

**2022 Virtual
Transit Asset Management Roundtable: Day 2
Integrating Strategic Priorities into TAM Investments
July 20, 2022**



**TRANSIT
ASSET
MANAGEMENT**



U.S. Department of Transportation
Federal Transit Administration

Presentation Materials



www.transit.dot.gov/TAM

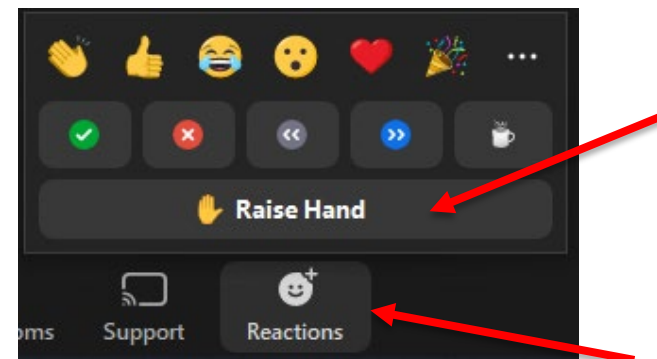
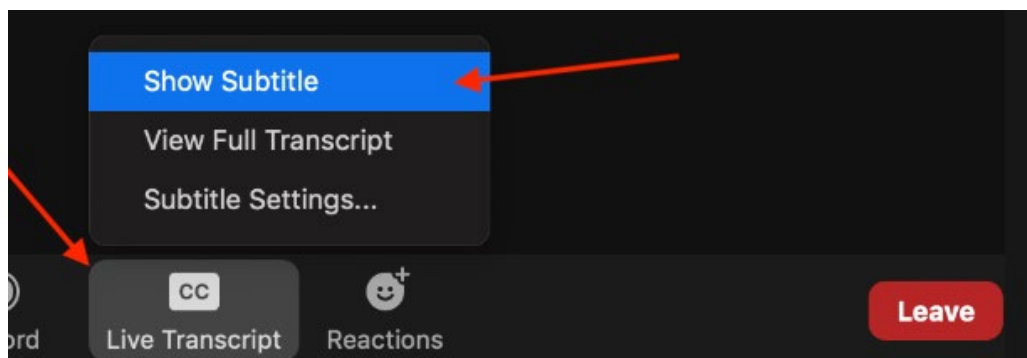
Select "TAM Events" in the sidebar and navigate to "Roundtables", then "2022 Transit Asset Management Roundtable"



Zoom Logistics



- There is no dedicated Q&A pod, only chat pod and direct messages
- Use Raise Hand tool or chat pod for Q&A in main room
- Please stay muted unless you're speaking in main room
- Go on camera and speak up in breakouts
- Closed captioning is available by clicking “Live Transcript”, then selecting “Show Subtitle”
- Raise Hand tool can be used by clicking "Reactions" icon





Day 1 Takeaways



Presentation Session: Integrating Resiliency, Equity, and Accessibility into TAM Investment Prioritization



Alan Lehto, *TriMet*



**Erin Fiorini, *Chicago
Transit Authority***



Tying Together TAM, Equity, Accessibility, and Sustainability with a Strategic Plan

TAM Roundtable

7/20/2022

Business Plan

- Strategic 5-year plan with annual updates to address changing circumstances
- [Trimet.org/businessplan](https://trimet.org/businessplan)



Capacity and Choices

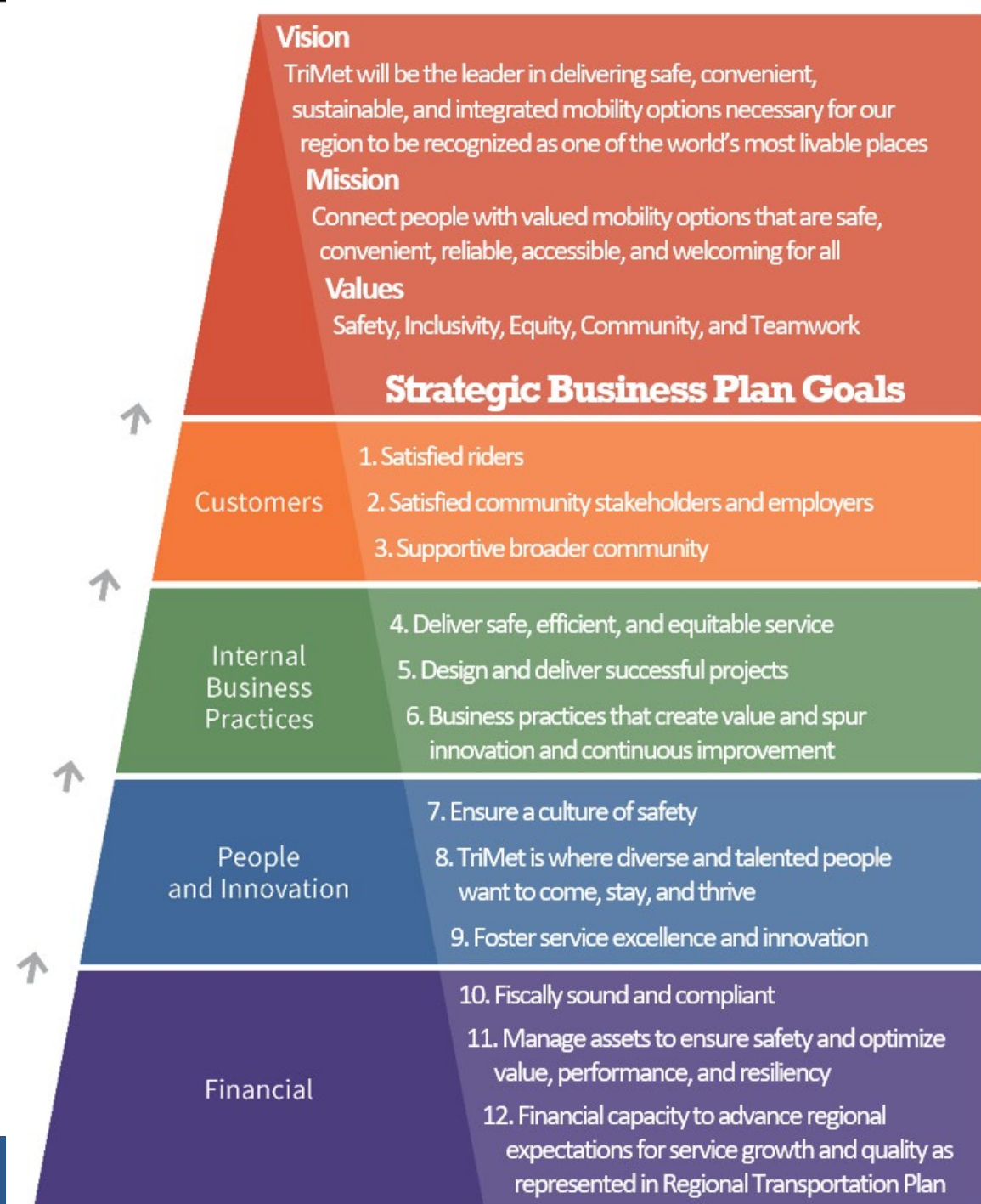
- Every good thing we do means fewer resources for every other good thing we could do, so our efforts must be focused and strategic

