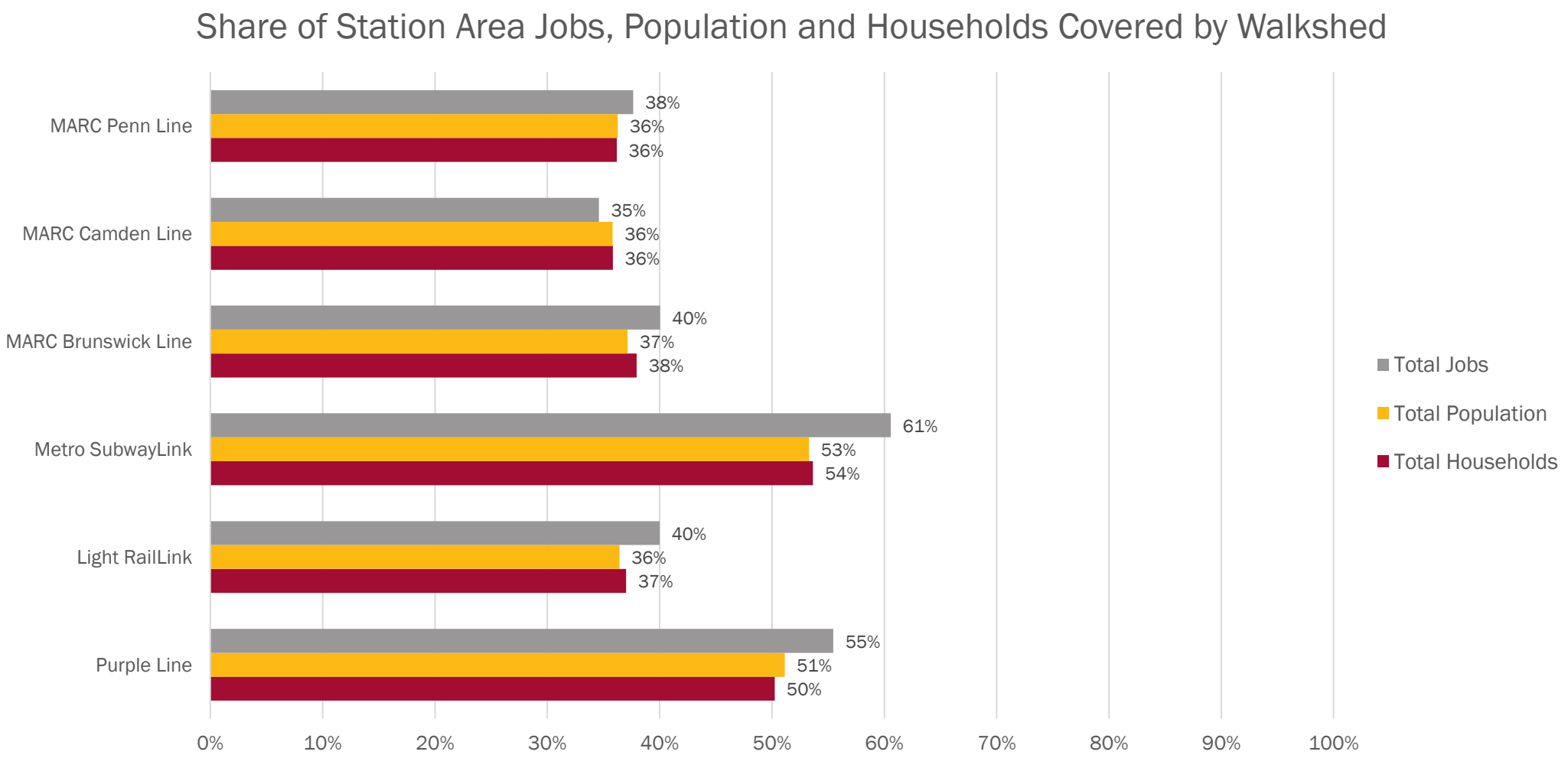
