



**Final Draft Plan**

**City of Tiffin & Surrounding Area:  
Bus Transit Development Plan**

**Prepared for the City of Tiffin, Seneca  
Regional Planning Commission, and  
SCAT**

**October 14, 2019**



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# INTRODUCTION

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## OVERVIEW

The City of Tiffin, Ohio and surrounding areas of Seneca County are served by Seneca Crawford Area Transportation, also known by its acronym, SCAT. The stated mission of SCAT is “to serve the public of Seneca and Crawford Counties by providing a safe, reliable, affordable, and efficient public transportation system.” SCAT is an advanced reservation, demand-responsive transportation service that is available to the general public in the two counties. In 2017, SCAT expanded from serving only Seneca County to providing transportation in adjacent Crawford County. This expansion prompted the agency to change its name from Seneca County Agency Transportation to Seneca Crawford Area Transportation. The main SCAT facility is located in Tiffin at 3446 South Township Road 15, in a building constructed in 2013 with grant funds provided under the American Recovery and Reinvestment Act (ARRA). SCAT service in Crawford County is coordinated from a local office in Bucyrus, Ohio.

In 2015, Heidelberg Business Institute (HBI), a consulting service offered by Heidelberg University’s School of Business, located in Tiffin, conducted a feasibility study on behalf of SCAT to estimate demand for a fixed route bus service. SCAT and HBI initiated this study after finding that only a small percentage of Tiffin residents use SCAT’s demand-response service. A scheduled service would provide working adults and Tiffin’s college student population with more flexibility and convenience than can be provided through demand-response transportation.

The HBI study included a demographic and travel pattern analysis using U.S. Census data; focus group meetings of community leaders; surveys of the public and college students; and a rural transit demand analysis utilizing the methodology provided by the Transit Cooperative Research Program (TCRP) Web-Only Document 49: Methods for Forecasting Demand and Quantifying Need for Rural Passenger Transportation. The study concluded that a scheduled route service is feasible for Tiffin and would provide between 11,000 and 66,000 one-way passenger trips per year to the community. In 2018, the Seneca Regional Planning Commission contracted with RLS & Associates, Inc. to create a Tiffin transit route operational plan, as a Phase II analysis that would prepare SCAT and its partners for implementation of the service.

## PROJECT LAUNCH

RLS & Associates, Inc. (RLS) conducted a project kick-off meeting on May 30, 2018 at Tiffin City Hall. This meeting was attended by the following community leaders:

- ◆ Charlene Watkins, Executive Director, Seneca Regional Planning Commission
- ◆ John Detwiler, Seneca Regional Chamber of Commerce
- ◆ Mary Habig, Executive Director, SCAT
- ◆ Elizabeth Rickard, Safety Manager, SCAT
- ◆ Amy Reinhart, Downtown Main Street
- ◆ Pat DeMonte, Executive Director, Tiffin-Seneca United Way

- ◆ Dan Reineke, Tiffin Ford
- ◆ Ron Davidson, Transportation Director, Seneca County Opportunity Center
- ◆ Carol Iannantuono, Seneca County Opportunity Center and SCAT Board Member
- ◆ Cathy Faber, Seneca County Opportunity Center and SCAT Board Member
- ◆ Aaron Montz, Mayor of Tiffin

The attendees discussed transportation needs in Tiffin and how a fixed bus route would benefit residents, university students, and businesses. The RLS Project Manager, Ray Boylston, explained that Tiffin, as compared to other cities of its size, has substantial population density in its core, which is likely to generate bus ridership. He explained that strong ridership would depend heavily on route design and frequency (how often the buses pick up at bus stops), as well as marketing of the new service. New bus routes build ridership slowly, taking two to three years to generate 75 percent of ridership potential. Linear routes, rather than loops, experience higher ridership. Transfers are usually necessary but should be limited to one planned transfer during the typical one-way passenger trip, if possible.

During the meeting, it was noted that the City of Tiffin develops the following calendar year's budget in the fall with budget adoption in early December. SCAT submits the annual grant application to the Ohio Department of Transportation typically during the first week of December.

The meeting attendees agreed that the following agencies will be represented on the project steering committee:

- ◆ Seneca Regional Planning Commission
- ◆ Tiffin University
- ◆ Heidelberg University
- ◆ Job and Family Services
- ◆ Board of Developmental Disabilities
- ◆ Commission on Aging
- ◆ Mayor of Tiffin
- ◆ SCAT Board of Directors/Staff
- ◆ Downtown Main Street and/or Chamber of Commerce
- ◆ Seneca County Commissioners

# SCAT

## SERVICE CHARACTERISTICS

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### TRANSPORTATION SERVICES PROVIDED BY SCAT

SCAT is a demand-response transportation service, requiring that customers call the scheduling office in advance to request each ride. Rides are provided in a curb-to-curb fashion, meaning that the vehicle stops at the curb in front of the residence or main building entrance to allow customers to board or alight. Customers may request that drivers provide door-to-door assistance between the curb and the entrance of the origin or destination. Rides must be scheduled at least 48 hours in advance; 72 hours advance notice is required for out of county trips. Passenger fares are listed in Table 1.

In-town	\$2.00 per trip
Within 3-mile radius	\$3.00 per trip
Within 7-mile radius	\$4.00 per trip
All other county trips (within Seneca and Crawford Counties)	\$5.00 per trip
Out of county	\$25.00/round trip
Elderly or disabled	Half of regular fare, in-county trips only

Out of county trips are available to all adjoining counties. Seneca County residents may ride to Crawford, Hancock, Huron, Wood, Wyandot, or Sandusky Counties. Crawford County residents may ride to Huron, Marion, Morrow, Richland, Seneca, or Wyandot Counties.

### SCAT SERVICE STATISTICS AND PERFORMANCE

The National Transit Database report for SCAT for 2016, the most recent annual agency profile available, reflects the data included in Table 2.

<b>Table 2: SCAT Data, National Transit Database, 2016</b>	
Operating Revenue	\$1,098,018
Passenger Fare Revenue	\$83,990
Total Expenses	\$1,182,008
Unlinked Passenger Trips	96,423
Vehicle Revenue Miles	376,340
Vehicle Revenue Hours	27,695
Trips per Revenue Mile	0.26
Trips per Revenue Hour	3.48
Operating Cost per Trip	\$12.26
Operating Cost per Revenue Mile	\$3.14
Operating Cost per Revenue Hour	\$42.68

SCAT management provided recent service statistics by exporting reports from ParaPlan scheduling and dispatching software.

<b>Table 3: SCAT Service Statistics, January - June, 2018</b>							
	<b>January</b>	<b>February</b>	<b>March</b>	<b>April</b>	<b>May</b>	<b>June*</b>	<b>Total</b>
Total Trips	5,944	6,231	6,669	6,494	6,113	3,663	35,114
Total Riders	6,315	6,854	7,425	7,179	6,920	4,299	38,992
Total Passenger Miles	45,600	49,408	58,674	58,531	54,873	29,147	296,231
Total Subscriptions Served	3,958	4,410	4,571	4,526	4,099	1,766	23,330
Total Wheelchair Trips	893	910	979	959	1,007	802	5,550
Total Cancellations	2,343	1,848	2,213	1,580	1,384	891	10,259
Total No-Shows	215	225	221	166	182	104	1,113
Revenue Hours	2,893	2,889	3,054	3,009	3,008	2,274	17,128
Deadhead Hours	604	565	555	593	575	379	3,270
Total Service Hours	3,501	3,454	3,634	3,595	3,587	2,653	20,424
Revenue Miles	42,085	43,107	45,642	45,227	45,737	32,695	254,493
Deadhead Miles	10,649	10,721	10,150	10,527	10,304	6,296	58,647
Total Service Miles	52,776	53,828	55,792	55,754	56,129	39,261	313,540

*\*SCAT management attributes June ridership decrease to schools being out of session, impacting student ridership, as well as regular riders taking vacations.*

## **PASSENGER CHARACTERISTICS**

Over the first six months of Calendar Year 2018, 1,001 unique individuals used SCAT for transportation. Of these individuals, 601 are classified in ParaPlan as needing some form of assistance, such as wheelchair accessibility, due to a disability.

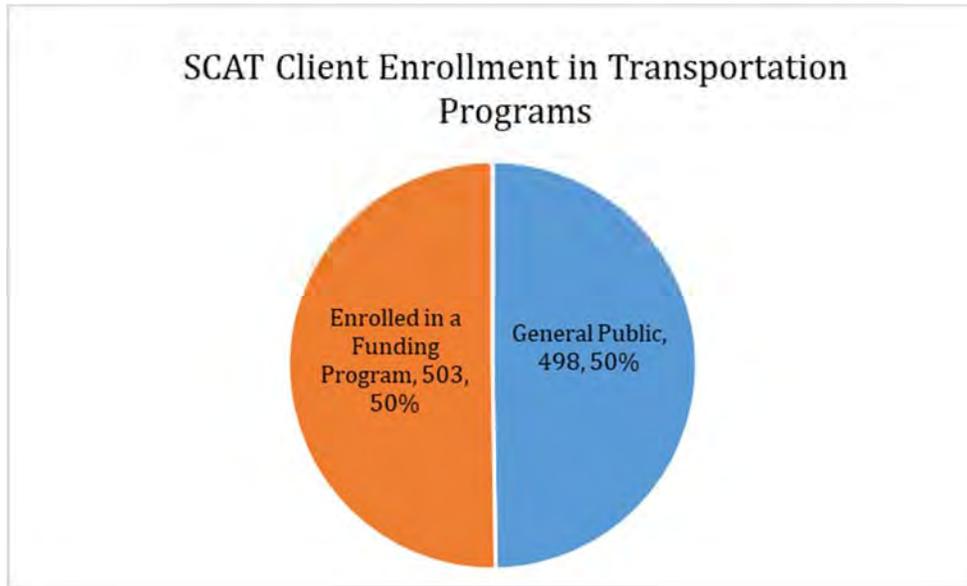
Fifty percent of SCAT clients are enrolled in programs that sponsor the cost of their rides. Funding sponsors typically include governmental agencies serving individuals with disabilities, vocational programs, Medicaid, social services agencies, veterans service organizations and

others. Individuals who use SCAT but are not sponsored by an agency are classified as General Public riders. The programs funding SCAT client transportation, and their associated client counts, are listed in Table 4.

Table 4: SCAT Client Funding Programs							
Program	Client Count	Program	Client Count	Program	Client Count	Program	Client Count
AMVETS	1	Future Horizons	2	NCOESC	3	SMYL	4
AWCC	35	GED	1	NET-In Town	4	Tiffin Rehab. Center	18
Bill	3	General Public	336	NET-Out of Town	21	T-S UW	10
Bridges	16	GSNH	35	No Charge	1	VOL	1
Carey Schools	2	Half Fare	3	Occupational Health	6	Webster	1
Donation	1	Ind. House	10	OFS	2	Work Connections	1
E&D	207	IOP	6	PHP	1	Wynford	1
FACT	1	Kidney	1	Pre-Paid-E&D	3		
FAET (Formerly WEP)	2	M-Clients	1	Reclaim Your Family	7		
FCS-Medicaid	6	MHR	13	SCCC	42		
FO UW	7	NCA	8	SFNH	11		

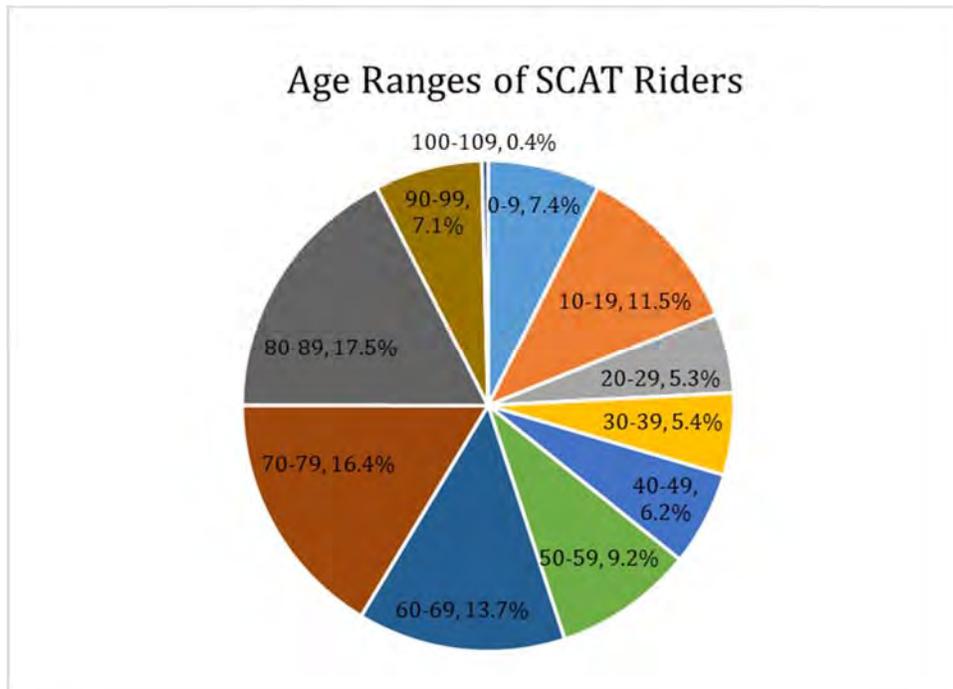
Figure 1 summarizes the proportions of clients who are enrolled in transportation funding programs and those who are general public riders or have no assigned funding program.

**Figure 1: SCAT Client Enrollment in Transportation Programs**



SCAT serves clients of all ages, with a slight majority (55%) aged 60 and older. A notable percentage (18.9%) of clients are aged 10 or younger. Figure 2 displays the age distribution of SCAT clients.

