

KENDALL EXTENSION STUDY



Breakout Room # 1

Environmental & Ridership

Environmental





Environmental Report Elements

Components of the Environmental Report:

- Field surveys and documentation
- Historic resources technical report
- High-level analysis of environmental factors, such as:
 - Air quality
 - Water quality
 - Noise and vibration
 - Threatened or endangered species



Environmental Report

Overview

- Conducted a high-level environmental review that resulted in an Environmental Report
- Examined environmental factors and determined if there are areas of concern that impact station site selection, costs, etc.
- Environmental Report is intended to support **future** National Environmental Policy Act (NEPA) documentation
- Additional analysis will be needed to fulfill NEPA requirements in future study phases

Environmental Report Finding

Summary of key potential impacts:

Resource	Alternative Y	Alternative P*	Alternative S*	Sugar Grove Improvements
Land Acquisition (acres)	108.9	137.4	156.5	4.0
Displacements (number)	1.0	1.0	5.0	0
Stream Crossings (number)	3.0	4.0	5.0	2.0
Floodplain Crossings (number)	2.0	3.0	5.0	2.0
Wetlands Impacted (acres)	9.1	9.1	12.1	7.0
Threatened and Endangered Species (number of potential sites)	2.0	3.0	4.0	2.0
Farmland Needed (acres)	108.9	137.0	156.1	4.0

*Future studies will be required to consider possible design alternatives and property acquisitions to avoid potentially-required street closures

Environmental Report Finding

Summary of key potential impacts:

- All alternatives benefit air quality due to reduction in vehicle miles traveled

Resource	Alternative Y	Alternative P*	Alternative S*	Sugar Grove Improvements
Historic Properties Impacted (number)	1	1	5	0
Parks and Recreation Impacted (acres)	0.3	0.9	0.9	2.5
Moderate Noise Impact (No. of Buildings)	7	43	104	N/A
Vibration Impact Zone (No. of Buildings)	0	11	50	N/A

*Future studies will be required to consider possible design alternatives and property acquisitions to avoid potentially-required street closures



Environmental Report Finding

Summary of key potential impacts:

•Traffic

- Alternative Y – No crossing closures**
- Alternative P – Future studies will evaluate and identify engineering solutions to avoid the closure of Ben Street (in Plano)**
- Alternative S – Future studies will evaluate possible design alternatives and property acquisitions to avoid the closures of Ben Street (in Plano), Lafayette Street (In Sandwich) and Main Street (in Sandwich)**
- Minor temporary construction impacts on local communities/ businesses such as noise, dust, vibration and temporary utility disruption**