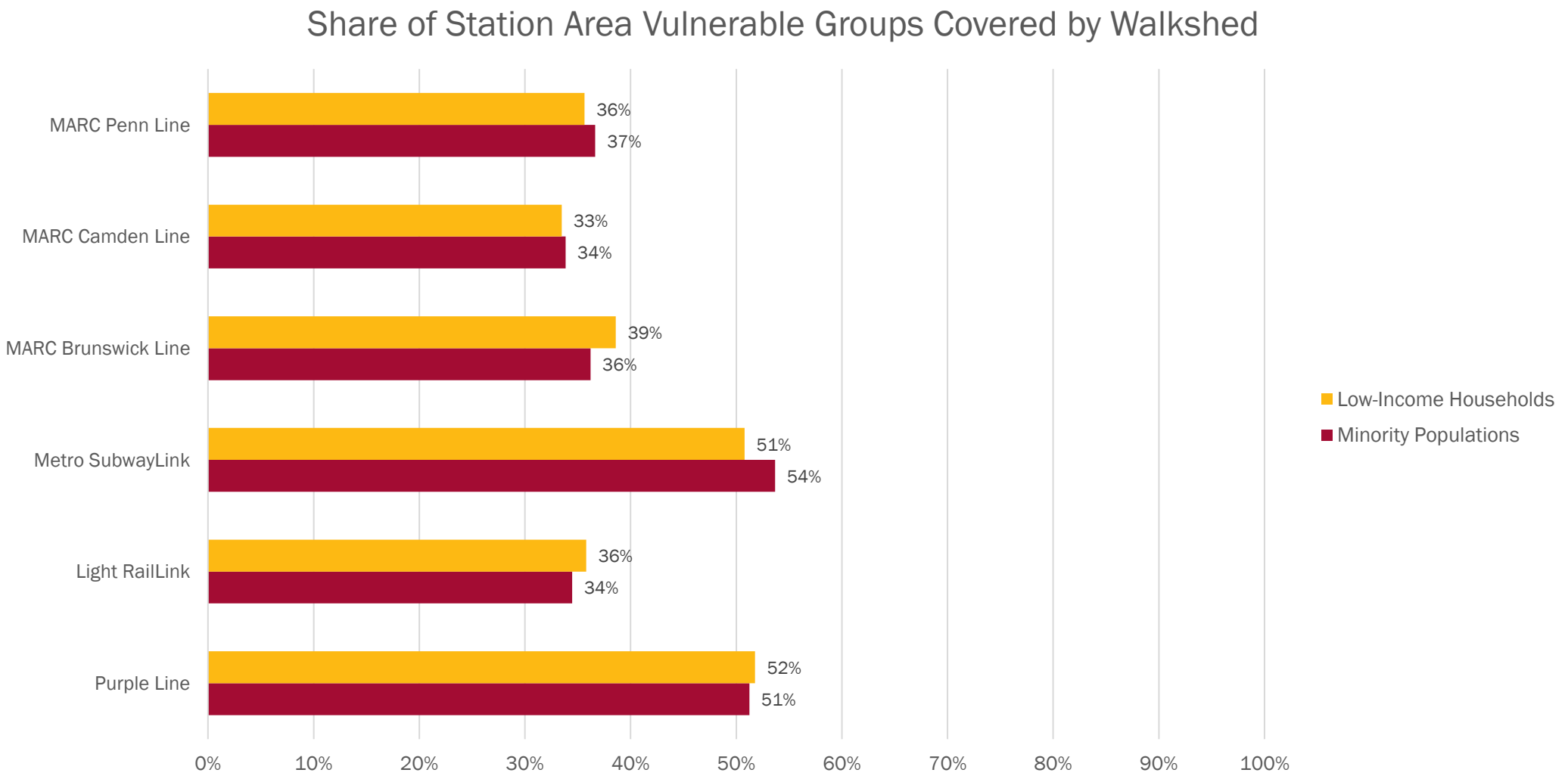