Driven by Purpose

- Support our economy and provide equitable opportunity
- Ease congestion
- Provide mobility for those with few options
- Help shape the future of our region
- Reduce emissions and support environmental sustainability

Strategy Map

- Setting overall direction for success



FY2023 – FY2027 Business Plan Strategic Priorities

Safety

- Building a culture of safety in everything we do
- Work to ensure a positive experience for both employees and our customers

Ridership

- Listening to community
- Learning new travel patterns
- Recognizing needs of riders
- Working on accessibility

Financial Stewardship and Capacity

- Sustainable budget
- Deliver safe and reliable transit
- Uninterrupted maintenance
- Asset management/replacement
- Expand revenue options

Employees and Employee Experience

- Improve relationship with ATU
- Enhance onboarding
- Focus on recruiting/retention
- Advance development opportunities
- Maintain performance measures
- Uphold accountability
- Celebrate and recognize employee contributions

Community and Partnerships

- Build and strengthen relationships
- Enhance two-way communication
- Proactively be part of the solution
- Make connections
- Reimagining public safety
- Address climate change

Inclusion, Diversity, Equity, and Access

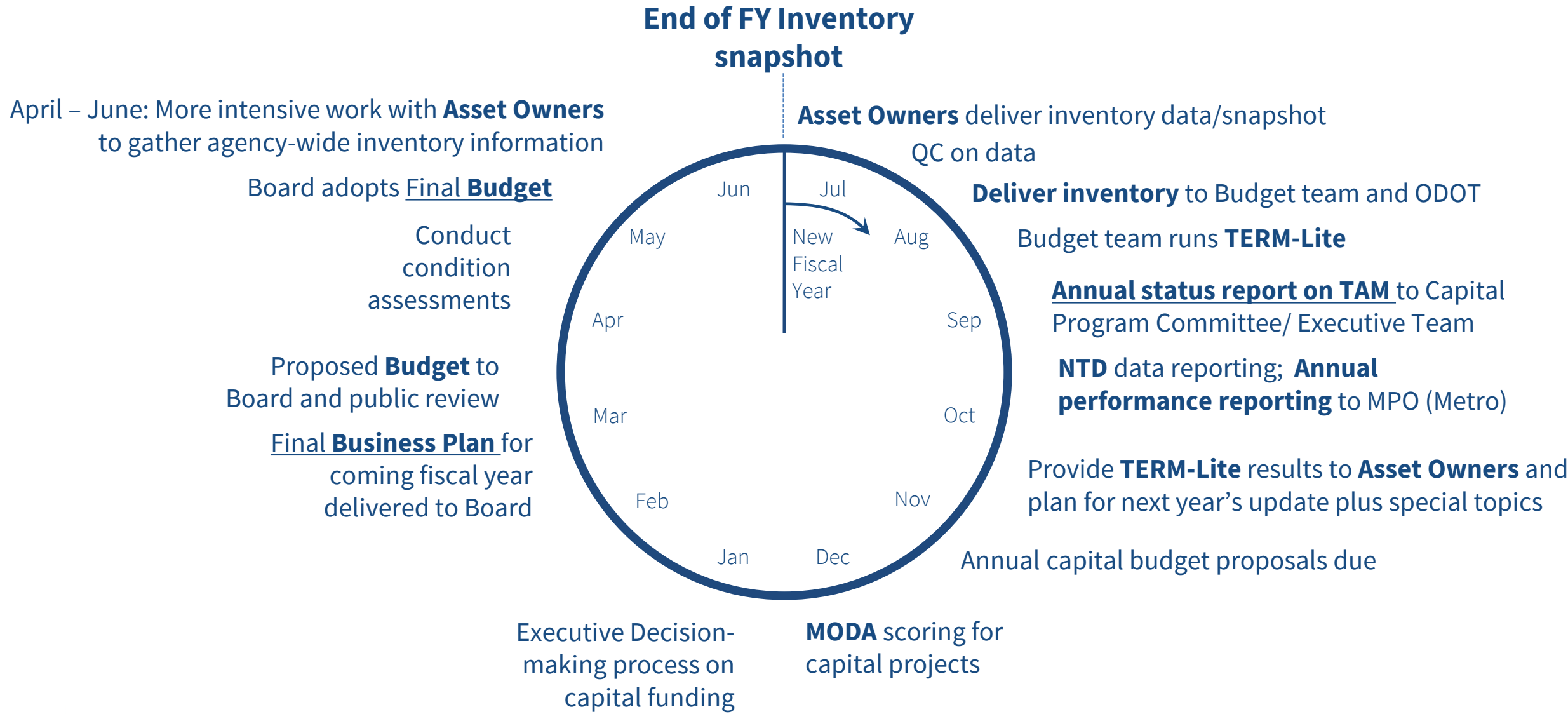
- Focusing on these elements in the service we provide, the projects we deliver, our contracting, and with all TriMet staff
- Fostering an agency that reflects the community we serve, with staff and partners working together to provide transit service that is welcoming to all

