

# Oconee County Transit Feasibility Study

Implementation Plan Presentation

May 29, 2014

DRAFT



**URS**

# Overview

- Original Study Completed in December 2008
- Goals of Update
  - Re-engage public
  - Integrate 2010 Census data
  - Review current transit service
  - Benchmark peer communities
  - Recommended next steps
    - Expand service to Walhalla, Westminster, and other parts of Oconee County



# Review of Current Transit Service in Oconee County

- Clemson Area Transit (CAT)
- Began operating in Oconee County in 2006
  - Three routes
  - 50% in City of Seneca
  - 50% in unincorporated Oconee County



# Path Forward

- Form Transit Advisory Task Force
- Perform an origin-destination study
- Begin dialogue with the City of Seneca and CAT concerning expanded service
- Identify funding
- Finalize service plan
- Finalize financial plan
- Implement new services





# Study Elements

- Develop and administer survey of key area employers (O & D Study also)
- Develop a Service Implementation Plan
- Estimate operational, maintenance, and capital costs
- Determine capital equipment and facility requirements
- Prepare Financial Plan
- Conduct meetings with Transit Advisory Task Force Committee



# Key Area Employer Survey

- Designed key employer survey and initiated survey website
- The Greater Oconee County Chamber of Commerce sent an electronic link for survey to their membership in an e-newsletter
- Conducted telephone interaction with area employers to encourage them to participate in employer survey
- Three responses to date
  - Low interest from employers





# Commute Patterns (O&D Analysis)

- Utilized US Census Bureau's Longitudinal Employer-Household Dynamics (LEHD) Origin-Destination Employment Statistics (LODES)
- Describes geographic patterns of jobs by employment locations and residential locations as well as the connections between the two locations



# Commute Patterns (O&D Analysis)

- LEHD data was analyzed to determine the census tract location of employees residing in the communities of Clemson, Seneca, Walhalla, and Westminster





# CLEMSON RESIDENTS' COMMUTE PATTERNS AND JOB LOCATIONS (2011)

## LEGEND

NUMBER OF CLEMSON BASED EMPLOYEES

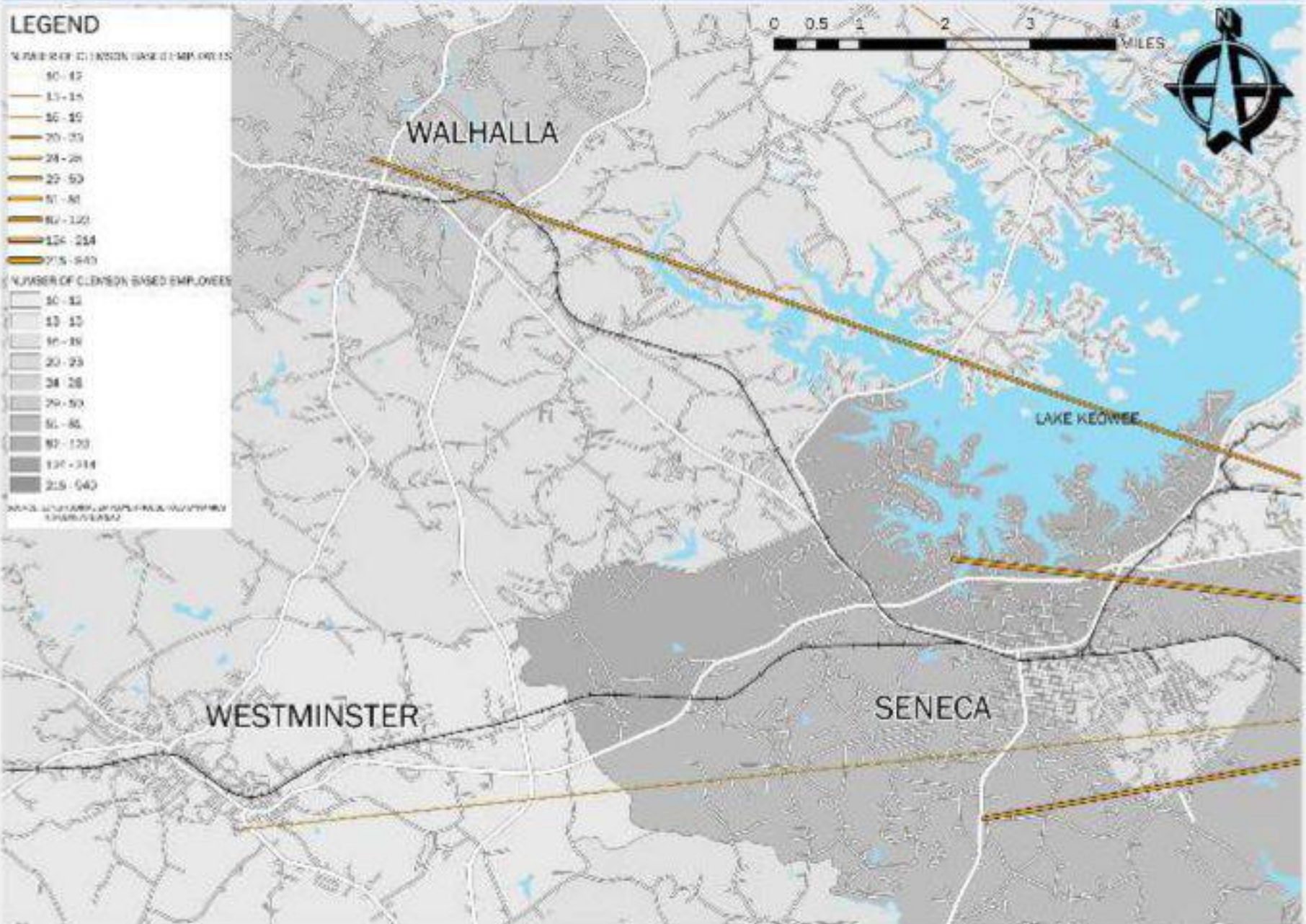
- 0 - 12
- 13 - 15
- 16 - 20
- 21 - 25
- 26 - 30
- 31 - 40
- 41 - 100
- 101 - 254
- 255 - 500