Total station areas are based on ½ mile buffers from station exits. Stations with multiple exits will have a total station area greater than 0.7852 mi².

Preliminary Results



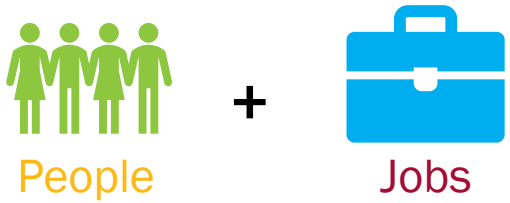
Preliminary Results



Preliminary Results

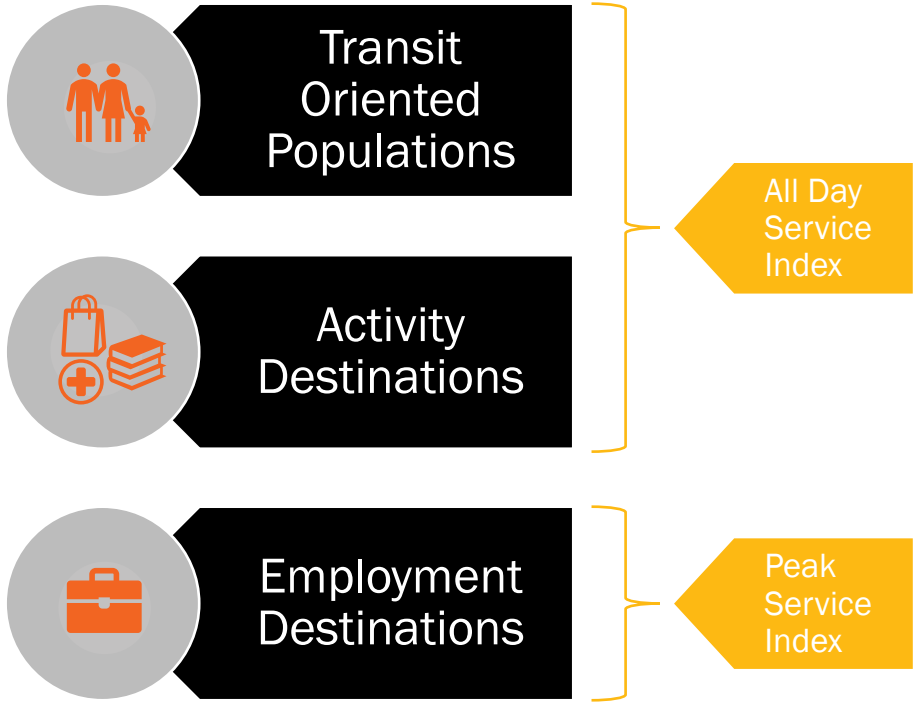
Propensity & Potential Analysis

Transit Potential



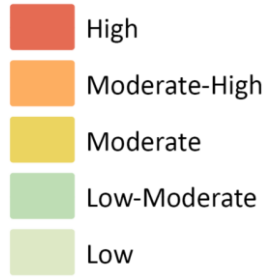
Transit is most effective in areas with high concentrations of residents and/or businesses

Transit Propensity Indices



Preliminary Results

- Transit-Oriented Populations
  - Populations of young and senior citizens, low-income residents, households with one or fewer cars, and persons with disabilities
  - Ranked from low to high



Mt. Royal Light Rail Station

	Station Area	Walkshed
Low	0%	0%
Low-Moderate	8%	4%
Moderate	13%	15%
Moderate-High	47%	56%
High	33%	25%

16th Street Purple Line Station

	Station Area	Walkshed
Low	4%	1%
Low-Moderate	16%	19%
Moderate	53%	59%
Moderate-High	2%	0%
High	25%	21%