TAM as reflected in Business Plan

Goals & Objectives:

1. Satisfied riders
 - 1A. Provide safe service
4. Deliver safe, efficient, and equitable service
 - 4A. Increase personal safety
 - 4B. Provide reliable performance
11. Manage assets to ensure safety and optimize value, performance, and resiliency
 - 11A. Meet or exceed state of good repair targets for all identified asset classes

TAM Annual Cycle – supports growth and change management



Inclusion, Diversity, Equity, and Access as reflected in Business Plan

Goals & Objectives:

1. Satisfied riders
 - 1D. Ensure equitable distribution of services and resources
2. Satisfied community stakeholders and employers
 - 2B. Advance mobility for those with limited options
 - 2C. Support economic opportunity for all by expanding employee access to jobs and customer access to business and services
8. TriMet is where diverse and talented people want to come, stay, and thrive

Example Key Strategic Actions related to Inclusion, Diversity, Equity, and Access



- 1B - 4. Conduct and implement comprehensive service analysis (Forward Together)
- 1D-10. Pursue accessibility improvement plan
- 2B-7. Engage riders, stakeholders, and community for Budget, Business Plan, comprehensive service analysis (Forward Together), Equity and Title VI update, fare policy, A Better Red Light Rail Project, Division Transit Project, and other initiatives and projects in development or underway such as transit-oriented development and potential future bus rapid transit projects
- 6A-3. Use equity lens framework in support of TriMet projects and programs
- 8D-6. Determine necessary improvements and staffing approach for diversity, equity, and inclusion and begin implementation of those improvements

Equity Measures

Objective 1D: Ensure equitable distribution of services and resources

Measures of equitable service – Lines serving areas with higher than average populations of **persons of color**, compared to other lines:

Revenue hours	Within 5 percent, equal, or better	☆ Within 5 percent, equal or better	▼ System average and MAX within 5 percent, equal, or better but bus is greater than 10 percent
Vehicle loads	Within 5 percent, equal, or better	☆ Equal or better	★ Equal or better
On-time performance	Within 5 percent, equal, or better	☆ Within 5 percent, equal, or better	★ Within 5 percent, equal, or better
Service availability	Within 5 percent, equal, or better	☆ Equal or better	★ Equal or better
Bus vehicle assignments	Within 5 percent, equal, or better	☆ Equal or better	★ Equal or better
MAX vehicle assignments	Within 5 percent, equal, or better	☆ Equal or better	★ Equal or better
Bus stop infrastructure (seating, lighting, elevators, digital displays, shelters, signs, maps, schedules, and waste receptacles)	Within 5 percent, equal, or better	☆ Within 5 percent, equal, or better	★ All within 5 percent, equal, or better

Objective 1D (continued): Ensure equitable distribution of services and resources

Measures of equitable service – Lines serving areas with higher than average populations of **persons with low incomes**, compared to other lines:

Revenue hours	Within 5 percent, equal, or better	☆ Equal or better	★ Equal or better
Vehicle loads	Within 5 percent, equal, or better	☆ Equal or better	★ Equal or better
	Within 5 percent, equal, or better	▲	▲ Within 5 percent, equal, or better

Sustainability as reflected in Business Plan

Goals & Objectives:

