



# Vacaville City Coach

FY 2023-2028

Short Range Transit Plan



innovate mobility

# CONTENTS

<b>EXECUTIVE SUMMARY.....</b>	<b>1</b>
Background Information	
Microtransit	
Looking Ahead	
<b>PRE-PANDEMIC STATE OF SERVICE.....</b>	<b>3</b>
Pre-Pandemic Travel Demand	
<b>CURRENT STATE OF SERVICE.....</b>	<b>14</b>
Overview of Existing Services	
Current Population Travel Patterns	
Geographic Travel Patterns	
<b>SCENARIO PLANNING CONCEPTS .....</b>	<b>21</b>
Cost Allocation Modeling	
Scenario Planning	
Assumptions	
<b>SCENARIO 1 – ROBUST RECOVERY .....</b>	<b>24</b>
<b>SCENARIO 2 – REVENUE RECOVERY/FEWER TRIPS ..</b>	<b>30</b>
<b>SCENARIO 3 – SOME PROGRESS .....</b>	<b>33</b>
<b>APPENDIX .....</b>	<b>36</b>
City of Vacaville History	
Population and Demographics	
Peer Review	
Market Assessment	
Vacaville City Coach History	
Governance and Department Organization	
Organizational Structure	

# TABLE OF FIGURES

- FIGURE 1 – FIXED ROUTE REVENUE HOURS OPERATED..... 3
- FIGURE 2 – DIAL-A-RIDE REVENUE HOURS OPERATED..... 3
- FIGURE 3 – FIXED ROUTE REVENUE MILES OPERATED..... 4
- FIGURE 4 – DIAL-A-RIDE REVENUE MILES OPERATED..... 4
- FIGURE 5 – FIXED ROUTE PASSENGERS PER REVENUE HOUR ..... 5
- FIGURE 6 – DIAL-A-RIDE PASSENGERS PER REVENUE HOUR ..... 5
- FIGURE 7 - PASSENGERS PER SERVICE AREA CAPITA ..... 6
- FIGURE 8 – FIXED ROUTE ANNUAL OPERATING EXPENSE..... 6
- FIGURE 9 – DIAL-A-RIDE ANNUAL OPERATING EXPENSE..... 7
- FIGURE 10 – FIXED ROUTE AVERAGE COST PER TRIP ..... 7
- FIGURE 11 – DIAL-A-RIDE AVERAGE COST PER TRIP ..... 8
- FIGURE 12 – FIXED ROUTE AVERAGE COST PER HOUR..... 8
- FIGURE 13 – DIAL-A-RIDE AVERAGE COST PER HOUR..... 9
- FIGURE 14 - FAREBOX RECOVERY RATIO ..... 9
- FIGURE 15 – PRE-PANDEMIC TRAVEL DEMAND..... 10
- FIGURE 16 - TRAVEL DEMAND BY HOUR OF DAY ..... 11
- FIGURE 17 - PRE-PANDEMIC TRANSIT EFFECTIVENESS..... 12
- FIGURE 18 - AVERAGE HEADWAY BY STOP ..... 12
- FIGURE 19 - PANDEMIC FIXED ROUTE SERVICE HOURS..... 14
- FIGURE 20 - PANDEMIC DEMAND RESPONSE SERVICE HOURS ..... 14
- FIGURE 21 - PANDEMIC FIXED ROUTE PASSENGER TRIPS..... 15
- FIGURE 22 - PANDEMIC DEMAND RESPONSE PASSENGER TRIPS ..... 15
- FIGURE 23 - PANDEMIC FIXED ROUTE OPERATING EXPENSES..... 16
- FIGURE 24 - RIDERSHIP BY MONTH BY YEAR..... 18
- FIGURE 25 – 2022 HOURLY TRIP DISTRIBUTION..... 19
- FIGURE 26 - PRE AND POST PANDEMIC TRAVEL DEMAND BY HOUR COMPARED ..... 19
- FIGURE 27 - PM PEAK TRAVEL PATTERNS ..... 20
- FIGURE 28 - MIDDAY TRAVEL PATTERNS ..... 20
- FIGURE 29 - AM PEAK TRIP PATTERNS ..... 20
- FIGURE 30 - SCENARIO PLANNING EXAMPLE ..... 23
- FIGURE 31 - SCENARIO 1 FORECASTING ..... 24
- FIGURE 32 - SCENARIO 1 SERVICE HOURS BY YEAR..... 25
- FIGURE 33 – PRE AND POST PANDEMIC TRAVEL DEMAND BY HOUR COMPARED..... 26
- FIGURE 34 -TRAVEL DEMAND AND TRANSIT POTENTIAL..... 27
- FIGURE 35 - MOBILITY VULNERABILITY ..... 28
- FIGURE 36 - TRAVEL TIME FOR EQUITY PRIORITY COMMUNITIES ..... 28
- FIGURE 37 - SCENARIO 2 FORECASTING ..... 30