Preliminary Results

Highest Walk Access Stations

1. Centre Street Light Rail Station
2. Charles Center Metro Station
3. Penn North Metro Station

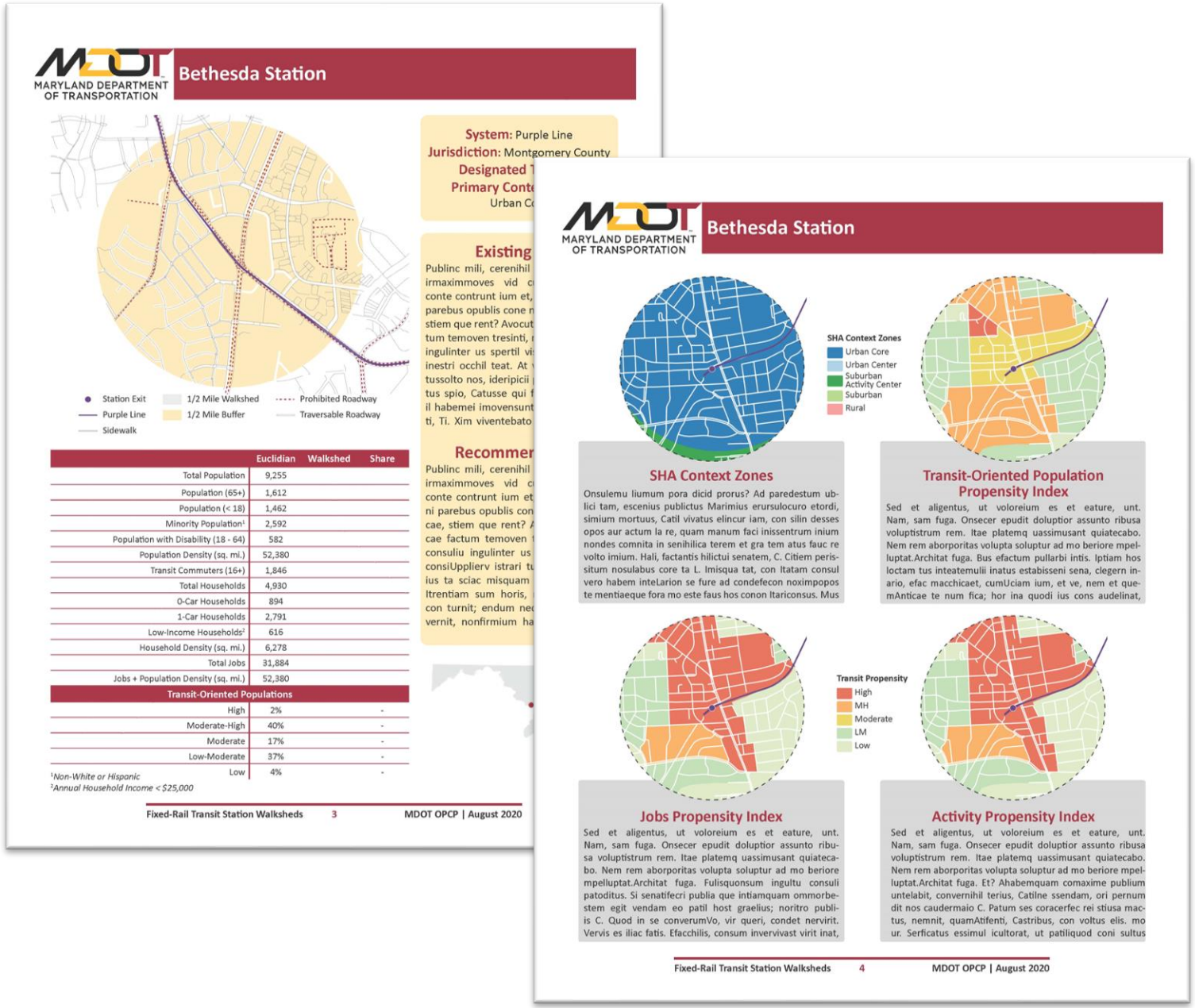
Bottom Walk Access Stations with Highest Potential *(i.e. highest total number of jobs, population, and households)*

1. Falls Road Light Rail Station
2. Jessup MARC Station
3. Dorsey MARC Station

Next Steps

Next Steps

- Finalize Existing Conditions Report
  - Walkshed Results
  - Gaps Analysis
  - Recommended Improvements
  - Improvement Prioritization
- Release Interactive Walkshed Application to Stakeholders
- Develop prioritization methodology (with input from stakeholders)



Stakeholder Input

Stakeholder Survey

- Complete a 5-minute online survey to:
  - Inform the methodology for improvement prioritization
  - Help us understand how you might use this data

Responses due Tuesday 12/1

https://arcg.is/1P084n

Questions?

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THANK YOU

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