**Figure 2: Percentage of SCAT Riders by Age Range**



## AGENCY EXPENSES AND REVENUES

### Calendar Year 2018 Operating Budget

SCAT's operating budget for CY 2018 is \$1,883,550. Table 5 provides operating expenses by category.

<b>Table 5: SCAT CY 2018 Operating Expenses</b>	
Operator Salaries and Wages	\$596,000
Admin Salaries and Wages	\$165,000
Other Salaries and Wages	\$143,050
Operator Fringe Benefits	\$48,250
Admin Fringe Benefits	\$60,200
Operator Paid Leave	\$6,200
Admin Paid Leave	\$12,800
Other Paid Leave	\$12,200
All Services	\$75,000
Fuel and Lubricants	\$490,000
Tires and Tubes	\$30,000
Other Materials and Supplies (Admin)	\$18,000
Other Materials and Supplies (Non-admin)	\$20,000
Utilities	\$64,500
Insurance Premiums	\$56,350
Recoveries of Damage Losses	\$7,000
Taxes	\$2,000
Travel and Meetings	\$12,000
Advertising, Printing	\$28,000
Other Miscellaneous Expense	\$31,000
Leases and Rentals (Other General Administration Facilities)	\$6,000
<b>Total</b>	<b>\$1,883,550</b>

SCAT's major funding sources are a Federal Transit Administration (FTA) Section 5311 grant, revenue from providing transportation under contracts, State of Ohio General Revenue Fund, and Local Share. Local Share funds are contributions from non-State and non-Federal sources. SCAT's sources of Local Share are the United Way, charitable foundations, and local service clubs. FTA Section 5311 grants are administered by the Ohio Department of Transportation (ODOT) and provide funding support for public transportation in rural areas, defined as areas with fewer than 50,000 in population. Section 5311 grants are matching grants, requiring transit agencies fund no more than 50 percent of operating expenses with Federal grant funding. The Ohio General Revenue Funds are also administered by ODOT through the Ohio Public Transportation Grant Program (OPTGP). OPTGP funds may be used for up to 30% of a transit system's eligible operating expenses (total operating expenses less farebox revenue).

<b>Table 6: SCAT CY 2018 Operating Revenue</b>	
State GRF (now known as OPTGP)	\$185,000
State E & D	\$20,000
Federal Assistance	\$726,000
Passenger Paid Fares	\$150,550
E & D Fares	\$52,000
Contract Revenue	\$445,150
Advertising Revenue	\$24,000
Local Share	\$280,850
<b>Total</b>	<b>\$1,883,550</b>

### **Calendar Year 2018 Capital Budget**

SCAT's capital expenses in 2018 were capitalized maintenance of its vehicles. The primary expense was contracted mechanic services provided by maintenance shops. FTA funding for capitalized maintenance requires a 10 percent local match, with FTA funding providing 90 percent of the capital maintenance budget.

<b>Table 7: SCAT CY 2018 Capital Expenses</b>	
Salaries and Wages	\$5,000
Professional and Technical Services	\$170,750
Tires and Tubes	\$5,000
Other Materials and Supplies	\$20,000
Leases and Rentals (Engine House, Car Shops and Garages)	\$18,000
<b>Total</b>	<b>\$218,750</b>

<b>Table 8: SCAT CY 2018 Capital Revenue</b>	
Federal Assistance	\$196,875
Local Share	\$21,875
<b>Total</b>	<b>\$218,750</b>

### **FOUR-YEAR CAPITAL AND OPERATING PLANS**

The Ohio Department of Transportation, which administers FTA and State of Ohio funds for rural transit systems, requires subrecipients to complete Four Year Capital and Operating Plans on an annual basis. The SCAT 2018-2021 Four Year Capital and Operating Plan describes the agency's projected capital and operating funding needs over the four-year horizon.

**Table 9: SCAT Four Year Capital and Operating Plan**

Year	Project	Estimated Cost	Federal Share	Local Share
2018	Operating Assistance	\$911,000*		
2018	Capitalized Maintenance	\$196,875*		
2018	Purchase Replacement Vehicle (1 - MMV)**	\$33,380	\$30,042	\$3,338
2018	Purchase Replacement Vehicles (2 - LTN)	\$112,728	\$101,455.20	\$11,272.80
2019	Operating Assistance	\$2,425,600		
2019	Capitalized Maintenance	\$275,799		
2019	Purchase Replacement Vehicles (3 - LTN)	\$540,000	\$432,000	\$108,000
2019	Purchase Replacement Vehicles (2 - LTV)	\$272,000	\$217,600	\$54,400
2019	Purchase Replacement Vehicle (1 - MMV)	\$38,000	\$30,400	\$7,700
2019	Purchase Expansion Vehicles (4 - LTL)	\$1,360,000	\$1,088,000	\$272,000
2019	Fare Collection Equipment	\$70,000		
2020	Operating Assistance	\$2,546,775		
2020	Capitalized Maintenance	\$289,589		
2020	Purchase Replacement Vehicles (4 - LTV)	\$1,142,400	\$913,920	\$228,480
2020	Purchase Replacement Vehicles (4 - MMV)	\$638,400	\$510,720	\$127,680
2020	Purchase of Passenger Shelters (8)	\$588,800	\$470,400	\$117,600
2021	Operating Assistance	\$2,674,114		
2021	Capitalized Maintenance	\$304,068		
2021	Purchase Replacement Vehicles (4 - LTN)	\$1,456,000	\$1,164,800	\$291,200
2021	Purchase of Surveillance/Security Equipment	\$40,000		
2021	Purchase Replacement Vehicles 4 - MMV)	\$670,320	\$536,256	\$134,064

\* 2018 amounts represent Federal and State funding amounts only

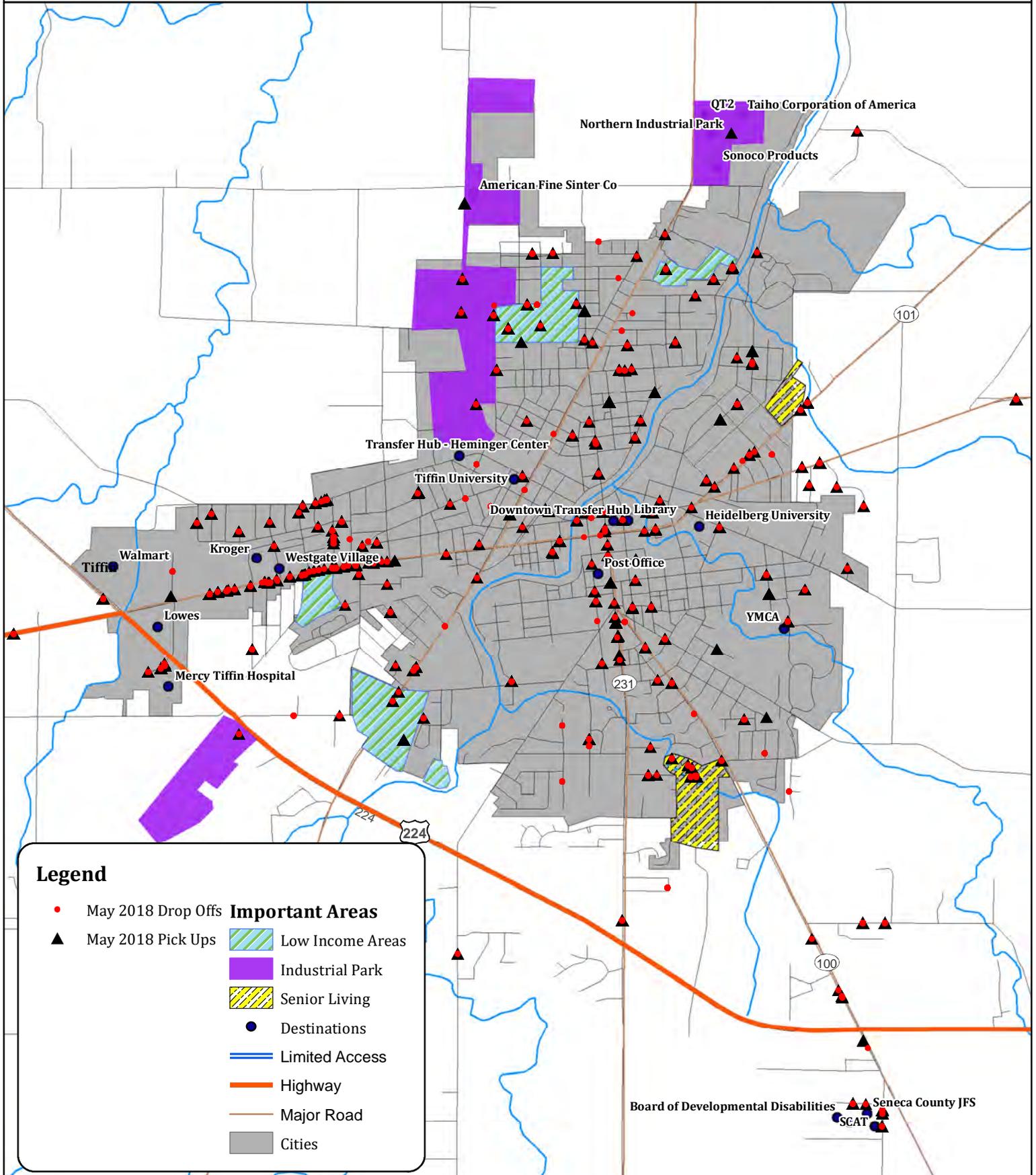
\*\*Vehicle Abbreviations: MMV = Modified Minivan; LTN = Light Transit Vehicle Narrow Body; LTV = Light Transit Vehicle; LTL = Light Transit Vehicle Low Floor

Increases in operating and capitalized maintenance expenses over 2018 levels for the years starting with 2019 are planned to accommodate a Tiffin fixed route. SCAT Executive Director Mary Habig consulted with other transit providers to determine preliminary budget figures to develop the route and included these figures in the Four-Year Plan. The planned fleet expansion of four low-floor light transit vehicles and the purchase of fare collection equipment, passenger shelters, and security equipment represent the capital expenses associated with implementation of the fixed route.

**SCAT TRIP ORIGIN/DESTINATION ANALYSIS**

Exhibit 1 is a map depicting the origins and destinations of all SCAT one-way passenger trips in May 2018. This map also displays key area characteristics, including the locations of major trip generators such as senior living facilities, industrial parks, and areas with high percentages of low-income households. These locations are likely to generate flexible route ridership and were considered for inclusion in the routing.

# Exhibit 1: Origin-Destination May 2018 Trips & Major Trip Generators



### DEMOGRAPHICS

The demographics of an area are a strong indicator of demand for transportation service. Relevant demographic data was collected and is summarized in this section. The data was gathered from multiple sources including the U.S. Census Bureau's 2016 American Community Survey (ACS) Five-Year Estimates. As five-year estimates, the data represent percentages based on a national sample, and do not represent direct population counts. Knowledge gained from local leaders' perspectives of their community are also critical when determining areas that would benefit from regular transit service.

### OLDER ADULT POPULATION

Older adults are most likely to use transportation services when they are unable to drive themselves or choose not to drive. Older adults also tend to live on a limited retirement income and, therefore, transportation services are an affordable alternative to owning a vehicle. For these reasons, the population of older adults in an area is an indicator of potential transit demand.

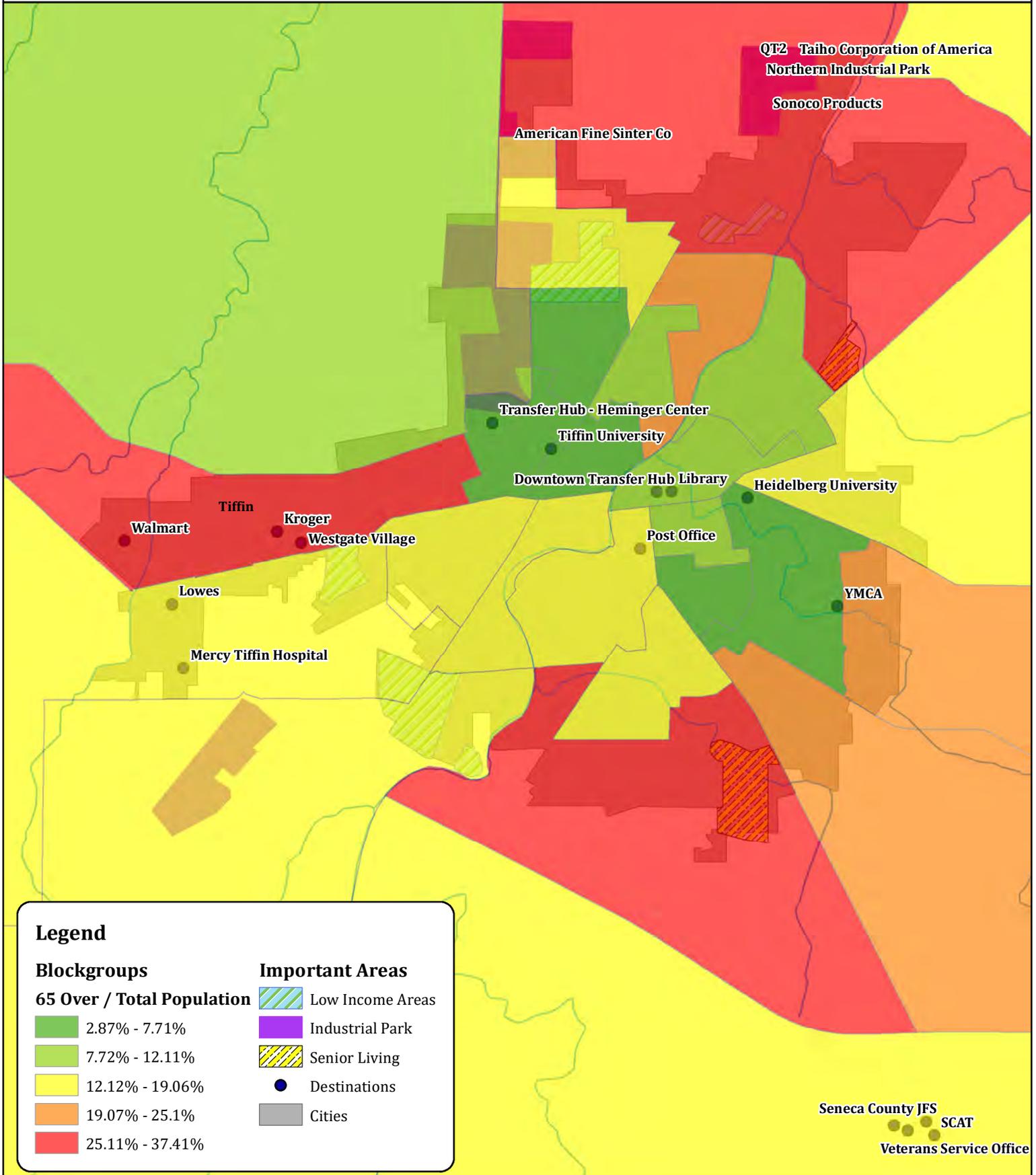
The United States population is aging, especially in rural areas. The two age cohorts with the largest percentage of growth over the last decade were the 50-54-year-old cohort and the 45-49-year-old cohort. People in these two age groups were primarily born during the post-WWII "baby boom" era defined by the Census Bureau as persons born from 1946 through 1964. These baby boomers have now reached the age of 65 and are becoming more likely to use transportation services where they are available.