Ridership



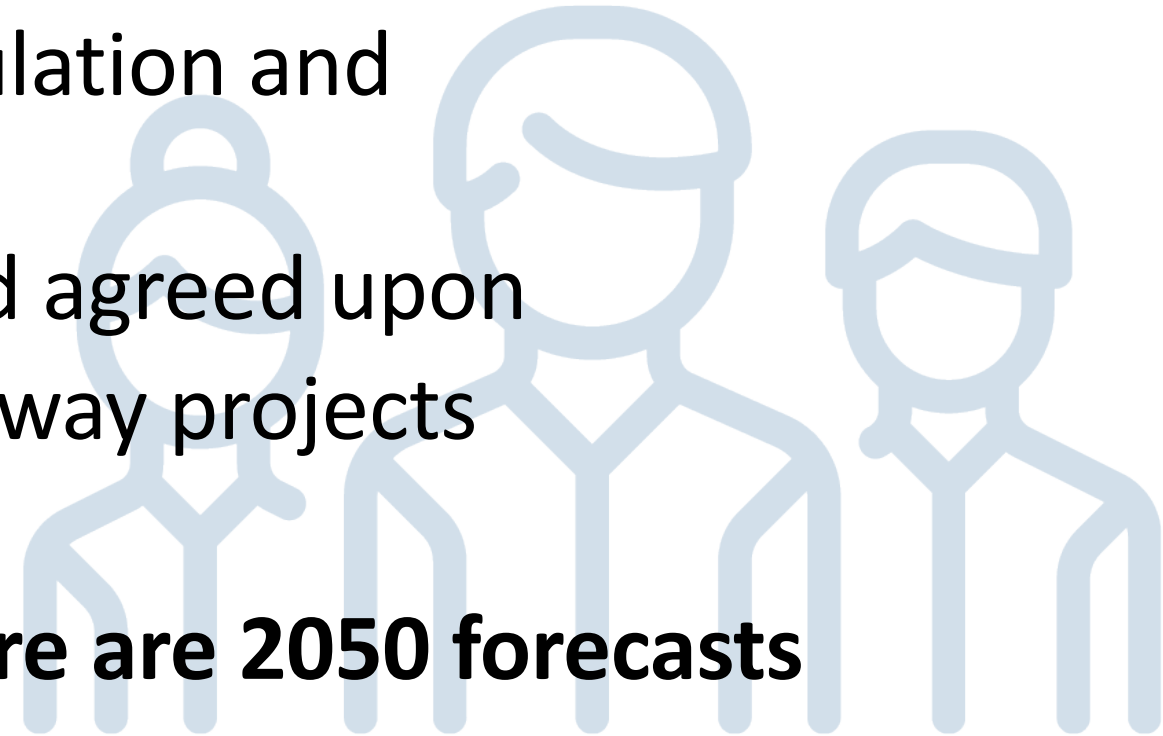
Ridership Analysis

- Federal Transit Administration (FTA) approved model
- Simulation models that replicate individuals' travel patterns
- Considers where potential riders live and work



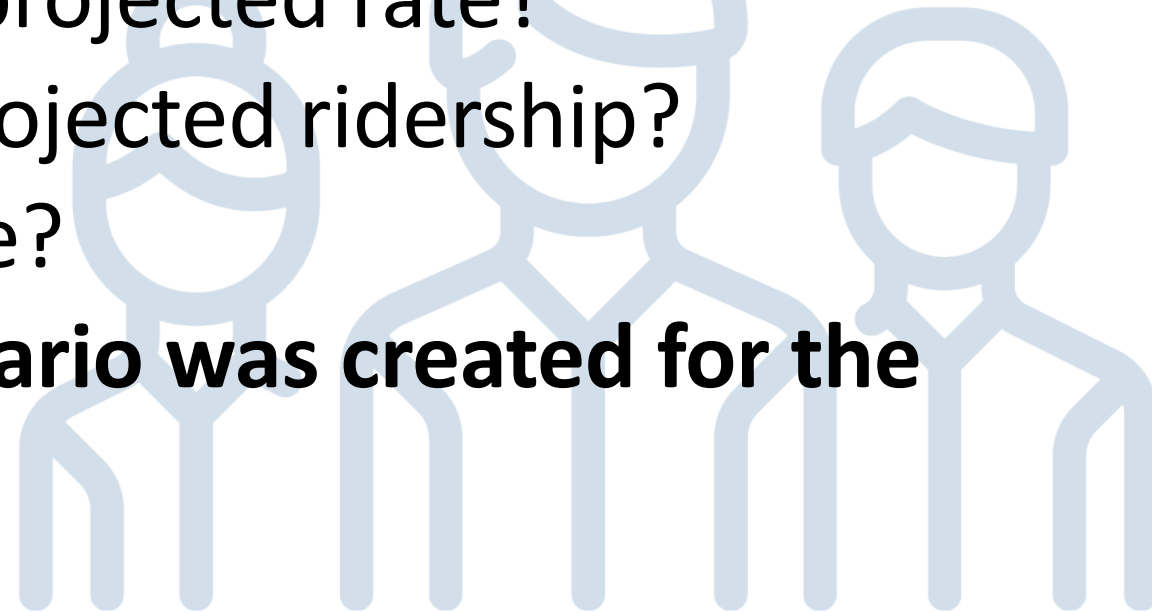
Ridership Analysis

- **Federally accepted ridership numbers based on Chicago Metropolitan Agency for Planning 2050 data**
 - Use the CMAP adopted population and employment forecasts
 - Regionally determined and agreed upon
 - Use the long-range plan highway projects
- **Ridership results presented here are 2050 forecasts**



Ridership Analysis

- **Analysis of population growth was used to test the impact to the Kendall Extension**
 - What if Kendall County's recent growth rate holds steady and exceeds CMAP's projected rate?
 - How does that change the projected ridership?
 - What stations would they use?
- **A high growth population scenario was created for the project**



Ridership Analysis

Kendall County Growth

- The CMAP model forecast is 2% annual growth to 2050
- High growth used was 2.9% annual
 - 136% matches existing 2000-2020 growth based on Census data

CMAP Baseline Population		
% Growth 2050 (vs2020)	Annual Growth	2050 Population
81.6%	2.0%	261,153
Revised 2050 High Population		
% Growth 2050 (vs2020)	Annual Growth	2050 Population
136.5%	2.9%	340,184