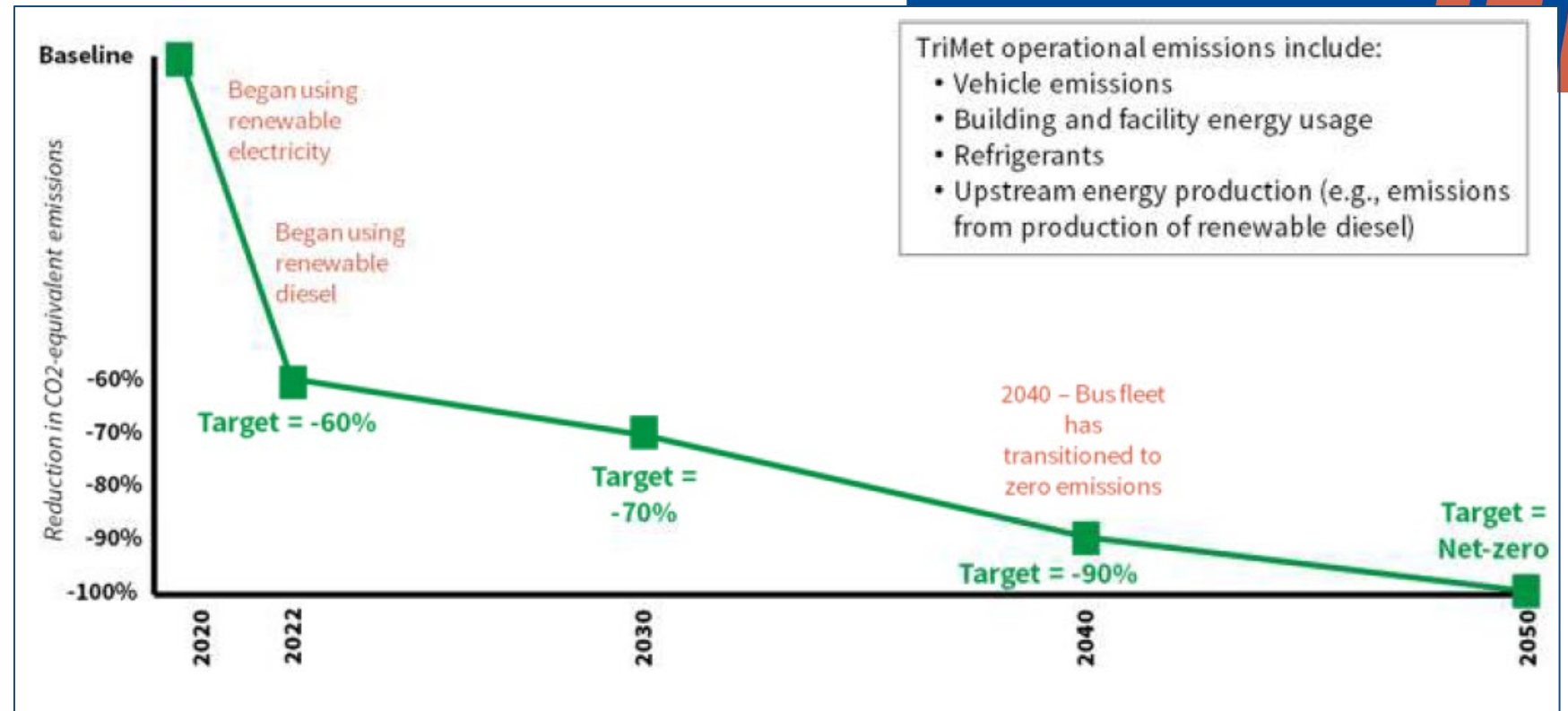
- 2. Satisfied community stakeholders and employers
 - 2A. Improve environmental sustainability and stewardship and reduce TriMet's carbon footprint
 - 2C. Help shape the future of cities and our region in line with Metro 2040 Growth Concept

Plus ... Inclusion, Diversity, Equity, and Access items already cited cover the equity and people elements of sustainability

...TAM items already cited cover economic sustainability

Climate Action Plan

- Sets targets for GHG emissions reductions
- Already close to 70% below baseline
- Defines future actions to keep reducing



High-level takeaways

- Look for synergies, even if in very different departments (e.g., collaboration with Budget and Maintenance with TAM and Budget cycle)
- Annual cycles and opportunities for getting messages across to colleagues in other divisions/departments and to executives
- Where do your needs and interests align with others?
 - Budget
 - Engineering
 - Maintenance
 - Transportation Operations

Thank you



Alan Lehto

Director, Business Planning & Asset Management

LehtoA@TriMet.org

FTA TAM Roundtable: Prioritization Process for CTA All Stations Accessibility (ASAP) Program Plan



Chicago Transit Authority

Agenda

- Introductions
- ASAP Plan Overview
- Prioritization Process
 - Needs and complexity
 - Scoring & Weight



CTA System at a Glance

Overview

- Independent governmental agency created by state legislation
- Nation's 2nd largest public transportation system
- Carries 80% of the region's transit rides
- 1.5 million rides are taken on an average weekday

Rail "The 'L'"

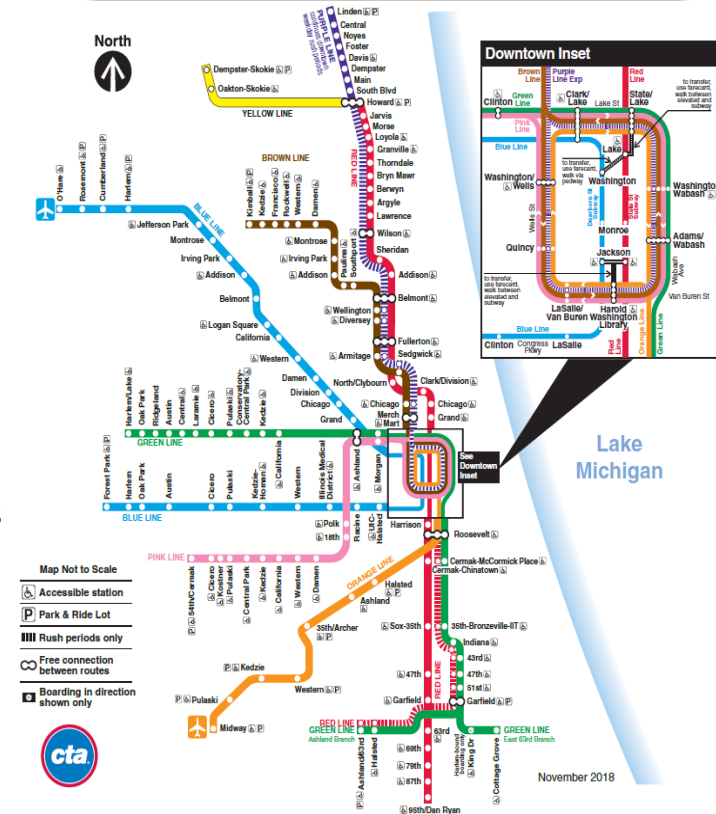
- 1,500 rail cars along 8 color coded transit lines
- 2 routes operate 24/7 (Red & Blue)
- Rail service to two major airports (O'Hare and Midway)
- Red line links two major league ballparks
- 12 transfer points
- 64 electrical substations, 224 miles of revenue track, 145 stations