Further, the Administration on Aging (U.S. Department of Health and Human Services) reports that, based on a comprehensive survey of older adults, longevity is increasing, and younger seniors are healthier than in all previously measured time in our history. Quality of life issues and an individual's desire to live independently will put increasing pressure on existing transit services to provide mobility to this population. As older adults live longer and remain independent, the potential need to provide public transit is greatly increased.

Exhibit 2 illustrates the percent population of persons over 65 years of age by block group in the City of Tiffin.

# Exhibit 2: Transportation Development Plan

## Percent Population 65 and Over



### Legend

#### Blockgroups

##### 65 Over / Total Population

	2.87% - 7.71%
	7.72% - 12.11%
	12.12% - 19.06%
	19.07% - 25.1%
	25.11% - 37.41%

#### Important Areas

	Low Income Areas
	Industrial Park
	Senior Living
	Destinations
	Cities

Seneca County JFS  
 SCAT  
 Veterans Service Office

## **POVERTY STATUS**

Exhibit 3 illustrates the percentage of the population by block group that is living below the poverty level. Persons living below the poverty level usually are some of the most transportation disadvantaged citizens in need of transit services.

## **PERCENT POPULATION 18-24 YEARS OLD**

Exhibit 4 depicts the number of residents between the ages of 18 and 24 years of age. As illustrated, the areas at or near Tiffin and Heidelberg Universities show the highest concentration of young adults (college age) who are often in need of transportation alternatives.

## **PERCENT POPULATION 16 AND OVER EMPLOYED**

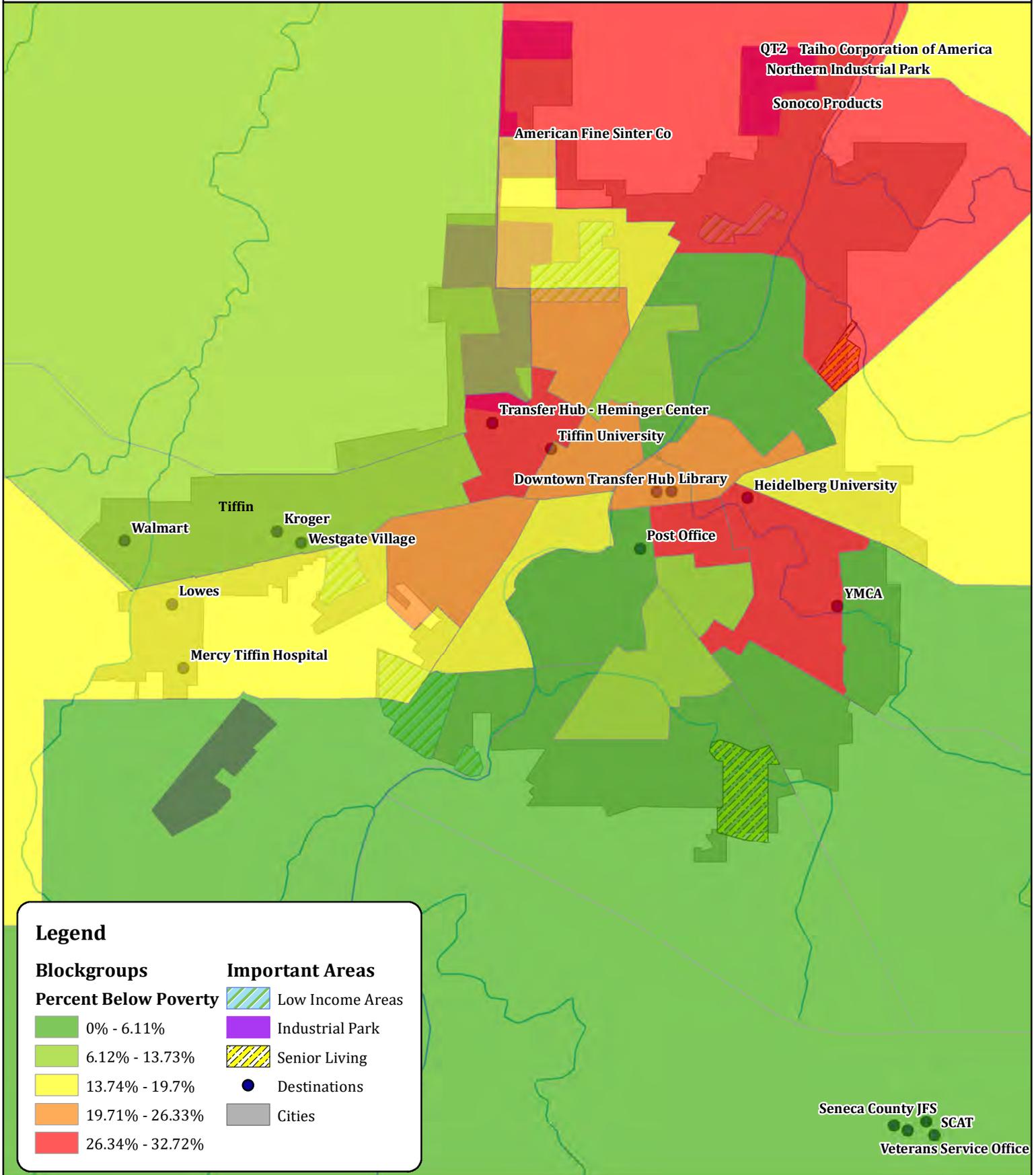
Exhibit 5 below depicts where citizens reside that are currently employed. This map gives an indication of those residents that may benefit from transit services in terms of accessing service for work purposes.

## **NUMBER OF EMPLOYEES AND WORK LOCATIONS**

Exhibit 6 below provides data on where there is the highest concentration of employees. This data is valuable as another factor in determining the placement of transit routes that may be beneficial to citizens for employment trips. Some of the largest concentrations of workers are located in the industrial park areas, east and west along Perry and Market Streets, and the southern portion of the City.

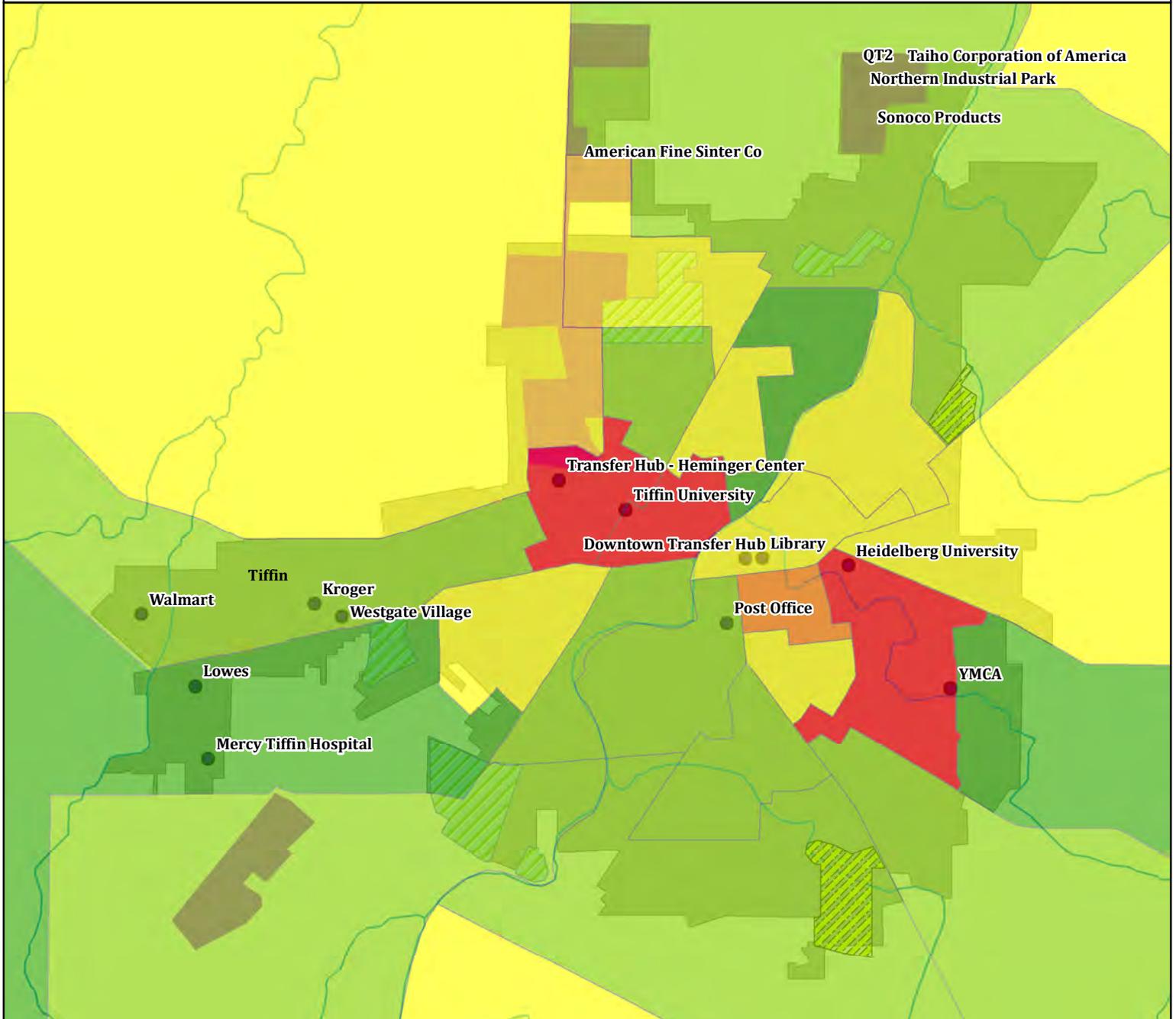
# Exhibit 3: Transportation Development Plan

## Percent Population Below Poverty



# Exhibit 4: Transportation Development Plan

## Percent Population 18-24 Years Old



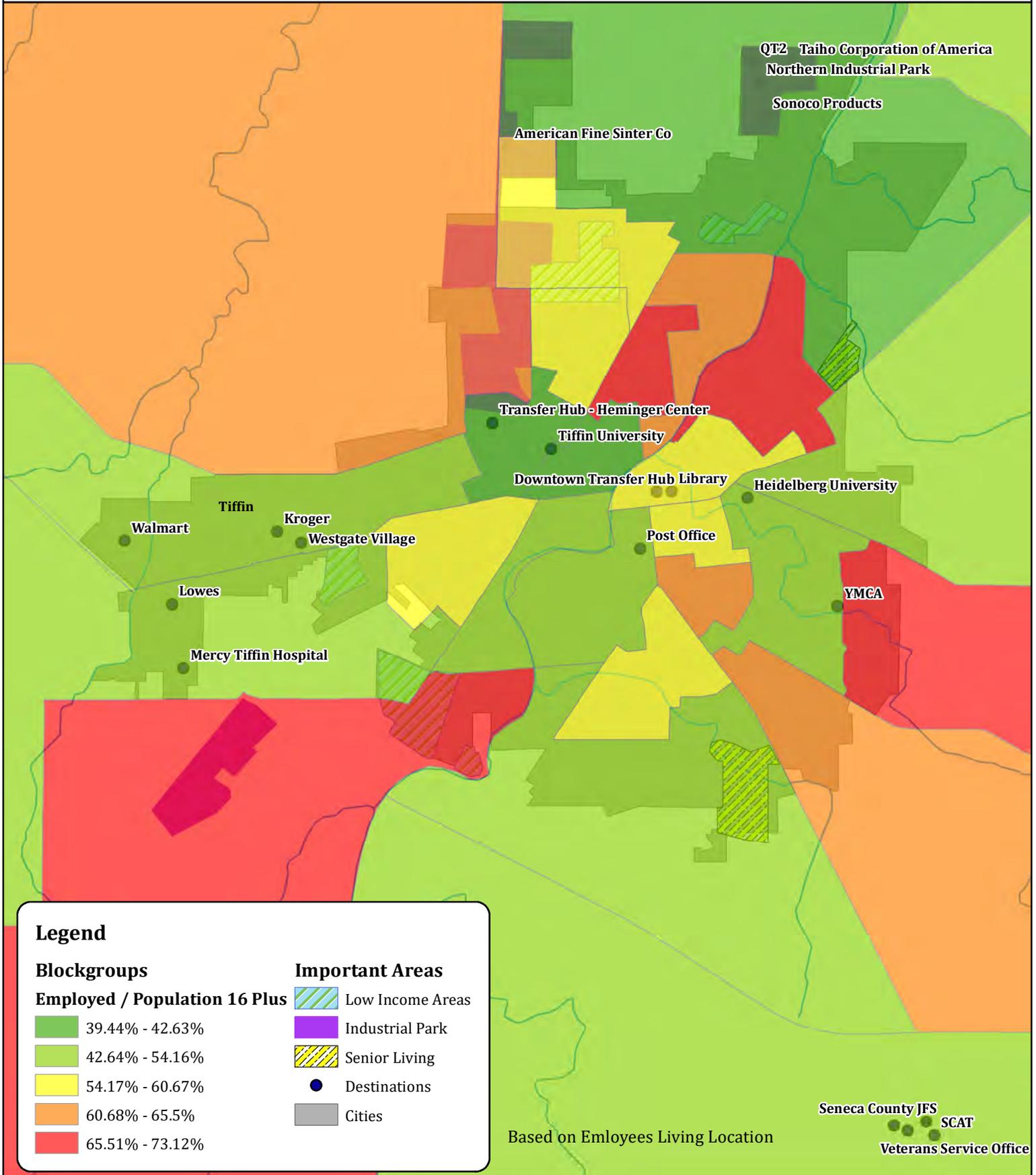
**Legend**

<b>Blockgroups</b>	<b>Important Areas</b>
<b>18-24 / Total Population</b>	Low Income Areas
1.72% - 3.73%	Industrial Park
3.74% - 8.85%	Senior Living
8.86% - 16.78%	Destinations
16.79% - 25.81%	Cities
25.82% - 53.93%	