Ridership Analysis

Changes in Kane, DeKalb, LaSalle

County	CMAP Baseline 2050	High Growth 2050
DeKalb	10,331	16,619
La Salle	7,337	8,631
Kane	58,489	85,034

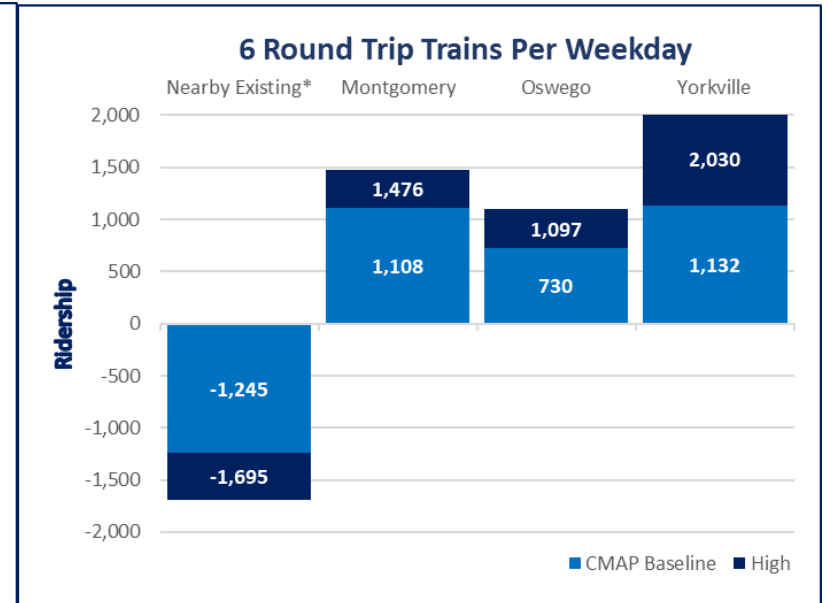
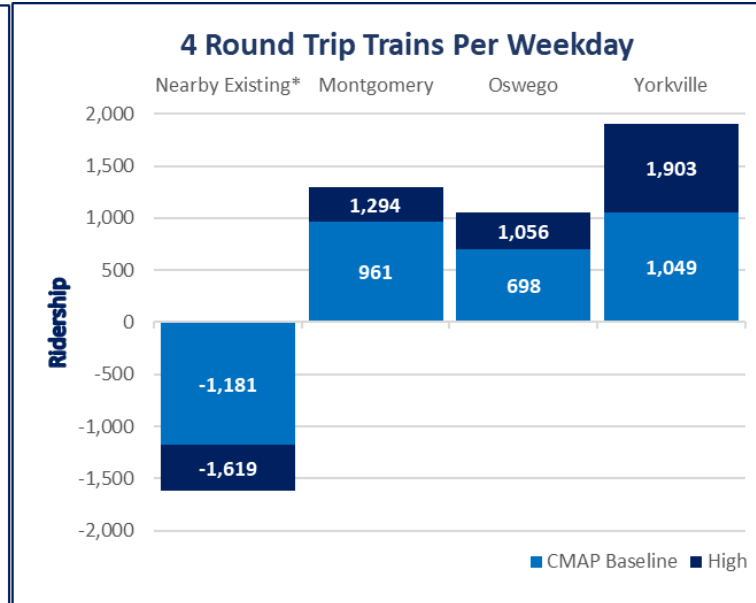
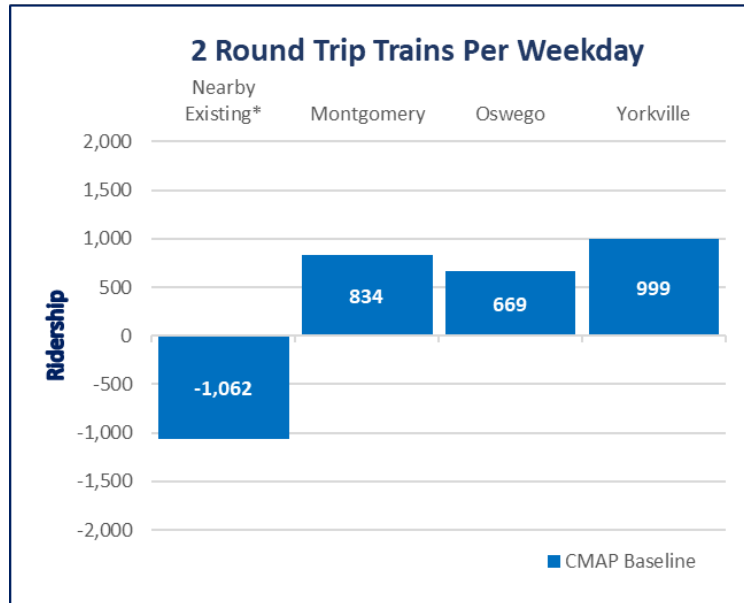
Ridership Analysis