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NUMBER OF CLEMSON BASED EMPLOYEES

- 0 - 12
- 13 - 15
- 16 - 20
- 21 - 25
- 26 - 30
- 31 - 40
- 41 - 100
- 101 - 254
- 255 - 500





# SENECA RESIDENTS' COMMUTE PATTERNS AND JOB LOCATIONS (2011)

## LEGEND

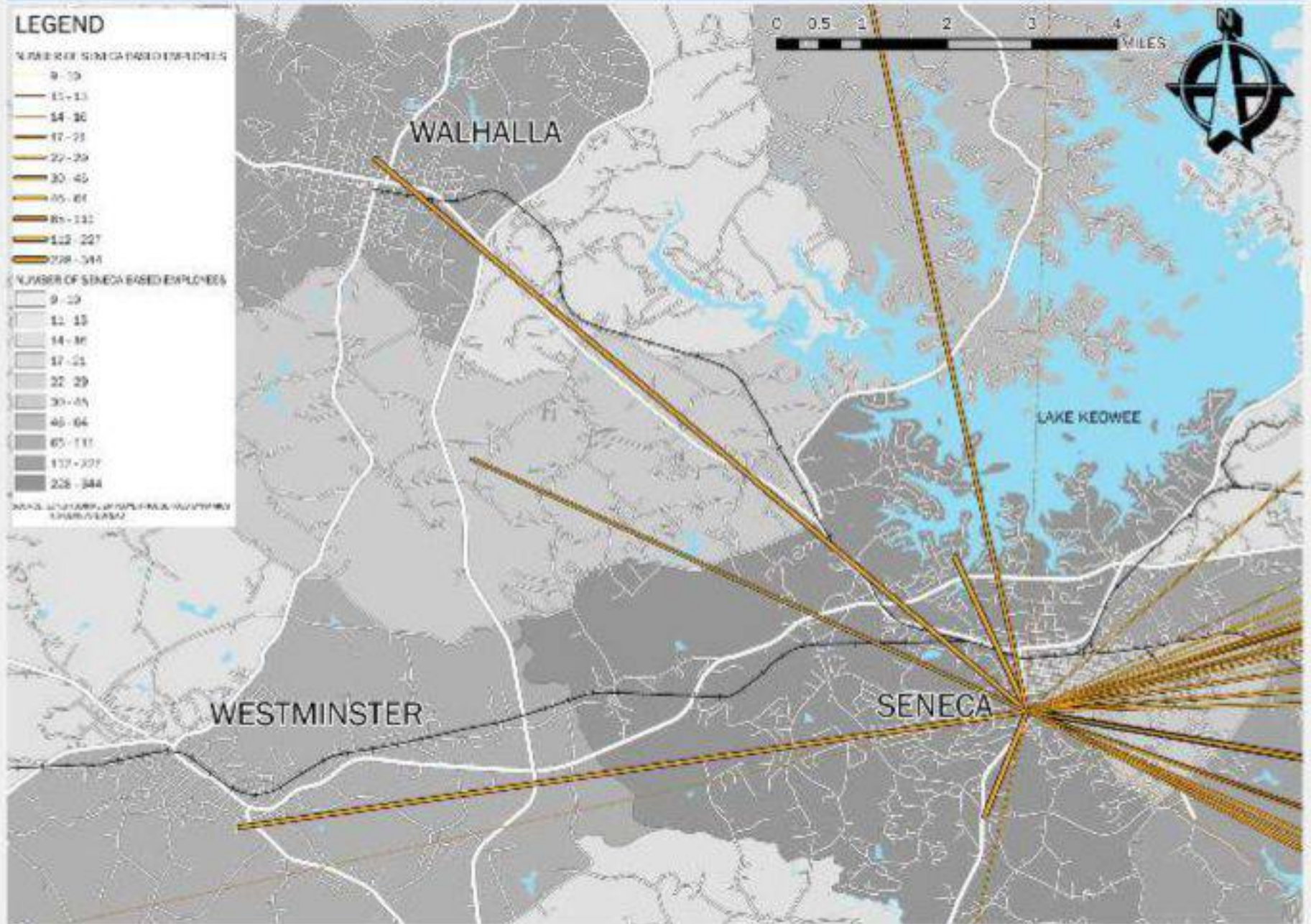
### NUMBER OF SENECA-BASED EMPLOYEES



### NUMBER OF SENECA-BASED EMPLOYEES



MAPS: CITY OF SENECA, WASHINGTON STATE UNIVERSITY





# WALHALLA RESIDENTS' COMMUTE PATTERNS AND JOB LOCATIONS (2011)

## LEGEND

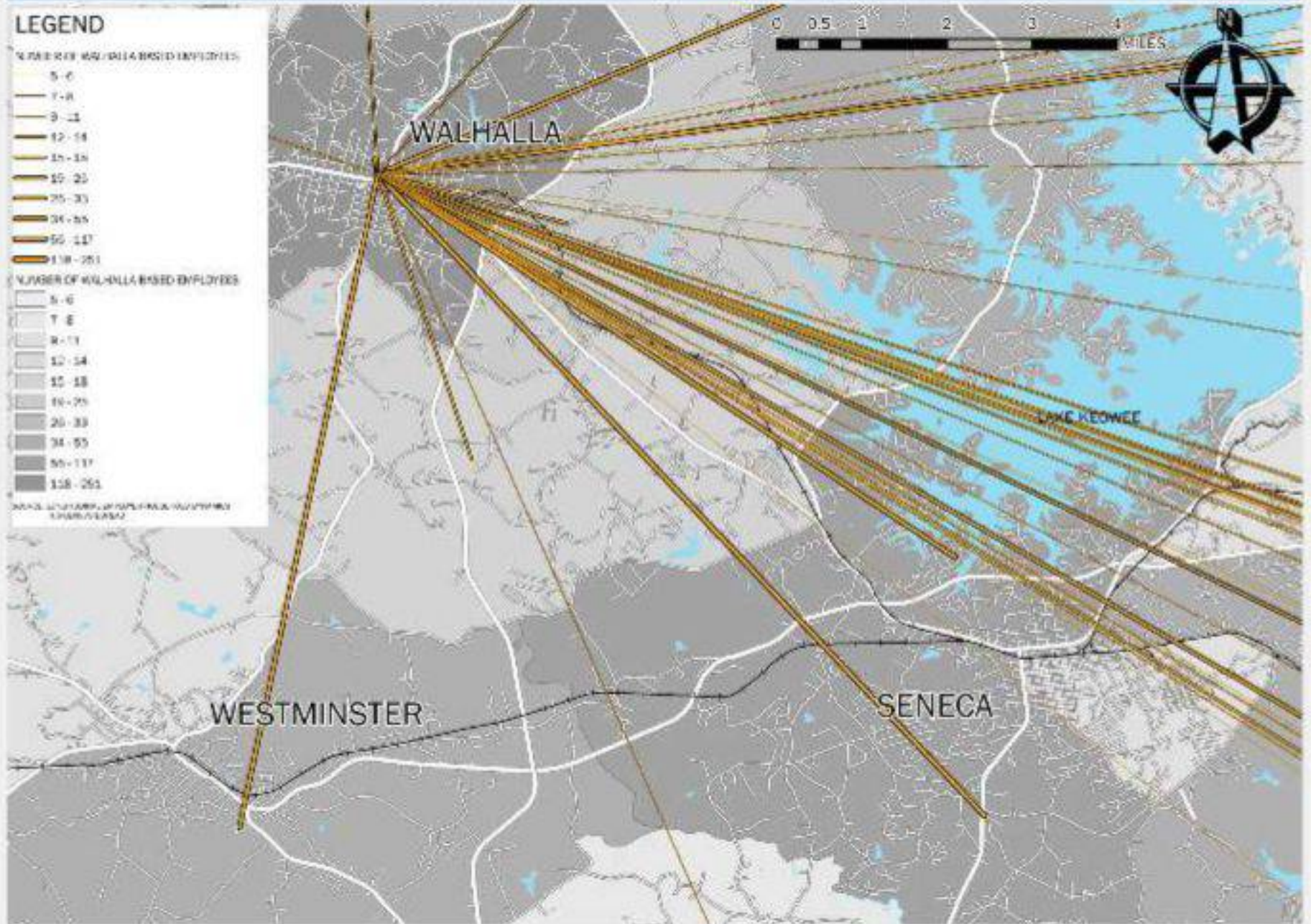