Bus

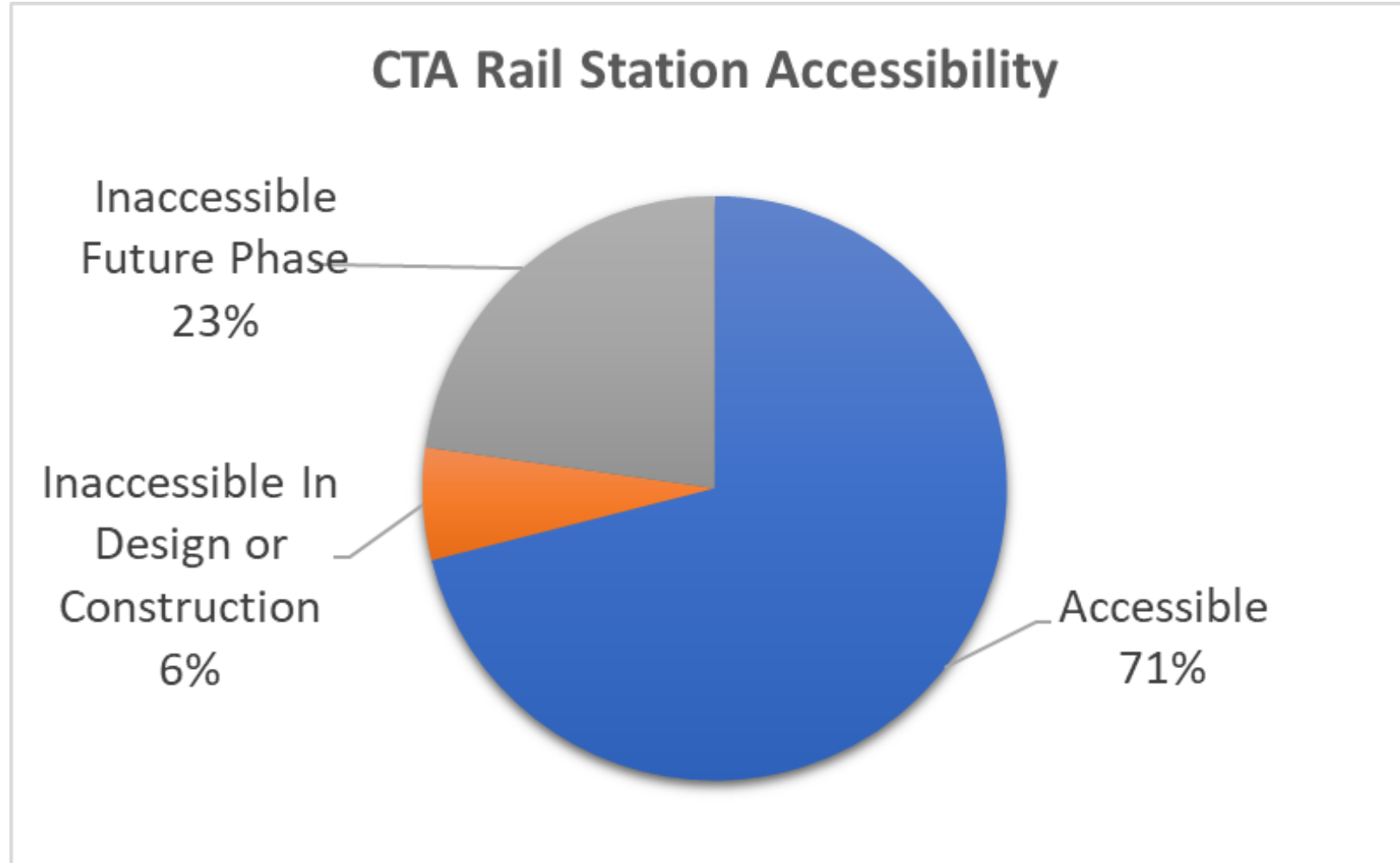
- 140 routes
- 1,900 ultra-low sulfur diesel fleet of buses
- 162,000 miles traveled on an average weekday

CTA Mission:

CTA delivers quality, affordable transit services that link people, jobs and communities.