Naming Conventions

Alternative Matrix	Two (2) Round Trip Trains per Weekday	Four (4) Round Trip Trains per Weekday	Six (6) Round Trip Trains per Weekday
Extend Train Service to Montgomery, Oswego & Yorkville (Y)	2Y	4Y	6Y
Extend Train Service to Montgomery, Oswego, Yorkville & Plano (P)	2P	4P	6P
Extend Train Service to Montgomery, Oswego, Yorkville, Plano & Sandwich (S)	2S	4S	6S

2050 Extension of Service to Yorkville (Y)

Values Shown Are Total Riders For Each Scenario and Station



Net New Boardings**	
CMAP Baseline	1,440
High	0

Net New Boardings**	
CMAP Baseline	1,527
High	2,634

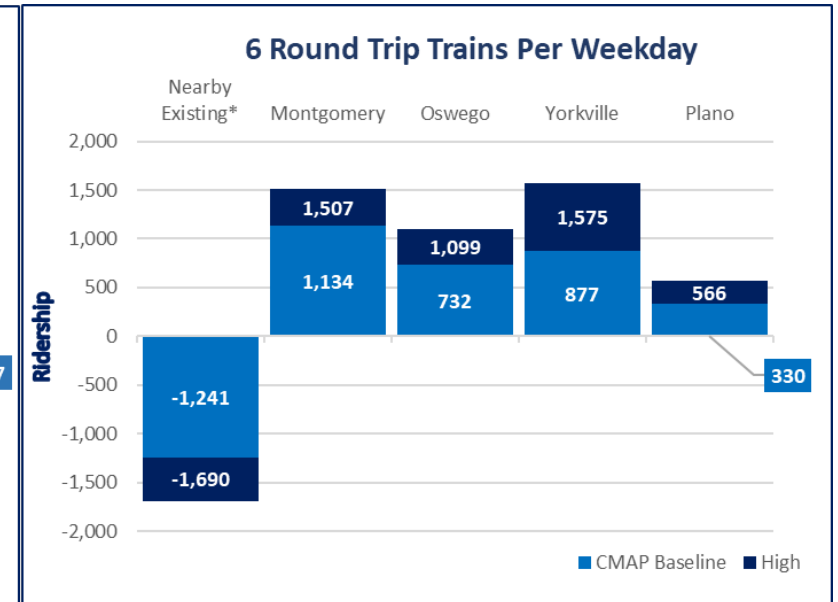
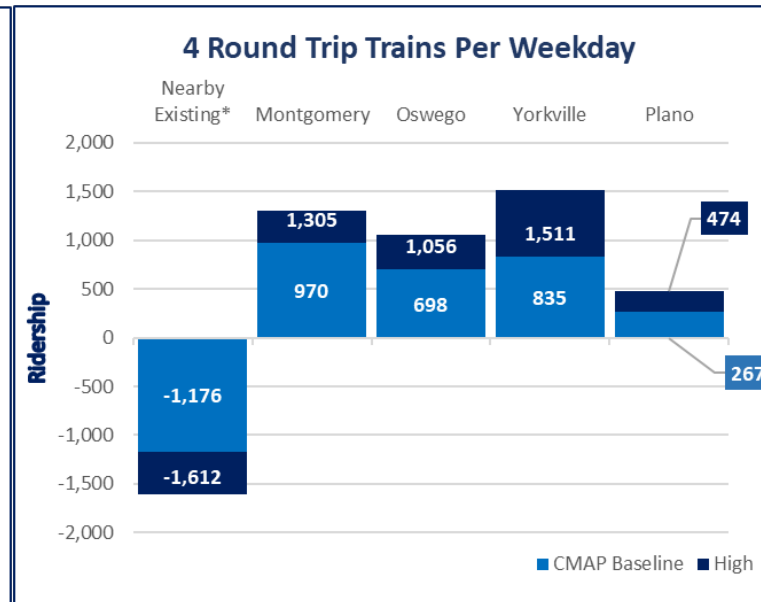
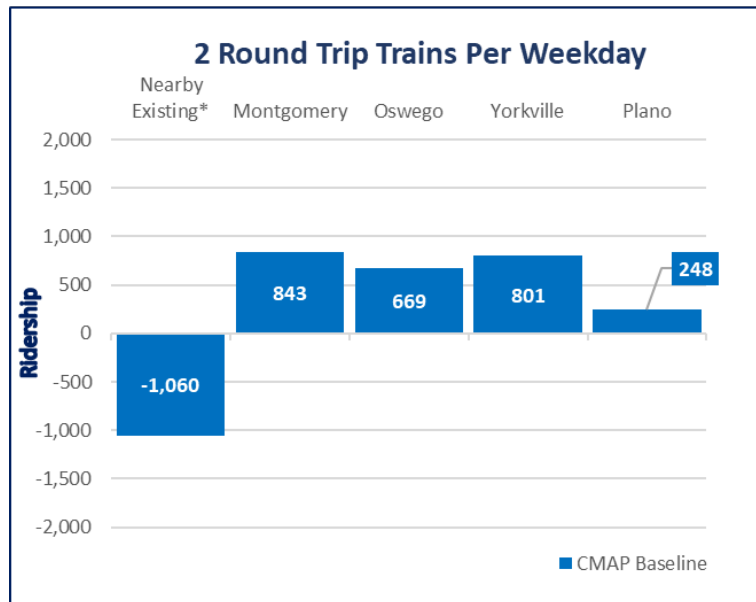
Net New Boardings**	
CMAP Baseline	1,725
High	2,908