### NUMBER OF WALHALLA-BASED EMPLOYEES



### NUMBER OF WALHALLA-BASED EMPLOYERS



MAPS COURTESY OF POLYTRAK/WALHALLA  
COMMUNITY





# WESTMINSTER RESIDENTS' COMMUTE PATTERNS AND JOB LOCATIONS (2011)

**LEGEND**

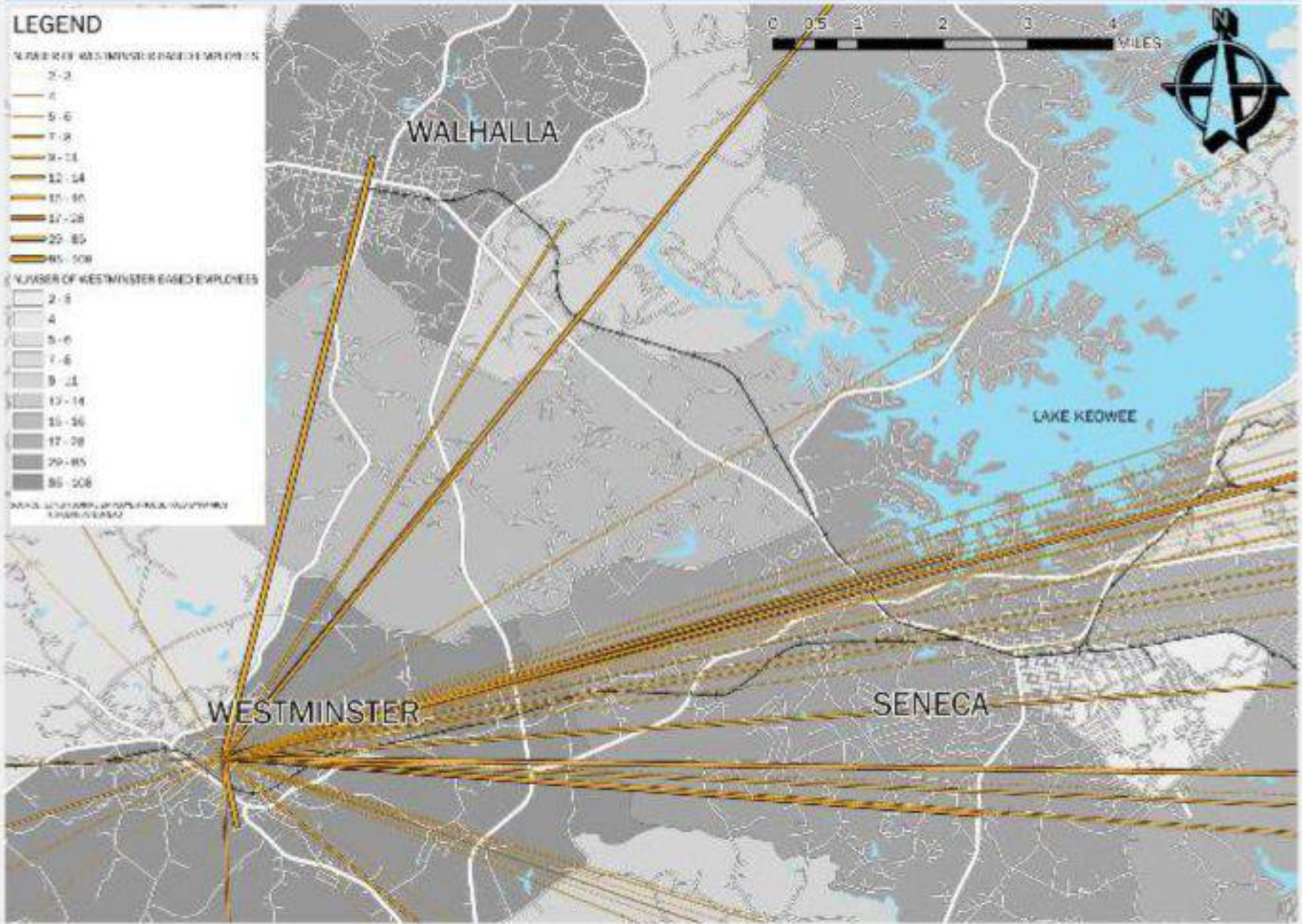
**NUMBER OF WESTMINSTER-BASED EMPLOYERS**

- 2-3
- 4
- 5-6
- 7-8
- 9-11
- 12-14
- 15-16
- 17-20
- 20-30
- 45-100

**NUMBER OF WESTMINSTER-BASED EMPLOYEES**

- 2-5
- 4
- 5-6
- 7-8
- 9-11
- 12-14
- 15-16
- 17-20
- 20-30
- 30-45
- 45-100

DATA SOURCE: U.S. BUREAU OF ECONOMIC ANALYSIS, U.S. DEPARTMENT OF COMMERCE



# Commute Patterns (O&D Analysis)

- Findings:
  - Many Oconee County residents commute in direction of Anderson or Greenville
  - Fairly significant interaction between all four communities that were analyzed
  - More people than expected traveling between Walhalla and Westminster





# Service Implementation Plan

- Purple Route: Seneca to Walhalla
- Green Route: Seneca to Westminster
- Gold Route: Walhalla to Westminster
- Re-charge at Medical Center