Seneca County JFS  
 SCAT  
 Veterans Service Office

# Exhibit 5: Transportation Development Plan

## Percent Population 16 and Over Employed



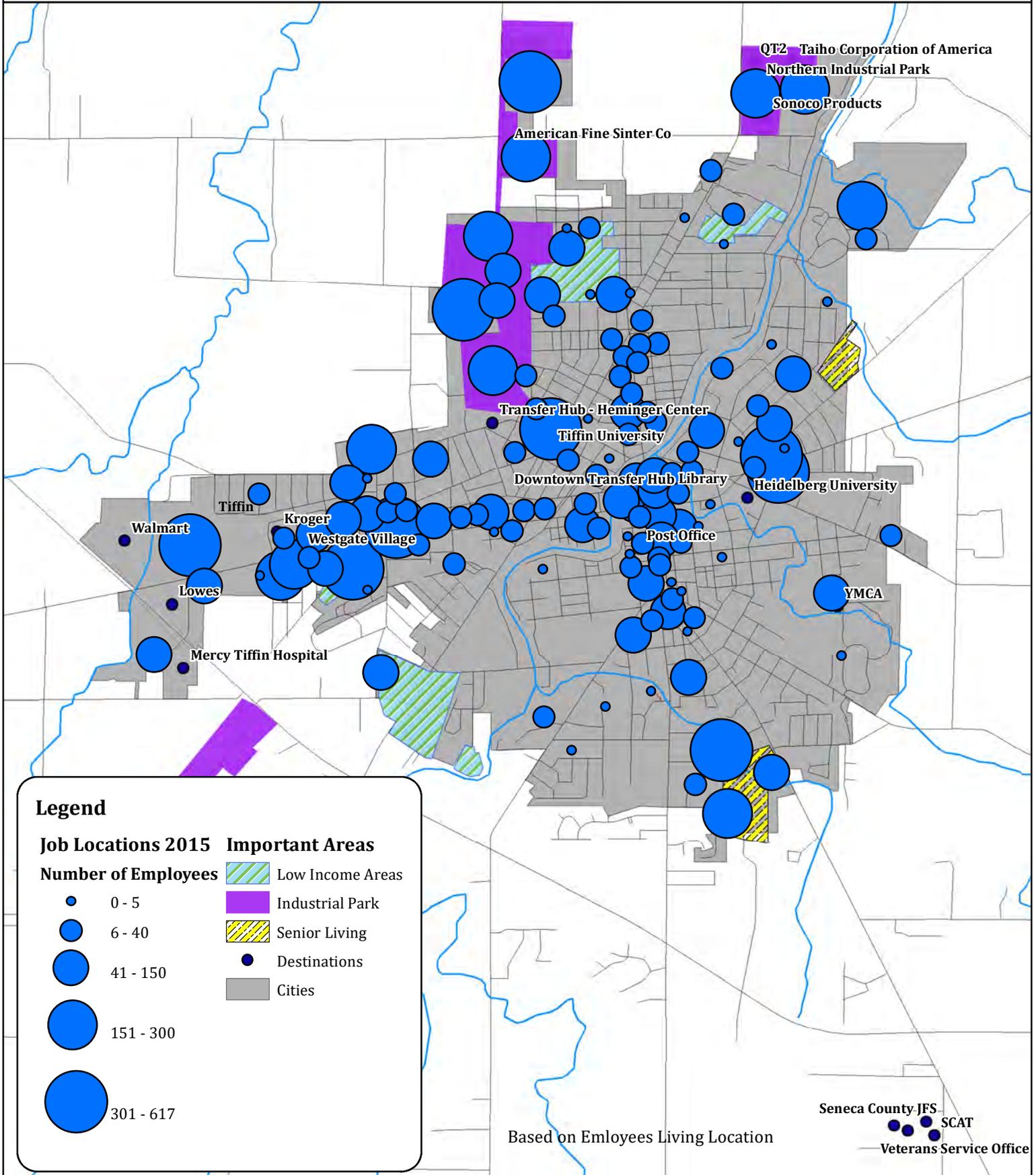
**Legend**

<b>Blockgroups</b>	<b>Important Areas</b>
<b>Employed / Population 16 Plus</b>	Low Income Areas
39.44% - 42.63%	Industrial Park
42.64% - 54.16%	Senior Living
54.17% - 60.67%	Destinations
60.68% - 65.5%	Cities
65.51% - 73.12%	

Based on Employees Living Location

# Exhibit 6: Transportation Development Plan

## Number of Employees, Work Location



# Alternatives

## DEVELOPMENT OF ALTERNATIVES

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### STAKEHOLDER AND PROJECT STEERING COMMITTEE FEEDBACK

#### General Overview of Service Design Development

Based on information gathered from key stakeholders during initial project steering committee meetings, demographic information, on-street visits of all areas of the proposed service area, industrial park employment analysis and feedback from Tiffin and Heidelberg Universities, the RLS team developed one primary fixed route service design that would have the greatest potential for ridership in the City of Tiffin. An October 29, 2018 meeting with a subcommittee of the project steering committee was instrumental in receiving valuable feedback particularly from the City of Tiffin and SCAT managerial staff in finalizing the preferred fixed route design. Two primary “spine” routes were developed focusing on serving the two universities, downtown, and significant commercial development and other major trip generators: 1) East-West Route, and 2) South Route. A third route was determined to be necessary to address the needs of employment transportation to industrial parks. Of the three major industrial park areas in Tiffin, the Eagle Rock and NorthStar Industrial Parks were determined to have the highest numbers of jobs. It was determined that the most efficient and effective means of serving the two industrial parks would be to provide connections from the East-West Route and the South Route during shift time changes only. The proposed route also provides access to the Maule Road/Wall Street industrial corridor. The initial route system design was accepted by the project steering committee; however, some adjustments to the South Route were incorporated to address the City’s desire to ensure service was provided to those nearer to downtown for hours above and beyond the initially proposed hours of the South Route.

In addition to the route corridor decisions, much discussion and information was gathered to ensure that the days and hours of service for the fixed routes met the local needs and desires. The RLS team received consensus from the project steering committee concerning the days and hours of services desired.

It was determined that a fixed route system would be more effective than a flexible or deviated-fixed route service. Flexible or deviated service allows for off-route deviations for pick-ups as requested by passengers. However, SCAT currently provides demand-response service to the general public in the City of Tiffin. Secondly, the proposed East-West fixed route is unable to serve all of the most critical trip generators (Tiffin University, Heidelberg University, Walmart, and Mercy Hospital) and remain on a “clock headway” schedule under a flexible/deviated route scenario. A clock headway schedule allows for 60-minute route frequency; for example, the bus always picks up at the grocery store at eight minutes past the hour.

#### ANALYSIS OF INDUSTRIAL PARK TRANSIT NEEDS

In the initial phase of the study, stakeholders indicated a need to meet the mobility needs of workers in the industrial parks, based on feedback they had received from employers. The RLS team conducted a telephone survey of employers in the NorthStar, Eagle Rock and Maule

Road/Wall Street industrial areas to determine their shift schedules (Exhibit 7). In addition, RLS met with the Tiffin-Seneca Economic Partnership (TSEP) to gather employment data for all industrial areas in Tiffin. RLS determined the number of employees by firm and area (see Exhibit 8) with the intent prioritizing high-employment areas for inclusion in the service design, assuming funding constraints.

### Exhibit 7: Industrial Park Shift Schedules

Industrial Park Companies	Shift Schedules	#Employees/Shifts
Taiho (Plant 1) 194 Heritage Drive	1st: 6:45 AM to 3:00 PM	200-300, most on 1st shift
	2nd: 2:45 PM to 11:00 PM	
	3rd: 10:45 PM to 7:00 AM	
Taiho (Plant 2) 162 Heritage Drive	1st: 7:00 AM to 3:00 PM	
	2nd: 3:00 PM to 11:00 PM	
	3rd: 11:00 PM to 7:00 PM	
Ameriwood - 458 2nd Avenue	1st: 7:00 AM to 3:00 PM	200 (1st)
	2nd: 3:00 PM to 11:00 PM	60 (2nd)
Toledo Molding and Die - 1441 N. Maule Road	1st: 7:00 AM to 3:00 PM	70 to 80 (1st) 70 to 80 (2nd) 70 to 80 (3rd)
	2nd: 3:00 PM to 11:00 PM	
	3rd: 11:00 PM to 7:00 PM	
Fry Foods - 99 Maule Road	1st: 7:00 AM to 3:00 PM	35 (1st) 35 (2nd) 35 (3rd)
	2nd: 3:00 PM to 11:00 PM	
	3rd: 11:00 PM to 7:00 PM	
Webster Industries - 325 Hall Street	1st: 7:00 AM to 3:00 PM	200 total, with majority on 1st shift
	2nd: 3:00 PM to 11:00 PM	
	3rd: 11:00 PM to 7:00 PM	
Laminate Technologies - 161 Maule Road	4:00 AM to 2:00 PM	75 total, with majority on the day shifts
	(Monday - Thursday)	
	2:15 PM to 12:00 AM	
	(Monday - Thursday)	
	6:00 AM - 2:00 PM	
	(Monday - Friday)	
	8:00 AM - 4:00 PM	
	(Monday - Friday)	
Quick Tab II - 241 Heritage Drive	7:00 AM to 3:00 PM	55 (1st) 5 to 7 (2nd)
	(Monday - Friday)	
	3:00 PM to 1:00 AM	
	(Monday - Thursday)	

Source: RLS Telephone Survey

**Exhibit 8: Industrial Park Job Count Estimates by Area & Company**

<b>Industrial Park Job Numbers by Area &amp; Company</b>	
<b>Area &amp; Company</b>	<b># of Employees</b>
<b>Southwest Area/Airport Industrial Park</b>	
Irving Equipment	22
Agrati Group	80
Ohio Hearing Professionals	5
Huston Financial	11
Tiffin Aire	30
OCECO	15
American Plastics	100
Wilson Tire	5
Palmer Bros. Concrete	5
Black Swamp	3
<b>AREA TOTAL EMPLOYEES</b>	<b>276</b>
<b>CR 54 Area</b>	
G&L Oil	12
Tiffin Ag & Turf	20
Reineke Collision	8
ICP	160
Smith Family Frosted Foods	20
Nye Gas	3
MSC Industrial Supply	14
JB Roofing	80
<b>AREA TOTAL EMPLOYEES</b>	<b>317</b>
<b>East (Heidelberg Area)</b>	
National Machinery	490
<b>AREA TOTAL EMPLOYEES</b>	<b>490</b>
<b>North Industrial Area/Wall-Maule Corridor</b>	
Buckeye Terminals	
Webster Industries	275
Tiffin Metal Products	100
Atlas Industries	25
Laminate Technologies	65
Fry Foods	115
Ameriwood/Dorel	285
<b>AREA TOTAL EMPLOYEES</b>	<b>865</b>
<b>Eagle Rock Business Park</b>	
American Fine Sinter	250
Tiffin Insulators	11

Toledo Molding & Die	300
<b>AREA TOTAL EMPLOYEES</b>	<b>561</b>
<b>Northstar Industrial Park</b>	
Arnold Machine	40
Sonoco Products	45
Owens Corning	70
Taiho Corporation	200
E-Systems	10
Quick Tab II	100
<b>AREA TOTAL EMPLOYEES</b>	<b>465</b>
<b>TOTAL NORTH INDUSTRIAL PARK AREA</b>	<b>1891</b>

Source: Tiffin-Seneca Economic Partnership

## TIFFIN AND HEIDELBERG UNIVERSITY INTERVIEWS

On February 27, 2019, the RLS project team met with representatives of Tiffin University and Heidelberg University to provide an overview of a preliminary bus service alternative and receive feedback from them on their perceived transit needs for their students, funding partnerships, and locations of stops. Both universities expressed support for the new service and believed that it would be beneficial to their students to have better mobility options for work, shopping, and social reasons.

Heidelberg University and Tiffin University are both located on the proposed East-West bus route. The two institutions house a combined student population of approximately 2,900 and a workforce of 700 full- and part-time employees. The East-West route includes timepoint bus stops at both schools due to anticipated ridership. The Tiffin University Heminger Center, located at the corner of Miami and Clay Streets, serves as the transfer hub for the East-West, Industrial Park and South Routes. An existing pull-out area, located immediately south of the Heminger facility, is ideal for the transfer hub with no enhanced infrastructure required. A secondary Tiffin University bus stop is planned for the center of campus, along Miami or Sandusky Streets. The Heidelberg University bus stop is proposed for Greenfield Street at Rebecca Street in front of the University Commons student center. Staff representatives from both universities indicated support for these key stop areas during interviews.