CTA Rail Station Accessibility



All Stations Accessibility Program Plan (ASAP)

Program Budget:

- Total Twenty-Year Cost: \$2.1 Billion
- Phase One: \$140.3 Million

Program Schedule:

- Phase One project completion dates range between 2023-2025
- Future Phases schedule TBD

ASAP Program Scope:

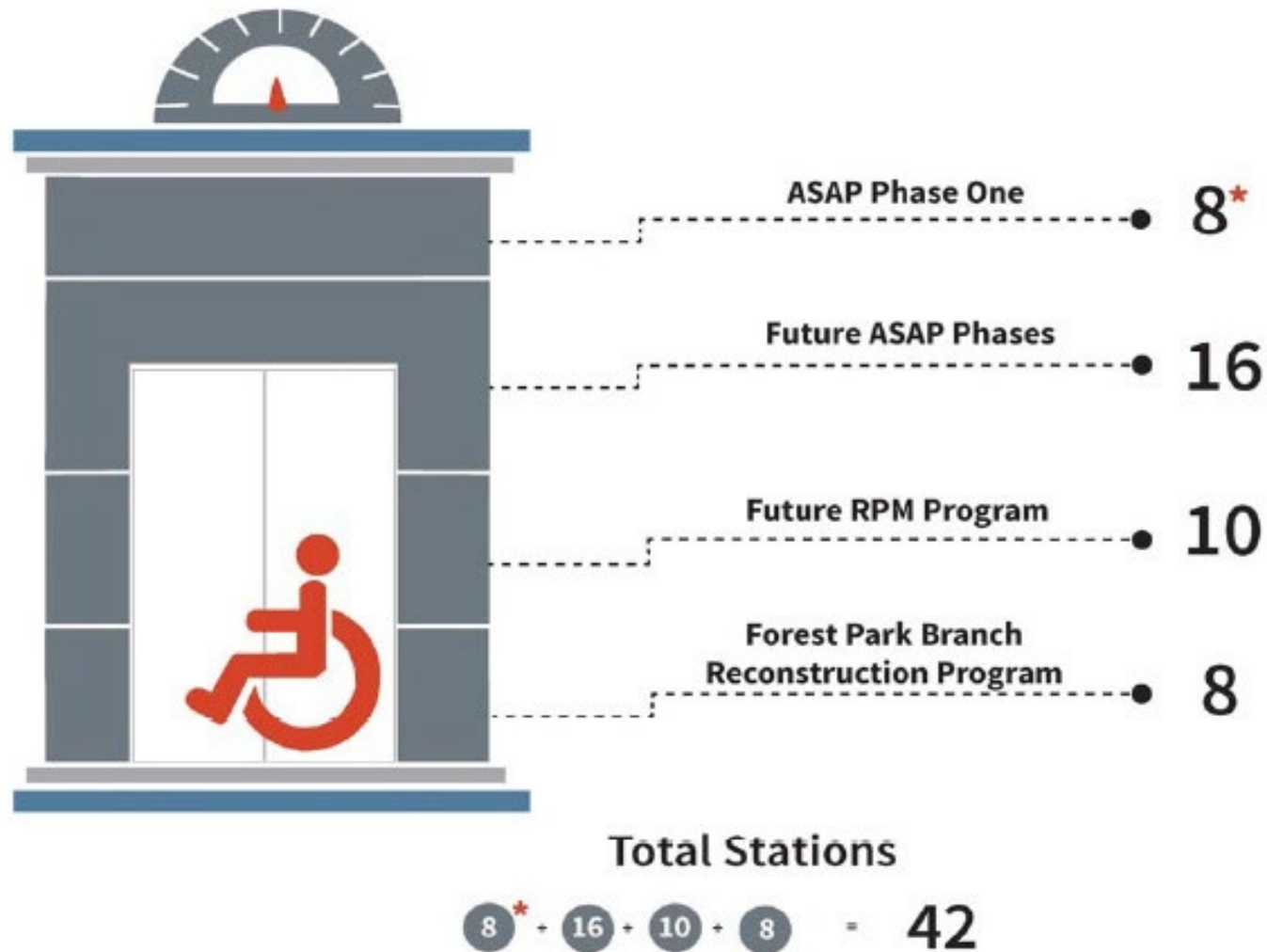
- The goal of ASAP is to make the system completely accessible to people with disabilities in the next 20 years.
- Forty-two stations are inaccessible and are included either in ASAP or in one of CTA's other major programs.
- ASAP Phase One includes eight (8) prioritized stations.
- Also includes elevator modernization program to replace and/or modernize existing elevators at CTA Rail Stations.

All Stations Accessibility Plan

https://www.transitchicago.com/assets/1/6/ASAP_Strategic_Plan_508_FINAL.pdf



Overview of ASAP Stations



* Includes four funded RPM Phase One stations and one CDOT-led station.



All Stations Accessibility Program Plan (ASAP)

- 2012 – Infrastructure Accessibility Task Force (IATF) report created CTA's first strategic review and analysis of station accessibility across the entire rail system since the key stations were designated twenty years prior.
 - Purpose of the IATF was to function as a resource for the CTA in developing initiatives to enhance accessibility for people with disabilities at CTA's rail stations.
 - The goals and objectives of the IATF were to:
 - Identify the highest priority stations to make accessible
 - Evaluate concepts for incorporating accessibility into the highest priority stations.
 - Identify general planning recommendations and develop design considerations for future accessibility improvements
 - Determine next steps for achieving full accessibility of the CTA rail system



All Stations Accessibility Program Plan (ASAP)

- July 2018 – CTA's All Stations Accessibility Program (ASAP) Plan Published
 - To develop a comprehensive roadmap to full vertical accessibility, the CTA began collaborating with accessibility experts and third-party architects to develop the ASAP Strategic Plan.
 - This Working Group met regularly to provide input on the ASAP planning process as well as technical guidance related to the proposed station designs. The CTA also regularly updated its ADA Advisory Committee, which serves in an advisory capacity to the CTA and whose members represent various disability-related organizations and interests within the disability community.
 - Working group created priority ranking of remaining CTA stations to become accessible
 - The ASAP Strategic Plan will be updated over time to remain consistent (every 5 years) with ongoing planning, modernization, and construction work as part of CTA's Capital Program.
- November 2021 – Working group reconvened to update ASAP Plan