# SENECA AREA EXISTING AND POTENTIAL NEW TRANSIT SERVICE

## LEGEND

### EXISTING SENECA ROUTES

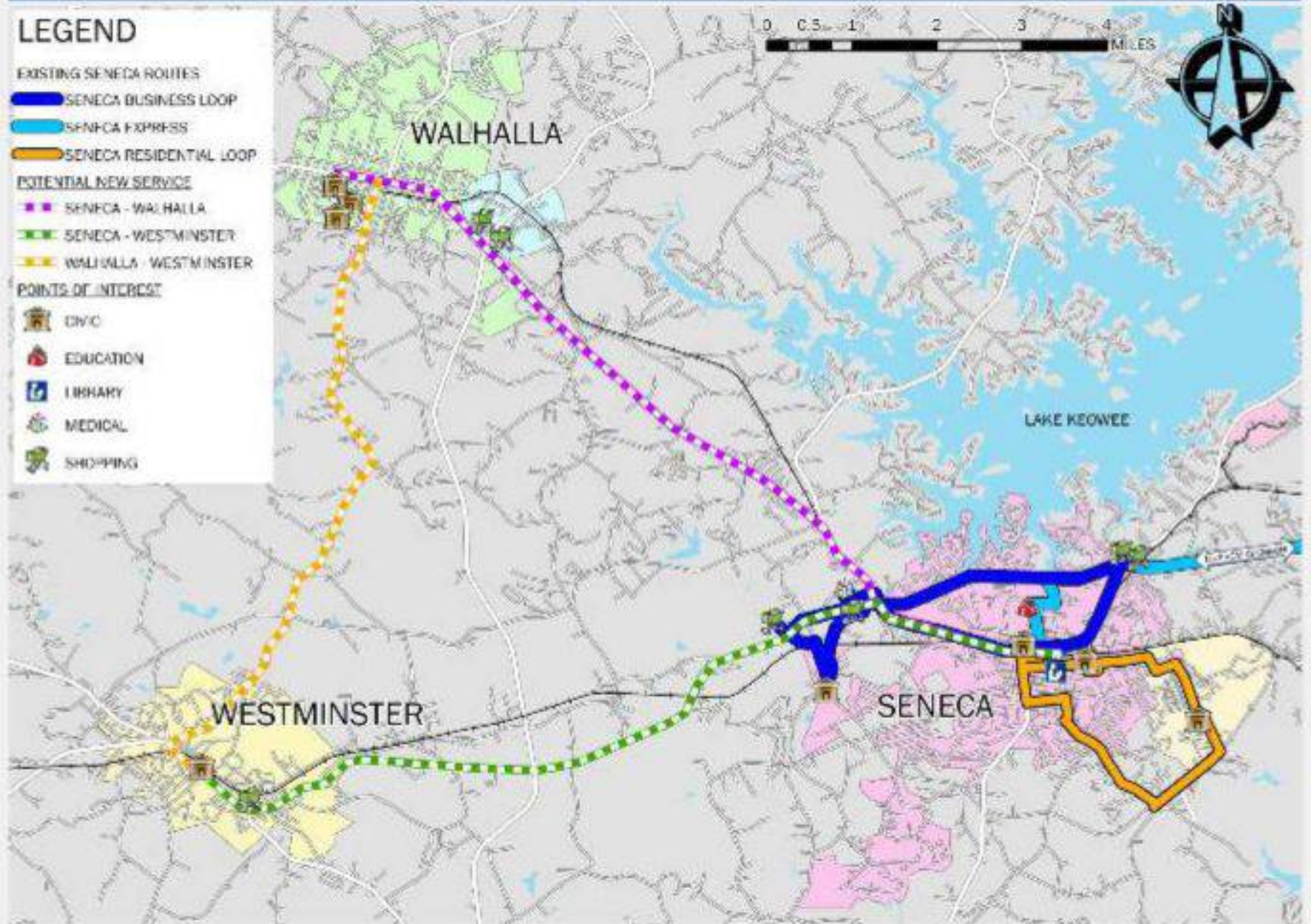
- SENECA BUSINESS LOOP
- SENECA EXPRESS
- SENECA RESIDENTIAL LOOP

### POTENTIAL NEW SERVICE

- SENECA - WALHALLA
- SENECA - WESTMINSTER
- WALHALLA - WESTMINSTER

### POINTS OF INTEREST

- DIVC
- EDUCATION
- LIBRARY
- MEDICAL
- SHOPPING





# O&M and Capital Cost Estimates

- Assumptions

- Operating 12 hours/day for 255 weekdays/year
- Low ridership assumes 10 passengers per revenue hour; Moderate ridership assumes 20 pax/rev hour; High ridership assumes 30 pax/rev hour
  - Note: Seneca service has ~ 35 pax/rev hour based on 28,000 passengers per month / 792 revenue hours per month (36 hours per day x 22 weekdays per month)
- O&M costs based on \$65.32 operating cost per revenue hour based on City of Seneca data