Also, during interviews, both universities demonstrated a willingness to consider entering into a “UPass” university bus pass arrangement with SCAT in order to subsidize student rides (see Exhibit 9); however, it was clearly stated that no formal commitment can be made without university leadership approval. A contract between the transit provider and each school will formalize the school’s commitment to pay, in advance, for the students’ ability to ride the bus for free. The amount of revenue generated by each school will be determined by multiplying the general public fare by the estimated number of one-way passenger trips taken by students. In order to ride for free, students will present their university identification card to the driver upon boarding. Drivers will track student boardings (trips) as they occur. It is recommended that SCAT submit a report on student ridership data to each university on a monthly basis.

- ◆ Tiffin University’s student population is 1,659. Average ridership is estimated to be 12 one-way passenger trips per student in 2021, amounting to a potential one-year contract amount of \$14,931.
- ◆ Heidelberg University’s student population is 1,213. Average ridership is estimated to be 10 one-way passenger trips per student in 2020, amounting to a potential one-year contract amount of \$10,971.

**Exhibit 9: Scenario on Potential University Pass (UPass) Program**

<b>ANTICIPATED STUDENT RIDERSHIP AND UNIVERSITY CONTRIBUTION (YEAR ONE)</b>						
<b>Undergrad Enrollment</b>		<b>Estimated Trips per student enrolled/year</b>	<b>Forecasted Ridership @ 12 trips/student</b>	<b>Base Fare/Trip</b>	<b>UPass Cost/Trip (25% Discount)</b>	<b>Annual Projected Cost</b>
Tiffin University	1,659	12	19,908	\$1.00	\$0.75	<b>\$14,931.00</b>
Heidelberg Univ	1,213	12	14,556	\$1.00	\$0.75	<b>\$10,917.00</b>

It is critical that SCAT and the universities collaborate on an outreach strategy to educate students about the bus service and promote use. Start-up transit services are unlikely to build ridership without frequent, widespread publicity that is accessible to target populations including college students. The RLS team also recommends that all new fixed route services be free for all riders during the first thirty days of operations. SCAT will ensure that students have access to accurate, easy-to-understand information about the service on its website, including schedules, operating hours and “how to ride” instructions. SCAT will also provide printed bus schedules for the schools to stock in student centers, residence halls and other key locations. Both universities demonstrated a willingness to promote the bus service to students through multiple communication channels frequently throughout the academic year. It is recommended that the universities place prominent links to the SCAT web page with bus route information in appropriate places on their own websites. It is also recommended that the schools promote the bus service on their social media feeds, in publications for students, and through other electronic channels such as text notifications. SCAT should also participate in community-wide transit outreach and publicity activities as determined by their overall marketing plan for the fixed route service. Additionally, it is recommended that SCAT pursue Federal or State funding to procure a smartphone-based, real-time bus arrival information system within the first two years of operations to enhance customer service, so that riders can determine the exact location and estimated arrival time when waiting at a bus stop. This technology deployment will be particularly useful to attract college students to the new transit service since they are regular users of smartphone applications.

**PUBLIC PARTICIPATION**

Feedback from the general public is a critical and necessary component to any transit service development plan. The project steering committee determined that it would be beneficial to take

advantage of the opportunity to reach a high number of citizens by surveying the Seneca County Fair. A survey tool was developed and used during the event between July 22<sup>nd</sup> and July 27<sup>th</sup>, 2019 by Seneca Regional Planning Commission staff. In addition to gathering feedback at the County Fair, the RLS team presented the plan at the Tiffin Downtown Summit on September 4, 2019. Approximately 200 citizens attended, with many completing surveys following the presentation. The survey included questions about the following aspects of the proposed transit service:

- ◆ The value of bus routes to the community
- ◆ The proposed overall service coverage area for the community
- ◆ Any additional critical locations that need to be served above and beyond proposed service
- ◆ Preferred days and hours of service
- ◆ Whether Wi-Fi service on buses would be desired
- ◆ Likelihood of riding bikes to bus routes if buses included bike racks

**Survey Responses**

The following survey responses were collected at the Seneca County Fair and the Tiffin Downtown Summit; 105 community members completed the survey during the two events.

<b>Q1: Do You Believe Having Public Transit Bus Routes Would be Valuable for Our Community?</b>		
<b>Yes</b>	<b>No</b>	<b>Maybe</b>
79%	7%	14%

Answered: 73  
Skipped: 32

<b>Q2: Do You Think That the Proposed Service for Tiffin Provides Good Overall Service Coverage for the Community?</b>		
<b>Yes</b>	<b>No</b>	<b>Maybe</b>
79%	1%	20%

Answered: 71  
Skipped: 34

<b>Q3: If You Do Not Live Within Walking Distance, Would You Ride a Bike and Lock on the Bus if the Bus was Equipped with Bike Racks?</b>		
<b>Yes</b>	<b>No</b>	<b>Maybe</b>
28%	30%	42%

Answered: 67  
Skipped: 38

<b>Q4: What Days and Hours of this New Proposed Transit Service Would Best Meet the Needs of the Community?</b>		
<b>Monday – Thursday</b>	<b>Friday and Saturday</b>	<b>Sunday</b>
7am-7pm	11am-11pm	7am-6pm

Q4: What Days and Hours of this New Proposed Transit Service Would Best Meet the Needs of the Community?		
6am-10pm	6am-11pm	8am-6pm
9am-9pm	9am-9pm	9am-6pm
	12am-12pm	
6am-6pm	8am-9pm	8am-9pm
6am-11pm	8am-11pm	8am-6pm
6am-11pm	6am-12am	8am-8pm
6am-9pm	6am-11pm	8am-6pm
7am-9pm	7am-10pm	7am-10pm
5am-7pm	5am-11pm	7am-2pm
7am-9pm	7am-10pm	9am-6pm
8am-10pm	9am-12pm	9am-5pm
7:30am-8:30pm	7:30am-4pm	10am-6pm
7am-6pm		
7am-10pm	7am-12pm	8am-5pm
5am-10pm	6am-8pm	8am-7pm
6am-10pm	6am-1pm	8am-8pm
7am-10pm	8am-11pm	8am-5pm
6am-8pm	9am-4pm	
8:30am-9pm	9am-11:59pm	11am-6pm
8am-8pm	8am-11pm	8am-5
6am-1pm	8am-2pm	
24/7	24/7	24/7
6am-11pm	6pm-1am	8am-1:30pm
7am-7pm	7am-5pm	9am-3pm
7am-9pm	7am-11pm	8am-6pm
8:30am-6pm	8:30am-6pm	9am-3pm
7am-9pm	7am-6pm	11:30am-5pm
9am-9pm	10am-10pm	7am-7pm
7am-11pm	8am-11pm	9am-8pm
11am-10pm	11am-12am	11am-4pm
6am-8pm	9am-11pm	11am-6pm
8am-5pm		
7:30am-7pm	9am-6pm	8am-2pm
8am-5pm		
8am-9pm	9am-12am	9am-6pm
5:30am-9pm	5:30am-1pm	5:30am-9pm
5:00am-12:00pm	7am-2pm	7am-12pm
6:30am-9pm	6:30am-11pm	6:30am-7pm
5:45am-11pm	5:45am-11pm	8am-9pm
8am-5pm	8am-5pm	9am-12pm
		9am-12pm
7am-10pm	7am-5pm	8am-3pm

<b>Q4: What Days and Hours of this New Proposed Transit Service Would Best Meet the Needs of the Community?</b>		
7am-10pm	7am-10pm	8am-12pm
7am-10pm	6am-10pm	8am-8pm
6:30am-7pm	8am-11pm	8am-7pm
7am-11pm	7am-12am	9am-6pm
7am-11pm	9am-11pm	9am-5pm
7am-6pm	8am-6pm	8am-5pm
6am-8pm-10pm	8am-6pm	10am-6pm
8am-11pm	8am-11pm	10am-8pm
8am-6pm	9am-11pm	9am-1pm
6am-8pm	6am-3am	6am-8pm

Answered:53

Skipped:52

<b>Q5: Is There Any Other Critical Location(s) in the Community That the Transit Service Should Reach?</b>
<b>Open-Ended Responses</b>
IGA - Salvation army and out that way
School Stops
Colleges; Downtown; YMCA; Hospital; Kroger/Aldi
CVS; Kroger/Aldi; Movie Theatre
Seasonal: Seneca County Fair; Restaurant areas on West Market Street
Sixes Corner
Sixes Corner; Downtown
Kroger; Walmart; IGA; YMCA; Industrial Parks; Schools, including colleges
Tried it - didn't work - Tiffin is not big enough! We have SCAT and cab service.
St. Francis - Expressions; Walmart; TU; Heidelberg; All High Schools; YMCA
IGA; Library
Meadowbrook Park; Bascom for special events
Churches
Churches; Parks; Senior Center
Township Road 119/Co Rd 591... often many times daily people walk up & down from trailer park to uptown; Walmart
Elmwood at the Shawhan
Elmwood
Hospital; Both Colleges
Seniors living at the Shawhan 59; Community members + other non-driving seniors in the downtown area.
Hotel; Fairgrounds
Westgate
Major community residential streets, i.e. Sycamore, Washington
Sixes corner area; there's a lot of businesses/residences in that area.
The Library/East Green/Splash Pad Universities

**Q5: Is There Any Other Critical Location(s) in the Community That the Transit Service Should Reach?**

Walmart; Hospital; All Pharmacy Locations

Answered: 25

Skipped: 80

**Q6: What Do You Think is the Most Important Feature of this Proposed New Service?**

**Open-Ended Responses**

Covers a lot of area price is low enough
Replacing cars on the road; Reducing carbon footprint; Thomas Freidman = Hot Flat + Crowded - every mile driven puts 1 pound of carbon into atmosphere
Uber
Less cars; Better for environment; Provide safe transportation
Rates from Colleagues; Electric scooters
Access for the elderly/students/others to become functioning citizens within community - doctor visits, grocery shopping, etc.
Would really help university students
Ease of access
Safe, reliable, ADA compatible
Reliable/Consistent service
Types of bus and bus stop; Size/style; Location
Cost + accessibility
No change; Both universities on the route
Ease of access; Promotion - people/students must understand where when + how it works
Consistency + affordability
None :)
Serving people who can't drive.
COST per RIDE?
Transportation for people who can't afford cars independently. Love openness from all areas of Tiffin.
Accessibility; Punctuality
Safety; Access for people who work in town
This will help businesses + students + elders
There is a major problem with this, for which you have no solution. It is in the United States. If it was in Europe, it would probably work. But if it was Europe, we would already have it. This is the US, and most poor people have cars. Very few adults even ride bikes. You will need very large subsidies.
Reasonable cost
On time service
An air-conditioned bus
Great Benefit Serving the entire community
Encouraging ease to arrive to places of employment & to spend their hard earnings to the community locally to enjoy our wonderful town!

Q6: What Do You Think is the Most Important Feature of this Proposed New Service?
Transportation for our residents who do not drive. Recently had to pay \$20 to send resident to the hospital from downtown!
College students + elders being able to travel throughout Tiffin for reasonable rates.
Can reach the major landmarks in Tiffin
Allowing everyone to be able to utilize our community retail + services (or, dentist, public churches)
Reliable transportation for people to get to work
Accessible; Bike racks
Access for college students to local businesses - creating a better sense of community among citizens & students
Cost; Reliability (Track via app); Convenience; Comfort
Regular schedules people can rely on
There may be some wheelchair bound people or other handicap that prevents them from climbing onto bus. Will these be accessible?
Access!
Moving forward ASAP. Covering surrounding communities to Tues-Thurs - maybe
Needs to be available to community + college students

Answered: 41  
 Skipped: 64

Q7: If You Could Choose, What Would Your Favorite Branding Name Be?	
Tiffin Transit	T^2 (T-squared)
45%	55%

Answered: 29  
 Skipped: 79

**SUMMARY OF SURVEY RESULTS**

Survey responses demonstrated overwhelming support for the proposed transit service, with 79 percent of respondents believing that the service would be valuable to the community, and 79 percent expressing satisfaction with the areas served. The responses regarding the days and hours of service were satisfactory overall when compared with the proposed service days and hours; however, the plan does not include Sunday service due to budgetary constraints. Sunday service could be implemented after the first few years of service if funding became available. Most of the areas that the respondents desired for bus stops are included in the final service design.

The project steering committee determined that the new fixed route service operated by SCAT would have a unique branding. Asked whether they would prefer the service to be named Tiffin Transit or T^2 (T-squared), a slight majority preferred T^2.

The SCAT Board of Directors and the proposed Tiffin Fixed Route Advisory Committee should collaborate on the unique branding for the fixed route vehicles. The branding should differentiate the service from the SCAT demand-response service that the public is accustomed



to seeing throughout the community. In particular, fixed route buses should have a prominent logo with a new name such as Tiffin Transit or T<sup>2</sup> (T-squared) utilizing different color schemes and design. Using different color and branding schemes for fixed route versus demand-response vehicles is customary in most urban transit systems. It should be noted that the project steering committee agreed that, regardless of the new branding, each fixed route vehicle must display “Operated by SCAT.”

# Service Design

## FINAL FIXED ROUTE SERVICE DESIGN

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The final fixed route service design was developed by the RLS team based on all feedback gathered from the project steering committee, demographic analysis, and public participation. The RLS team and key stakeholders developed a consensus on what areas of the City of Tiffin were more appropriate for fixed route service coverage and generate the most ridership. Fixed route bus service is characterized by having an established schedule with clearly identified physical bus stop signage, with the vehicles stopping only at designated bus stops for waiting passengers. The project steering committee determined that service should be reduced on Friday and Saturdays on the East-West Route when the two universities are on winter and summer breaks to reduce costs and generate higher overall service productivity (as measured by passenger boardings per hour). Detailed descriptions of each route, including maps, are provided in the following sections.