Station Prioritization Criteria

- ASAP builds from IATF planning effort, updating IATF data and advancing the IATF methodology.
- ASAP Program established priorities in three categories to rank stations:
 - Ridership and Gaps;
 - Origins; and
 - Destinations
- Rankings were factored by a complexity score recognizing some stations are more difficult to design and construct



Station Prioritization: Ridership

Ridership (35% Total Weight):

Criteria	Comments
Total Station Ridership Based on CTA Ridership Statistics (20% Weight)	Target Highly Used Locations for Most Impact
Persons with Disabilities Ridership Based on CTA Fare Data (10% Weight)	Prioritize Stations with Existing Disability Patron Ridership
Senior Ridership Based on CTA Fare Data (5% Weight)	Prioritize Stations with Existing Senior Patron Ridership



Station Prioritization: Gaps

Gaps (20% Total Weight):

Criteria	Comments
Station Gaps Based on Geographic Distance (15% Weight)	Targets Stations to Fill in Large Spans Between Inaccessible Stations
Connections Bus Connections Only (5% Weight)	Focuses on Expanding Accessible Network via Buses



Station Prioritization: Origins

Origins (15% Total Weight):

Criteria	Comments
Population Based on Census and CMAP Projections (10% Weight)	Identifies Potential Ridership – Current and Future
Paratransit Pace Data (5% Weight)	Identifies Existing Pace Transfer Locations



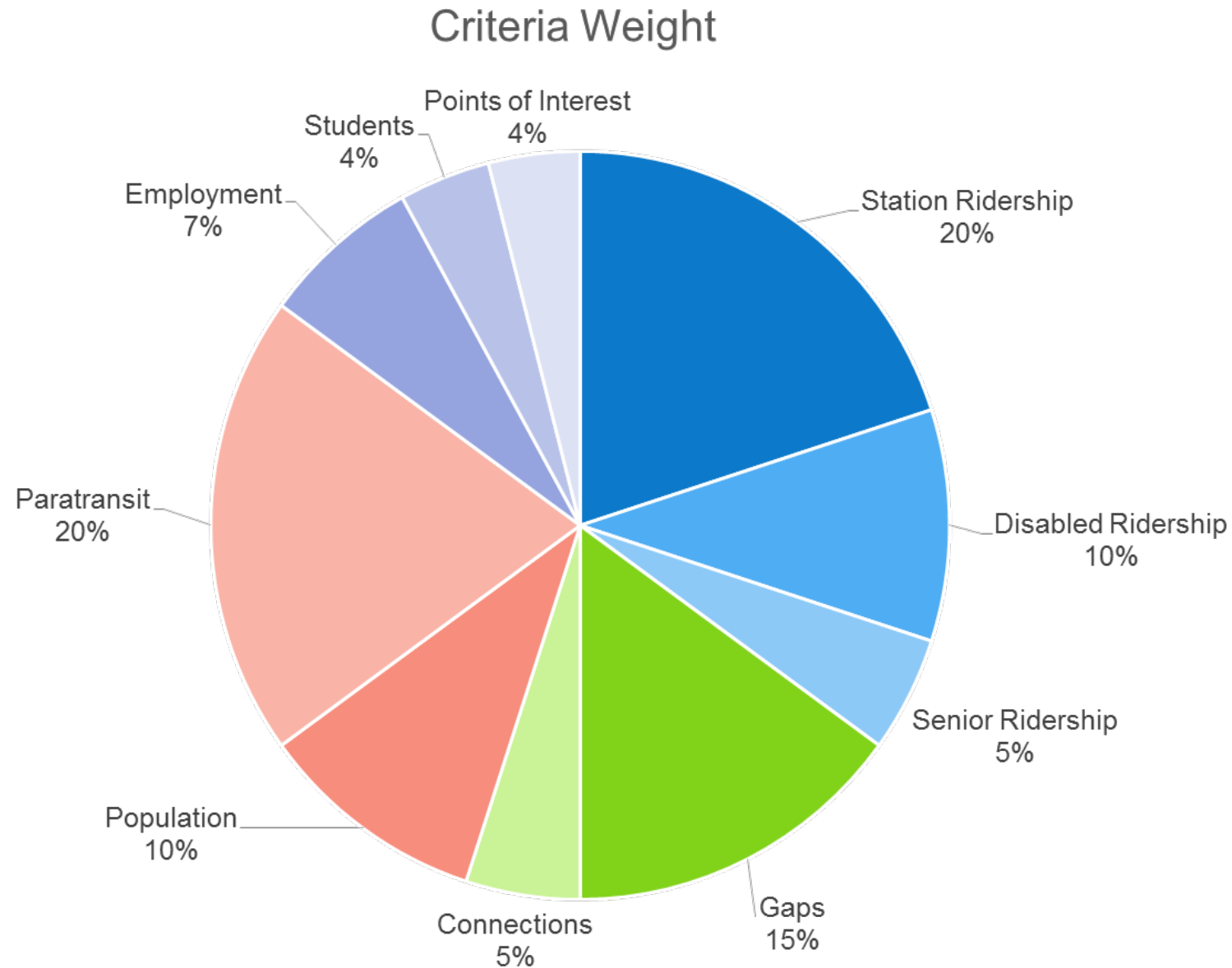
Station Prioritization: Destinations

Destinations (15% Total Weight):