*Includes Aurora, Route 59 & Elburn

** At outlying stations on/near extension

2050 Extension of Service to Plano (P)

Values Shown Are Total Riders For Each Scenario and Station



Net New Boardings**	
CMAP Baseline	1,501
High	0

Net New Boardings**	
CMAP Baseline	1,594
High	2,734

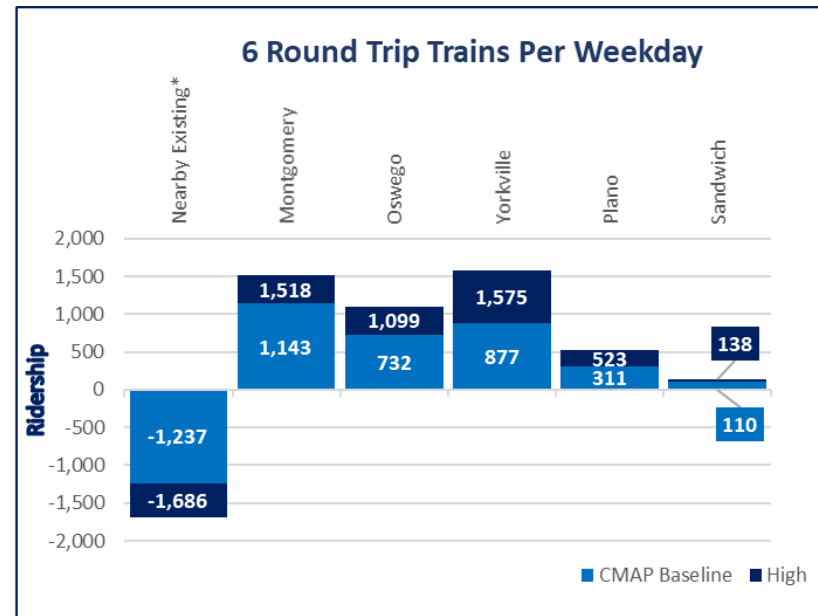
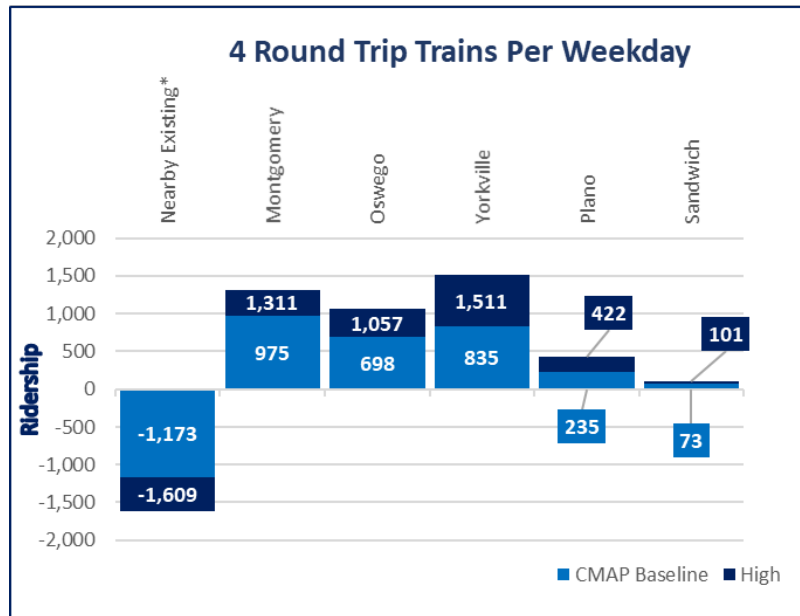
Net New Boardings**	
CMAP Baseline	1,832
High	3,057