### **EAST-WEST ROUTE**

The East-West Route is expected to be the highest-ridership route, traveling on one-hour frequencies along the Market Street corridor. This route serves both Tiffin and Heidelberg Universities, downtown Tiffin, Mercy Hospital, and the highest concentration of commercial development (restaurants, retail stores, pharmacies, etc.) within the city limits. The East-West Route is highly likely to generate an abundance of trips for employment, shopping, and recreation. The East-West Route is considered the spine of the proposed fixed route network. The extended hours on Friday and Saturday evenings were desired by stakeholders in order to provide an alternative to driving for those citizens frequenting late night establishments.

#### **Days and Hours of Service**

Monday through Thursday: 5:45 a.m. to 8:00 p.m.

#### **When Universities are in session:**

Friday: 5:45 a.m. to 1:00 a.m.

Saturday: 9:00 a.m. to 1:00 a.m.

#### **When Universities are not in session (winter and summer breaks):**

Friday: 5:45 a.m. to 8:00 p.m.

Saturday: 9:00 a.m. to 8:00 p.m.

No Sunday services

University Spring and Fall Break Schedules (2018-2019 may change year to year):

Tiffin University

Winter Break: December 14-January 14

Summer Break: May 3-August 23

Heidelberg University

Winter Break: December 13-January 9

Summer Break: May 7-August 17

Note: Service would be provided when one university is in session and the other is not. Thus, *service reduction* on Fridays and Saturdays would commence beginning on December 14 through January 9 for the winter break and May 7 through August 17 for summer break.

**Service Frequency**

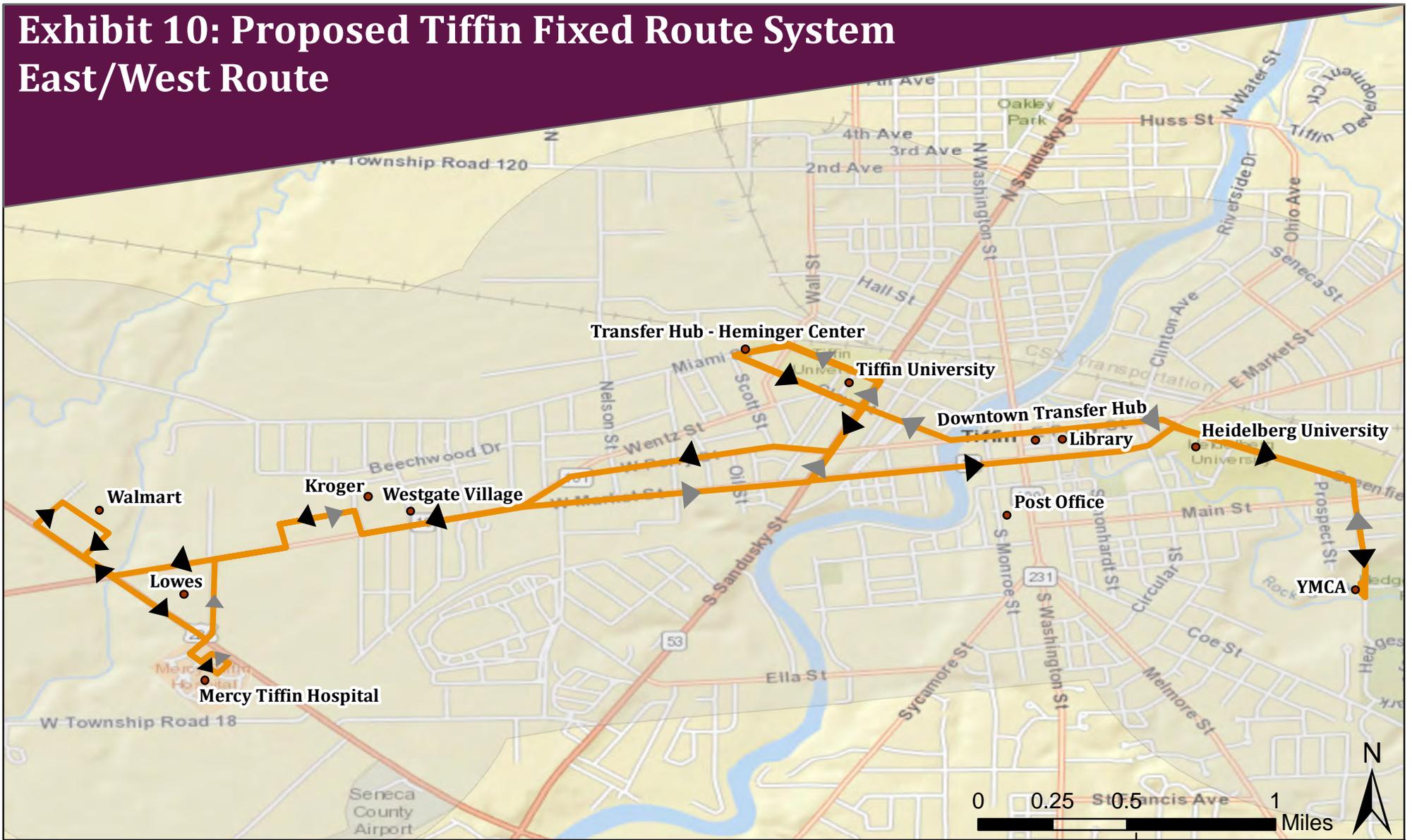
The East-West Route (Exhibit 10) will operate on an hourly schedule with each east and west one-way segments (headways) taking between 24-26 minutes to complete. Under average driving conditions, this service frequency allows about 4-6 minutes of driver layover time at the Tiffin University Heminger Center transfer hub located on Miami Street. This dwell time will allow for driver breaks and time for passengers to transfer from one route to another. As with any fixed route service, road construction projects, special community events, or inclement weather may impact on-time performance or schedule adherence.

**Significant Trip Generators**

A list of the primary trip generators along the East-West Route are provided below:

- ◆ Tiffin Community YMCA Recreation Center
- ◆ Hedges-Boyer Park
- ◆ Heidelberg University campus along Greenfield Street
- ◆ National Machinery
- ◆ Downtown Tiffin
  - Community Hospice Care
  - Tiffin-Seneca Public Library
  - Numerous downtown restaurants
  - Seneca County and City of Tiffin government offices
  - The Ritz Theater
- ◆ Tiffin University campus on Miami/South Sandusky/Clay Streets
- ◆ Numerous restaurants on West Perry Street and West Market Street
- ◆ Westgate Village Shopping Center
- ◆ Tiffin Mall
- ◆ Goodwill
- ◆ Holiday Inn Express
- ◆ Walmart Supercenter
- ◆ Mercy Tiffin Hospital

# Exhibit 10: Proposed Tiffin Fixed Route System East/West Route



## City of Tiffin Proposed Routes

### Legend

- Destinations
- ▲ Inbound
- ▶ Outbound
- East/West Route
- ADA 3/4 Mile Buffer

### Frequency

East/West Route: 49 Minutes



## **SOUTH ROUTE AND INDUSTRIAL-SOUTH PEAK ROUTE**

The South Route will provide citizens with access to various social service agencies located in the South Melmore Street corridor, in addition to serving residents living in the southeast portion of the city. The operation of the South Route works in conjunction with the North Industrial Route (to be described in more detail later) to streamline operations, using one driver for a portion of the service day. This type of joined route is referred to as an in-line routing approach whereby two routes are served by the same bus, but operate as separate routes when arriving or departing from the transfer hub [see the Industrial Route (purple) and South Route (green) in Exhibit 12]. Thus, passenger counts will be separate for each route regardless of whether they are staying on the same bus that will continue to provide service on the next route.

### **Days and Hours of Service**

Monday through Friday only: 8:30 a.m. to 5:00 p.m.

Note: Since the primary purpose of the South Route is to provide a mobility option to citizens requiring access to social services organizations near the southernmost portion of the service, service hours will be consistent with the operating hours of these agencies. A peak morning service of a portion of the South Route will operate in-line with the Industrial Route run between 7:00 a.m. and 8:30 a.m. Monday through Friday to provide residents with northbound service to the downtown area.

### **Service Frequency**

The South Route operates hourly with about 21.5 minutes in each direction to the Heminger Center Transfer Hub. This allows for ample dwell time at the start (Transfer Hub) and end (SCAT facility) of the route for driver breaks and transferring of passengers between routes at the Transfer Hub. Scheduling will permit relatively convenient transfers between the East-West Route and the South Route during most of the operating day.

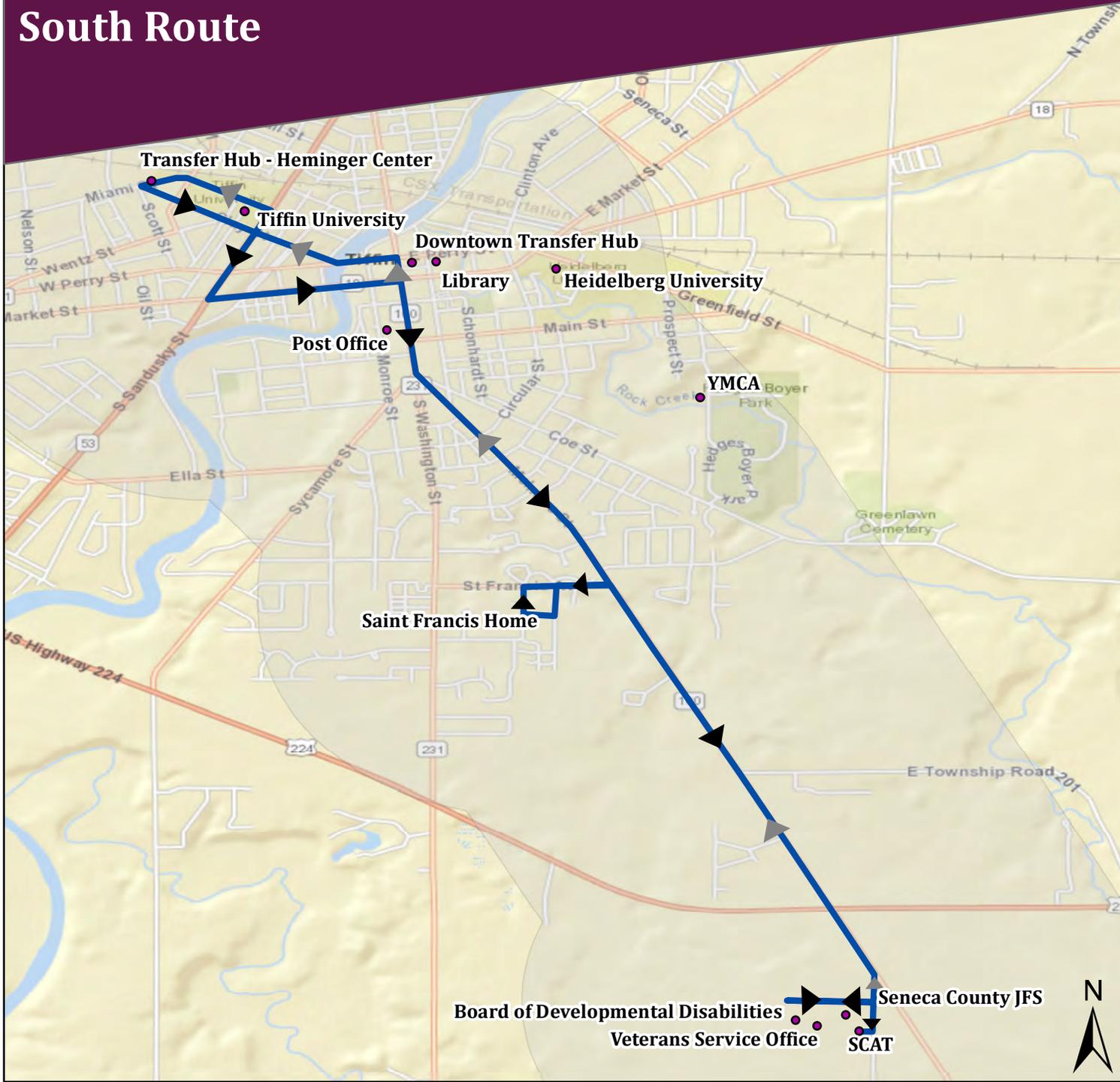
### **Significant Trip Generators**

A list of some of the primary trip generators along the South Route are provided below:

- ◆ Tiffin University along Miami/South Sandusky/Clay Streets
- ◆ Downtown merchants and government offices previously noted on the East-West Route description
- ◆ Southeast Tiffin residential areas adjacent to downtown
- ◆ St. Francis Home (senior citizens residential area)
- ◆ Seneca County Opportunity Center
- ◆ Seneca Veteran's Service Center
- ◆ Seneca County Youth Center
- ◆ Seneca County Department of Job and Family Services
- ◆ SCAT facility

Exhibit 11 displays the South Route. Exhibit 12 displays the Industrial Route and South Peak Route.