# O&M and Capital Cost Estimates

## Purple Route – Seneca to Walhalla

Annual Service Statistics	60 Minute Frequency	120 Minute Frequency
Peak Vehicles	1	0.5
Fleet Vehicles	2	1
Vehicle Revenue Hours	3,060	1,530
Vehicle Revenue Miles	67,300	33,700
<b>Estimated Low Ridership <sup>1</sup></b>	<b>30,600</b>	<b>15,300</b>
<b>Estimated Moderate Ridership</b>	<b>61,200</b>	<b>30,600</b>
<b>Estimated High Ridership</b>	<b>91,800</b>	<b>45,900</b>
<b>Annual O&amp;M Cost <sup>2</sup></b>	<b>\$199,879</b>	<b>\$99,940</b>
<i>Estimated Cost per Revenue Hour</i>	<i>\$65.32</i>	<i>\$65.32</i>





# O&M and Capital Cost Estimates

## Green Route – Seneca to Westminster

<b>Annual Service Statistics</b>	<b>60 Minute Frequency</b>	<b>120 Minute Frequency</b>
Peak Vehicles	1	0.5
Fleet Vehicles	2	1
Annual Vehicle Revenue Hours	3,060	1,530
Annual Vehicle Revenue Miles	58,100	29,100
<b>Estimated Low Ridership <sup>1</sup></b>	<b>30,600</b>	<b>15,300</b>
<b>Estimated Moderate Ridership</b>	<b>61,200</b>	<b>30,600</b>
<b>Estimated High Ridership</b>	<b>91,800</b>	<b>45,900</b>
<b>Annual O&amp;M Cost <sup>2</sup></b>	<b>\$199,879</b>	<b>\$99,940</b>
<i>Estimated Cost per Revenue Hour</i>	<i>\$65.32</i>	<i>\$65.32</i>



# O&M and Capital Cost Estimates

## Gold Route – Walhalla to Westminster

<b>Annual Service Statistics</b>	<b>30 Minute Frequency</b>
Peak Vehicles	1
Fleet Vehicles	2
Annual Vehicle Revenue Hours	3,060
Annual Vehicle Revenue Miles	91,800
<b>Estimated Low Ridership <sup>1</sup></b>	<b>30,600</b>
<b>Estimated Moderate Ridership</b>	<b>61,200</b>
<b>Estimated High Ridership</b>	<b>91,800</b>
<b>Annual O&amp;M Cost <sup>2</sup></b>	<b>\$199,879</b>
<i>Estimated Cost per Revenue Hour</i>	<i>\$65.32</i>





# O&M and Capital Cost Estimates

## Summary

Annual Service Statistics	Purple and Green Routes		Purple Route Only	Gold Route Only
	60 Minute Frequency	120 Minute Frequency	60 Minute Frequency	30 Minute Frequency
Peak Vehicles	2	1	1	1
Fleet Vehicles	4	2	2	2
Annual Vehicle Revenue Hours	6,120	3,060	3,060	3,060
Annual Vehicle Revenue Miles	125,400	62,800	67,300	91,800
Estimated Low Ridership <sup>1</sup>	61,200	30,600	30,600	30,600
Estimated Moderate Ridership	122,400	61,200	61,200	61,200
Estimated High Ridership	183,600	91,800	91,800	91,800
O&M Cost <sup>2</sup>	\$399,758	\$199,879	\$199,879	\$199,879
Estimated Cost per Revenue Hour	\$65.32	\$65.32	\$65.32	\$65.32



# O&M and Capital Cost Estimates

- Capital Requirements
  - One to three buses
  - Nine to eleven shelters
- Capital Cost Estimates
  - Dependent on type of bus, shelters and signage





# Financial Plan

- Finalizing operating and maintenance cost element
- Determining the capital cost estimate
- Reviewing potential funding sources



# Discussion





# Next Steps

- Summarize and consider TATFC comments
- Refine conceptual transit service alternatives and phases
- Finalize Financial Plan
- Prepare final Implementation Plan