*Includes Aurora, Route 59 & Elburn

** At outlying stations on/near extension

2050 Extension of Service to Sandwich (S)

Values Shown Are Total Riders For Each Scenario and Station



Net New Boardings**	
CMAP Baseline	1,643
High	2,793

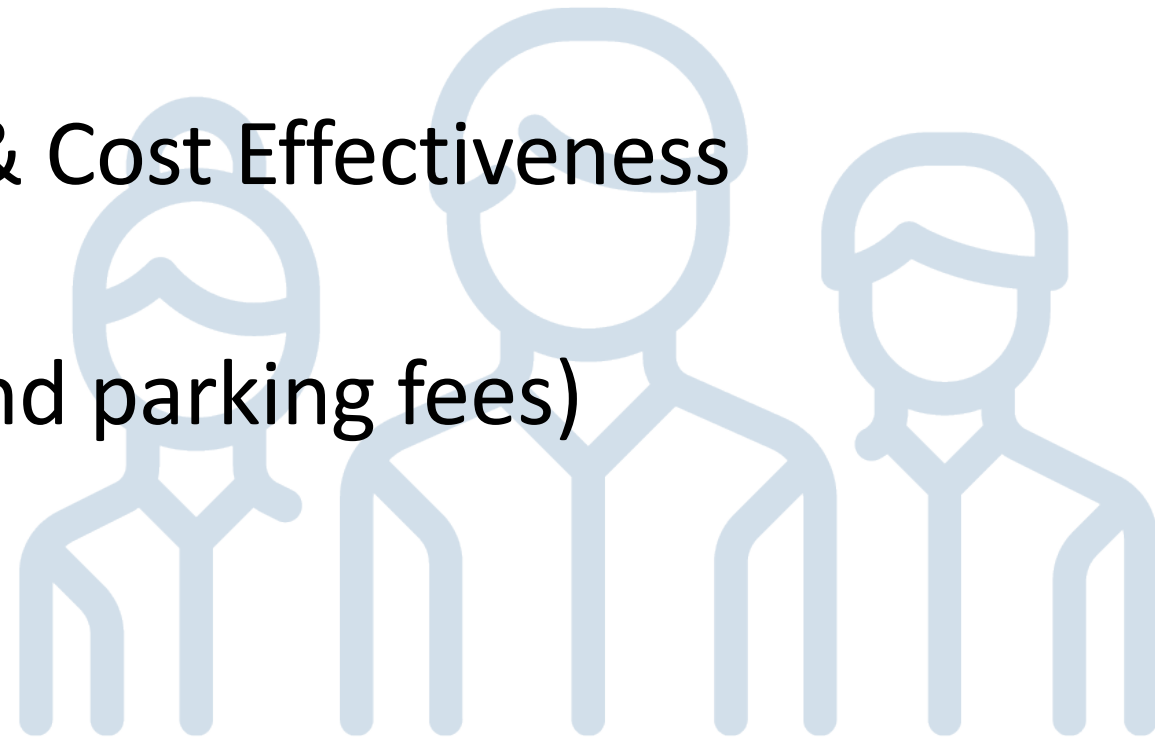
Net New Boardings**	
CMAP Baseline	1,936
High	3,167

*Includes Aurora, Route 59 & Elburn

** At outlying stations on/near extension

Ridership Analysis

- **Ridership is Key to the Kendall Extension Analysis**
 - Sizing of stations and parking lots
 - Rolling stock needs
 - FTA Ratings for Cost Benefit & Cost Effectiveness
 - Environmental Savings (VMT)
 - Revenue Projections (fares and parking fees)



Questions?

Website:

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