# Exhibit 11: Proposed Tiffin Fixed Route System South Route



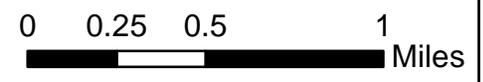
## City of Tiffin Proposed Routes

### Legend

- Destinations
- South Route
- ADA 3/4 Mile Buffer
- ◀ Inbound
- ▶ Outbound

### Frequency

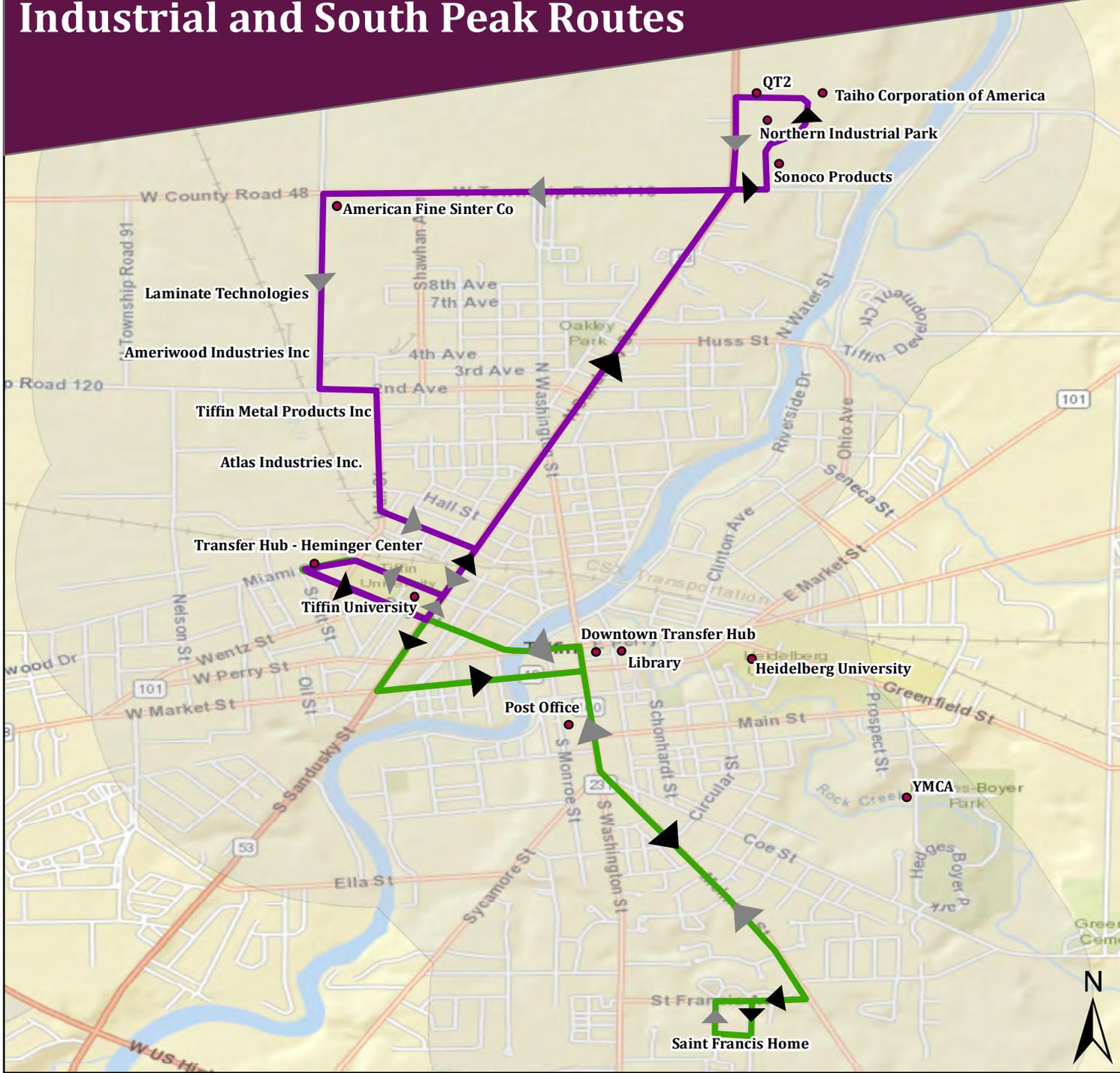
South Route: 43 Minutes



Board of Developmental Disabilities  
Veterans Service Office  
SCAT

Seneca County JFS

# Exhibit 12: Proposed Tiffin Fixed Route System Industrial and South Peak Routes



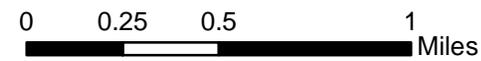
## City of Tiffin Proposed Routes

### Legend

- Destinations
- North Industrial Route
- South Route Peak Morning Only
- ADA 3/4 Mile Buffer
- ◀ Inbound
- ▶ Outbound

### Frequency

North Industrial Route: 24 Minutes  
South Peak Route: 22 Minutes



## **INDUSTRIAL ROUTE**

As described previously, the RLS team and project steering committee selected the northern industrial park area after reviewing employment density throughout the City. This route will operate from the Tiffin University Heminger Center Transfer Hub to the NorthStar and Eagle Rock Industrial Parks, looping around to the west and south to reach other employment destinations on its return to the Transfer Hub (see Exhibit 12 above depicting the Industrial Route in purple). The Industrial Route will operate only during shift change periods, as no other significant trip generators exist along the route corridor.

### **Days and Hours of Service**

Monday through Thursday: 6:30 a.m. to 7:00 a.m., 2:30 p.m.-3:30 p.m., and 11:00 p.m. to 12:15 a.m.

Friday: Same as Monday through Thursday except for last run time will be 11:00 p.m. to 11:30 p.m.

### **Service Frequency**

The Industrial Route is approximately 12 minutes in duration on the outbound and inbound, respectively, or a 24-minute round trip. This trip timing allows for about 6 minutes of dwell time at the terminus of the route at the Heminger Center Transfer Hub for passenger transfers between routes.

### **Significant Trip Generators**

A list of some of the primary trip generators along the Industrial Route are provided below:

- ◆ Tiffin University
- ◆ Northern Tiffin residential areas
- ◆ Arnold Machine
- ◆ Sonoco Products
- ◆ Owens Corning
- ◆ Taiho Corporation of America
- ◆ QT2
- ◆ American Fine Sinter
- ◆ Laminate Technologies
- ◆ Ameriwood Technologies Inc.
- ◆ Tiffin Metal Products, Inc.
- ◆ Atlas Industries, Inc.

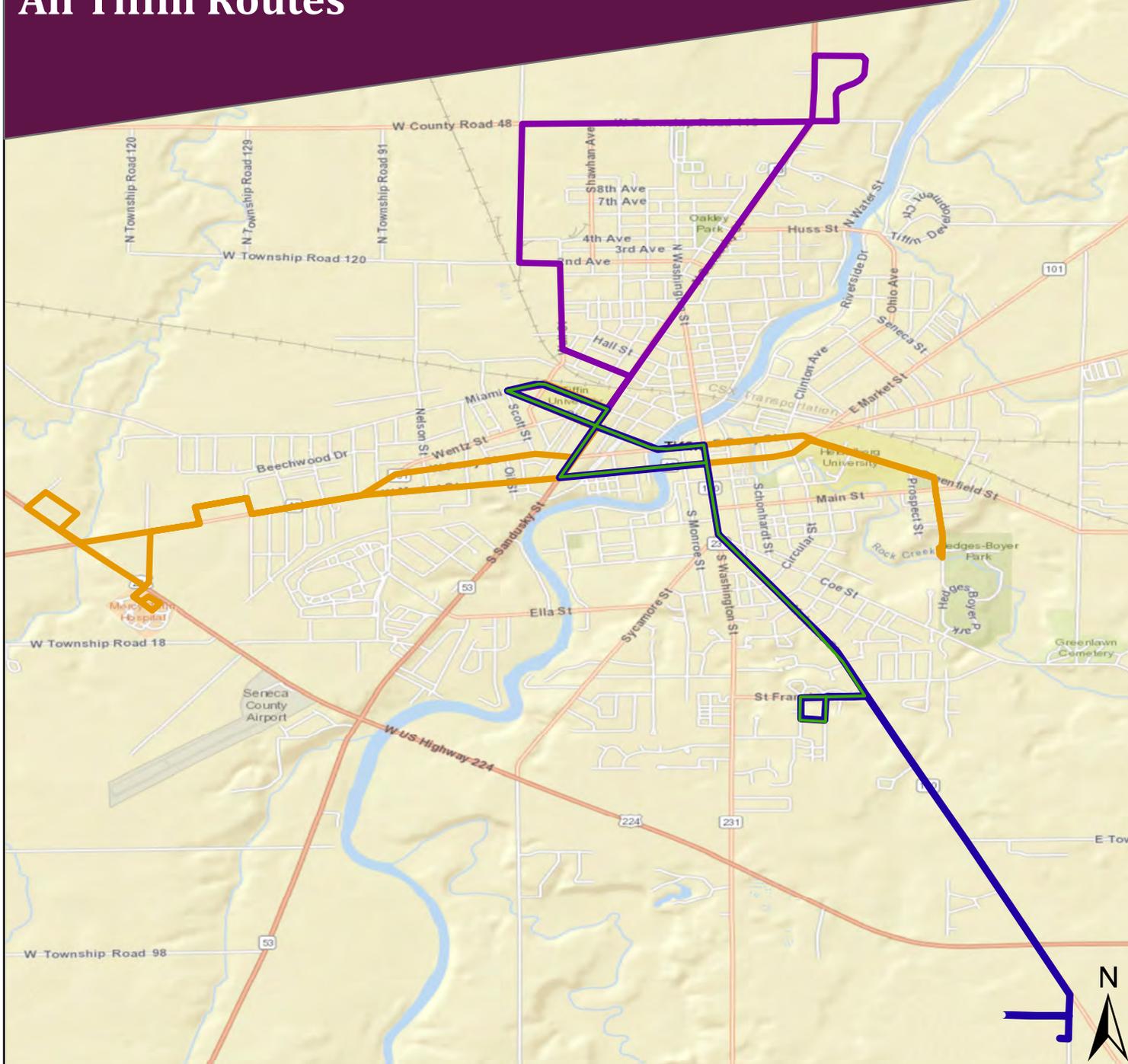
## **SYSTEM WIDE MAP**

All fixed routes are displayed in Exhibit 13.

# Exhibit 13: Proposed Tiffin Fixed Route System

## All Tiffin Routes

### City of Tiffin Proposed Routes



#### Legend

- South Route Peak Morning Only
- South Route
- North Industrial Route
- East West Route



# Fare Structure

## **PROPOSED FIXED ROUTE PASSENGER FARE STRUCTURE**

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Most fixed route services in rural and small urban areas of the United States charge passenger fares of \$1.00 to \$2.00 per trip. Based on the demographics of the City of Tiffin and assuming a goal of attracting many riders to the new fixed route service, the RLS team and project steering committee recommend a one-way fare of \$1.00. Riders aged 12 and under or 65 and older should be permitted to ride for free. Those individuals who are 13 to 64 years old and have applied to SCAT for Americans with Disabilities Act (ADA) service are expected to pay half of the base fare, or \$.50 per one-way trip. SCAT may also want to consider offering a monthly pass for unlimited fixed route rides for \$40 a month.

Some transit systems require passengers to pay a transfer fee or an additional \$1.00 fare when they change from one route to another within the system. The RLS team recommends that SCAT offer a day pass for unlimited rides for \$2.50 rather than charge a transfer fee. Drivers will not handle cash or provide change. Riders are expected to have the proper currency or coinage.

### **Summary of Fare Structure:**

- ◆ Regular one-way fare: \$1.00
- ◆ ADA-eligible reduced/discounted one-way fare (see details in the next section on ADA below): \$.50
- ◆ Age 12 or under: Free
- ◆ Age 65 or older (must show US Medicare Card/ID): Free
- ◆ Monthly Pass: To be determined by SCAT Board of Directors

SCAT plans to use secured, stainless steel fareboxes for the collection of fares. The collection and reconciliation of cash and coin from the fareboxes will occur at the end of each service day, with cash secured in a vault at the SCAT facility. Deposits should be made at least every other day but will be dependent on SCAT cash management policies and procedures.

If ridership increases over the first few years of implementation, SCAT also has the option of seeking Federal and State grant funding to purchase electronic fareboxes which will provide an array of fare choices and options, especially the use of stored-value cards, which many riders in other markets find useful. The stored-value card acts similarly to a debit card where there is a stored value of \$10-\$40 dollars that is reduced by the standard fare each time the rider boards a bus.

For most systems similar in size and scope to the proposed service, passenger revenues only pay for a small percentage of the overall operating costs, typically in the five to ten percent range. Only in densely populated large urban areas do fare revenues usually exceed ten percent. Most systems rely on Federal and State grants, local funding options, and advertising revenues to offset operating expenses. Despite low revenues from passenger fares in relation to overall operating costs, there are numerous intangible benefits to transit, including dependable employment transportation for residents without personal vehicles, social interaction and

independence for seniors and persons with disabilities, and overall ability for many to live productive lives regardless of their ability to drive or afford a vehicle,

Based on the RLS team's experience with developing and implementing new transit services, it is important to note that new fixed route service, in an area that previously has not had fixed route service, usually takes between 3-5 years before realizing maximum ridership potential.

The RLS team highly recommends offering free fixed route service for the first thirty days of operation to entice riders to try the new service.

# Ridership

## RIDERSHIP GOALS

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Attracting riders to any new fixed route service takes time to materialize. The RLS team anticipates slow but steady growth over the first three to five years. Whereas most demand-response service averages in the 1.8 to 2.5 range for passengers per hour, the goal for a small city like Tiffin is to eventually achieve double the high range of demand response services. Marketing the new service to the community is paramount to reaching ridership goals. Realistic ridership goals for the new Tiffin fixed routes for the first five years should be:

### **Passenger Per Hour Goals/Total Annual One-Way Passenger Trips:**

- ◆ FY21: 3.5/24,500
- ◆ FY22: 4.0/28,000
- ◆ FY23: 4.5/31,500
- ◆ FY24: 5.0/35,000
- ◆ FY25: 5.5/38,500

# ADA Requirements

## **SERVICE PLAN TO COMPLY WITH AMERICANS WITH DISABILITIES ACT (ADA) REQUIREMENTS**

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The Americans with Disabilities Act (ADA) of 1991 requires that all fixed route service providers ensure that complementary ADA demand-response service is provided for those individuals that cannot access the fixed route stops due to a disability – whether it is temporary, permanent, or conditional - if they reside or are located within  $\frac{3}{4}$  of a mile of the fixed route. SCAT and Tiffin are in a unique and advantageous position in that SCAT already provides demand-response service to anyone in Seneca County. In addition, SCAT's current demand-response is \$2.00 per one-way trip which is in compliance with the ADA requirements that the fare to ride the complementary paratransit service not exceed two times the value of the base, peak-hour fare which is proposed as \$1.00 per one-way trip.