Criteria	Comments
Employment Based on Census and CMAP Projections (7% Weight)	Assists in Connectivity to Employment
School Enrollment CPS and Other Data (4% Weight)	High School and University Connections
Points of Interest CPS and Other Data (4% Weight)	General Connectivity, Especially for Tourism or Civil Purposes



Station Prioritization: Weighting



Station Prioritization: *Complexity*

- ASAP methodology introduced a complexity factor
- Complexity factor measures a number of high-level cost considerations (e.g., extend of utility work, presence of multiple platforms, station type) and the time needed for planning, design, construction and agency coordination of accessibility improvements.
- Complexity penalties were applied based on station type (subway vs. elevated/median/or at-grade) and variables at those station types



Station Prioritization: *Complexity*

- Coordinated with Technical Committee
 - Land Acquisition
 - Historical Considerations
 - Cost
 - Constructability
 - Code Compliance
 - Station Condition
- Accounts for 50% of the total score



Station Prioritization: Scoring & Weight

- For both need and complexity assessments, all stations were assigned a score between zero and five.
 - Zero was lowest score; five was highest score. Zero was only assigned when the value of the criterion equaled zero.
 - Scores then assigned by percentile (e.g., top 20% of stations with the highest values received a score of five, etc.)
 - In complexity assessment, stations with higher complexity scores are less complex and those with lower scores are more complex.
 - As a result, the scoring incorporated a penalty to account for various levels of complexity across station types.
- Overall ASAP needs was weighted at 50% and complexity was also weighted at 50%.



Overview of ASAP Phases



Blue Line Loop Green Line Red Line Red / Purple Lines

☒ Nine (9) stations fully funded and in implementation



Questions?



Chicago Transit Authority



Q&A



Using TAM to Respond to Uncertainty Panel



Frank Knorek, *Luzerne
County Transportation
Authority*



Kris Owen, *Metro St. Louis*



Luzerne County Transportation Authority Characteristics

- **Agency**

- Established October 10, 1972.
- 170 total employees.
- Service area is a mixture of urban, suburban, industrial, and rural communities.
- 5-acre campus contains: maintenance, tire warehouse, fuel island, vehicle storage, bus wash, and administrative buildings.

- **Fixed Route Bus**

- Operates six (6) days a week: 4:45 AM to 1:17 AM.
- Services 36 of 76 municipalities in Luzerne County, with a service area of 56 sq. miles.
- 18 Regular Routes (Weekday/Saturday) and 5 Night Service Routes (Weekday Only).
- Bus Fleet Size: 40 (35' Gillig Phantom Diesel, and 35' Gillig Low Floor Hybrid and CNG).
- Fixed-route provider for the cities of Wilkes-Barre, Nanticoke, and Pittston. Serves as a connector to the cities of Hazleton(HPT), and Scranton in Lackawanna County (COLTS).
- 8 Service Vehicles.
- 1.1M Annual UPT (pre-Covid).

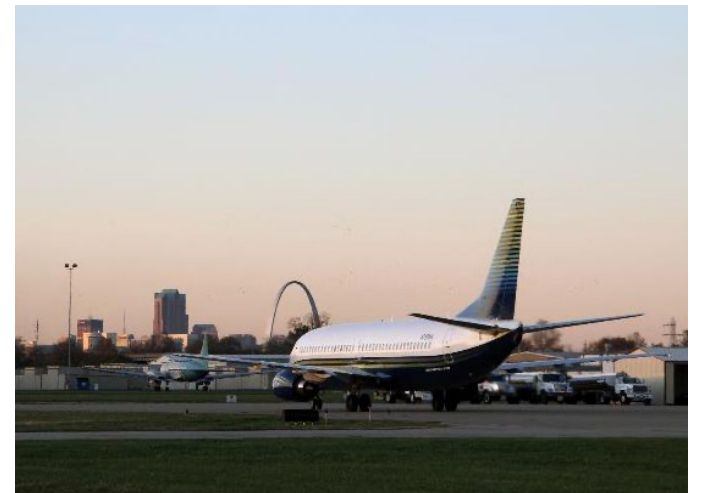
- **Paratransit (Shared Ride)**

- 49 (Ford E350/E450 Cutaway Vans and Ford Transit Passenger Vans)
- Operating throughout Luzerne County (906 sq. miles)
- 116,000 Average Annual UPT (pre-Covid).



BI • STATE DEVELOPMENT





Kris Owen
TAM Program Manager
Metro - STL



Metro Transit



- Established in 1949 through an interstate compact between Missouri & Illinois and ratified by the United States Congress; signed into law by President Harry S. Truman
- 87 LRVs on 46-mile MetroLink light rail system
- Approx. 400 MetroBus fleet that operates on 59 MetroBus routes in Missouri and Illinois
- Metro Call-A-Ride, a paratransit fleet of 122 vans
- Over 6000 bus stops, 8 transit centers, 39 rail stations located across the bi-state area
- Bi-State Development Agency also operates the Arch trams, 2 riverboats on the Mississippi River, helicopter tours on the riverfront, the St. Louis Downtown Airport, and the St. Louis Regional Freightway



Q&A



Information for Tomorrow



- Day 3 begins at 1:00 PM ET
- Your unique link will be resent to you ~1 hour ahead of the session
- If you have any questions, email TAMRoundtable@dot.gov
- Thank you!





[TRANSIT.DOT.GOV](https://www.transit.dot.gov)