Since SCAT already has funding for the current Seneca County demand-response service, no additional revenues are required to meet the ADA requirements for the fixed route service. If SCAT did not already offer demand-response service, then the cost for a new ADA complementary paratransit service could require approximately 25 to 30 percent of the total fixed route operating cost. Thus, about \$100,000 is saved due to SCAT already having an established demand-response service that currently meets all ADA requirements, including drivers and staff trained in all aspects of ADA.

SCAT already has an application and review/approval procedures to ensure there is a mechanism in place to determine if an individual is eligible (disabled) for a reduced or discounted fixed route fare as described previously. The documentation required for disabled persons to be eligible for discounted fares includes a copy of a state-issued identification card, SSI or Social Security Disability determination letters, proof of enrollment in a Sheltered Workshop program, or certification from a medical provider.

It should be noted that some systems opt to operate flex or deviated fixed route service whereby the bus can deviate off the existing fixed route path for a determined distance and at a certain amount of times for each leg of the route to pick up the general public. By operating such a flex route-type service, the operator then does not have to provide complementary fixed route service. Given the limited dwell time for the primary East-West Route, the flex route option is not compatible with the Tiffin fixed route service design because, if implemented, the route would likely run behind schedule on a frequent basis and disrupt service and overall quality for riders. Thus, flex routes are not recommended for Tiffin.

# Budget

## **FIXED ROUTE SERVICE BUDGET PROJECTIONS**

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SCAT management provided the RLS team with a complete projected line item budget to operate the Tiffin fixed route service. After review of the budget, it is anticipated that costs are all appropriate and deemed necessary for the implementation of the service. As noted in Exhibit 14, overhead administrative costs only reflect a portion of SCAT's overall service in Seneca and Crawford Counties. Capital costs to operate the service have also been developed by SCAT staff and the RLS team to reflect all potential needs associated with fixed route service. For both operating and capital costs, potential revenue sources have been provided.

The Ohio Department of Transportation (ODOT) has recently developed a new grant program (Ohio Transit Partnership Program – OPT2) to provide additional operating and capital funds for transit providers throughout the State. The General Assembly approved \$70 million in new state general revenue fund (GRF) spending for transit. The state GRF funding may be used to provide 100 percent of the total project cost or 100 percent of the non-Federal share to match a federal operating assistance grant. Due to its newness, many grant policies and procedures for the program are still under development.



In September 2019, SCAT submitted grant requests for the operating and capital needs associated with the Tiffin fixed route transit service for FY21 or beginning July 1, 2020. Currently, SCAT has received no funding commitments from ODOT. For purposes of this plan, the consulting team is assuming that funding will be awarded; however, in the event that it is not awarded, funds will be sought by SCAT through a Federal Section 5311 application which will require a significant local share (50 percent) for operating costs. Local leaders in the City of Tiffin and Seneca County will be required to determine the best means of generating this local match if OPT2 funding is not realized. SCAT will continue annually applying for Section 5311 program funds regardless of OPT2 funding.

Regardless of the State funding scenarios, the proposed fixed route service would begin, at the earliest, on July 1, 2020, if all vehicle capital is received. As a result of this timeframe, the service budget could be subject to minor changes due to unforeseen cost increases for items such as for insurance and fuel (for example).

### **PROJECTED SCAT OPERATING EXPENSES**

Having a good operating system with experienced staff and a strong Board of Directors, such as SCAT, in Tiffin's area is a great advantage to implementing the new service. Some new staff (drivers and dispatchers) will need to be hired; however, the organizational structure and strong leadership in place is ideal for a smooth start-up of the fixed route service.

The projected SCAT operating expenses for the Tiffin fixed route service is provided in Exhibit 14.

**Exhibit 14: Projected SCAT Operating Expenses for Tiffin Fixed Route Service**

<b>SCAT Projected Operating Costs for Tiffin Fixed Routes - Beginning FY21</b>			
<b>Operating Cost Projections - FY21 (based on projected 8k revenue hours &amp; 130k miles)</b>			
<b>Expense Object Class</b>	<b>Operating Cost Projections</b>	<b>Projected Annual Costs</b>	<b>Description Details on All "Other" Expense Line</b>
<b>501 LABOR</b>			
501.01	Operator Salaries and Wages	\$116,000	FTEs #: 3.0
501.02.01	Dispatch Salaries and Wages	\$116,000	FTEs #: 2.0
	Administrator	\$8,000	% of time: 10%
	Safety Manager	\$5,000	% of time: 8%
	Maintenance Manager	\$500	% of time: 2%
501.02.02	Other Salaries and Wages	\$1,200	Describe if applicable: Overtime coverage
<b>502 FRINGE BENEFITS</b>			
<b>Only for Tiffin Fixed Routes</b>			
502.15.01	Operator Fringe Benefits	\$3,500	
502.15.02	Admin Fringe Benefits	\$400	
502.15.03	Other Fringe Benefits	\$3,500	
502.16.01	Operator Paid Leave	\$600	
502.16.02	Admin Paid Leave	\$500	
502.16.03	Other Paid Leave	\$600	Describe if applicable: Dispatcher
<b>503 SERVICES</b>			
503.98	Extra Cap Maint carried over to operating		
503.99	Vehicle Maintenance	\$35,000	
	Other Capital Maintenance	\$0	Describe if applicable:
<b>504 MATERIALS AND SUPPLIES CONSUMED</b>			
504.01	Fuel and Lubricants	\$175,000	
504.02.01	Tires and Tubes	\$4,500	
504.99.01	Other materials and supplies (admin)	\$500	Describe if applicable: tablet, paper, office supplies
504.99.02	Other materials and supplies (non-admin)	\$1,500	Describe if applicable: towing, washing
<b>505 UTILITIES</b>			
505.02	Utilities	\$1,500	
<b>506 CASUALTY AND LIABILITY COSTS</b>			
506.01	Premiums for Insurance	\$3,500	
506.02	Recoveries of Damage losses	\$200	
<b>507 TAXES</b>			
507.05	FUEL AND LUBRICANT TAXES	\$0	
507.99	OTHER TAXES	\$0	Describe if applicable:
<b>508.01 PURCHASED TRANS. SVC.</b>			
		\$0	
<b>509 MISCELLANEOUS EXPENSES</b>			
509.02	Travel and Meetings	\$0	
509.08	Advertising, Printing	\$4,000	
509.99	Other Miscellaneous Expense	\$500	Describe if applicable: copying, staff awards, etc.
<b>511 INTEREST EXPENSE</b>			
		\$0	
<b>512 LEASES AND RENTALS</b>			
		\$0	
512.12	Other General Administration Facilities	\$0	Describe if applicable:
<b>600 OTHER COSTS</b>			
		\$0	Describe if applicable:
<b>GRAND TOTAL</b>		<b>\$482,000</b>	

## PROJECTED SCAT OPERATING REVENUES

Due to the uncertainty of grant funding from ODOT, the two following operating revenue scenarios have been developed. Under the first scenario (Exhibit 15), OPT2 full funding for the total operating costs of the fixed routes would be awarded by ODOT. Under the second scenario (Exhibit 16), SCAT would have to rely on the availability of FTA Section 5311 funds that fund only 50 percent of the operating costs after deducting local non-matching revenues (fares and other sources). Section 5311 funding levels are determined by ODOT for the State's rural transit systems on a year-to-year basis, depending on Federal apportionments.

### Exhibit 15: Scenario 1 – OPT2 Funded

Scenario 1: Projected Annual SCAT Operating Revenues - FY21	
Type Funding	Amount
State (OPT2)	\$482,000
Federal	\$0
Local	\$0
Advertising*	\$2,500
Fares*	\$10,000
TOTAL	\$494,500
Balance	\$12,500

### Exhibit 16: Scenario 2 – ODOT Section 5311 Funded

Scenario 2: Projected Annual SCAT Operating Revenues - FY21	
Type Funding	Amount
State	\$0
Federal	\$234,750
Local	\$234,750
Advertising*	\$2,500
Fares*	\$10,000
TOTAL	\$482,000
Balance	\$0

## PROJECTED SCAT CAPITAL EXPENSES

Exhibit 16 depicts all capital-related expenses necessary for implementation of the Tiffin fixed route service. Note that stop improvements for FY21 are a portion of the overall stops that need improvements to meet ADA requirements. The RLS team recommends at least ten stop improvements a year with an expected twenty additional stops needing enhancements over the following two years. Recommended stop improvements include:



- ◆ Concrete pad work to fill in gaps between sidewalks and curbs at some bus stop locations; or
- ◆ Purchase and installation of benches or shelters, and trash receptacles.

Some of these expenses could be in-kind services provided by the City Public Works Department. AVL real-time bus tracking software is included, of which \$2,832 are annual fees for software maintenance and updates. It is anticipated that the City would, potentially, provide in-kind trash removal service for those stops not on private property that have trash receptacles.



A real-time bus information system via Automated Vehicle Locator (AVL) could be purchased in FY21 or in later years. This technology enhances the customer experience through a free app to indicate a bus location, eliminating uncertainty while waiting for the next bus. This technology would also provide SCAT dispatchers with the ability see the location of the buses on computer screens, minimizing communications via radio between dispatchers and drivers.

**Exhibit 16: SCAT Capital Expense Projected Costs – FY21**

SCAT Capital Expense Projected Costs - FY21	Item Cost	Quantity	Total Projected Costs
Cost Per Vehicle (including tax, titles, & fees) - 18 passenger LTVs, 2 lift securement locations	\$82,000	4	\$328,000
Cost Per Bike Rack for FR Buses	\$1,700	4	\$6,800
Cost Per Bus Stop Sign	\$100	60	\$6,000
Cost Per Sign Installation	\$100	60	\$6,000
Stop Improvements Yr. One (concrete pad work or benches/shelters options or combination)	\$1,500	10	\$15,000

System Map Signage @ Heidelberg/Tiffin Universities (poster size)	\$1,000	2	\$2,000
Vehicle Decal/Painting	\$2,000	4	\$8,000
Manual Fareboxes & Associated Equipment	\$500	4	\$2,000
Real-time Bus Information System/AVL (4 buses/associated software & monthly fee)	\$9,707	1	\$9,707
<b>GRAND TOTAL</b>			<b>\$383,507</b>

### PROJECTED SCAT CAPITAL REVENUES

Two scenarios are provided for capital revenues. First, Scenario 1 depicts a successful award for OPT2 full funding from ODOT, while Scenario 2 illustrates capital funding through a Section 5311 award through ODOT.

#### Exhibit 17: OPTS Funded Capital Budget

Scenario 1: Projected Annual SCAT Capital Revenues - FY21	
Type Funding	Amount
State (OPT2)	\$383,507
Federal	\$0
Local	\$0
<b>TOTAL</b>	<b>\$383,507</b>

#### Exhibit 18: Section 5311 Funded Capital Budget

Scenario 2: Projected Annual SCAT Capital Revenues - FY21	
Type Funding	Amount
State	\$38,350.70
Federal	\$306,805.60
Local	\$38,350.70
<b>TOTAL</b>	<b>\$383,507.00</b>

# Oversight

## **FIXED ROUTE OVERSIGHT RESPONSIBILITIES**

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### **SCAT BOARD OF DIRECTORS**

As indicated previously, one of the advantages of SCAT as the Tiffin fixed route service provider is its well-established Board of Directors that oversees its transit service operations in Seneca and Crawford Counties. The SCAT Board is comprised of twelve members who meet on a monthly basis. The SCAT Director serves as staff to the Board and presents regular updates on system performance, grant opportunities, and other service and policy decisions for Board action.

### **TIFFIN FIXED ROUTE SERVICE ADVISORY COMMITTEE**

Because the proposed fixed route service is a new service for the City of Tiffin, the City plans to create a Tiffin Advisory Board or Commission that will meet periodically (monthly for the first six months, then quarterly afterward) to keep abreast of the performance (ridership) and quality of the fixed route service. This advisory board would not enact operating policy or procedures as that responsibility is currently handled by the SCAT Board of Directors. However, this group would serve to advise and offer potential service enhancements or modifications for the SCAT Board to consider. A designated City staff person would serve in the capacity of publishing meeting schedules, notifications, agendas (in coordination with the SCAT Director), and meeting minutes. It is recommended that the Chair of this Advisory Committee serve as a member on the SCAT Board of Directors, as a vacancy arises, to act as a liaison between the two groups. The Mayor and City Administrator will determine the membership of the committee. Due to potential impacts of the service on City planning and infrastructure, representatives from these areas of local government should be considered included on this committee. The City should consider the following individuals to serve in this advisory capacity:

- ◆ Mayor or Council Member
- ◆ SCAT Director
- ◆ Seneca Regional Planning Commission Executive Director
- ◆ Downtown Main Street Manager
- ◆ Communications/PIO Manager
- ◆ City Engineer or designee
- ◆ Planning Department Director or designee
- ◆ Seneca County Planning Director or designee

# Summary

## **EXECUTIVE SUMMARY**

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If Tiffin and SCAT are successful in securing grant and local funding sources for the fixed route service, they will have to work in a collaborative and coordinated effort throughout the final implementation steps to start the service. It is recommended that the Tiffin Transit Advisory Committee be formed immediately after final approval of the plan by the City, County, and SCAT Board of Directors to ensure consistent communications between all key stakeholders.