FIGURE 38 – SCENARIO 2 SERVICE HOURS BY YEAR .....	31
FIGURE 39 - SCENARIO 3 FORECASTING .....	33
FIGURE 40 – SCENARIO 3 SERVICE HOURS PER YEAR .....	34
FIGURE 41 – POPULATION BY YEAR.....	41
FIGURE 42 – POPULATION OF NEIGHBORING CITIES .....	42
FIGURE 43 - POPULATION BY BLOCK GROUP .....	42
FIGURE 44 - MEDIAN HOUSEHOLD INCOME BY YEAR.....	43
FIGURE 46 – MEDIAN HOUSEHOLD INCOME OF NEIGHBORING CITIES.....	44
FIGURE 45 - POVERTY BY BLOCK GROUP .....	44
FIGURE 47 - UNEMPLOYMENT RATE BY YEAR.....	45
FIGURE 48 -UNEMPLOYMENT RATE OF NEIGHBORING CITIES .....	45
FIGURE 49 - UNEMPLOYMENT BY BLOCK GROUP .....	46
FIGURE 50 - VACAVILLE EDUCATION ACCESS.....	47
FIGURE 51 – POPULATION BY RACE (SELF-REPORTED).....	47
FIGURE 52 - RACIAL DISTRIBUTION.....	48
FIGURE 53 - CITY OF VACAVILLE DEPARTMENT STRUCTURE.....	50
FIGURE 54 - CITY COACH ORGANIZATION CHART .....	50
TABLE 1 - PRE-PANDEMIC TRAVEL BY TIME PERIOD AND HOUR .....	11
TABLE 2 - PRE-PANDEMIC TRANSIT TRAVEL TIME COMPARISON BY TIME PERIOD .....	13
TABLE 3 - FIXED EXPENSES.....	21
TABLE 4 - VARIABLE EXPENSES .....	22
TABLE 5 - TRAVEL DEMAND SATISFIED BY TRANSIT .....	26
TABLE 6 - POPULATION AND DEMOGRAPHICS .....	40

# EXECUTIVE SUMMARY

---

## BACKGROUND INFORMATION

City Coach is the primary transit provider for the City of Vacaville, California. The agency started in 1981 and over the years has operated public fixed route, ADA paratransit, on-demand shuttles, and also offers a reduced fare local taxi program. These services are offered Monday through Saturday as early as 7 a.m. on weekdays and 8 a.m. on Saturdays and as late as 7 p.m. on weekdays and 6 p.m. on Saturdays.

Like most transit agencies across the country and worldwide the COVID-19 pandemic, which started for City Coach in Spring of 2020, has taken the focus of operations and administration staff ever since. Transit ridership nationwide plummeted in the early days of the pandemic and has only recently begun to recover at a slow pace. Many agencies are facing ridership levels of 50% or less compared to 2019 levels causing severe revenue shortages and uncertainty for the future ahead.

To address these concerns and help to plan for an uncertain future, the Metropolitan Transportation Commission, or MTC, has asked regional transit agencies to examine three potential scenarios and consider how they would impact transit service over the next five years. The three scenarios are as follows:

1. Robust Recovery – full recovery of revenue and ridership with modest annual increases.
2. Revenue Recovery with Fewer Trips – full recovery of operations assistance revenue, but a sluggish ridership recovery.
3. Some Progress – slightly decreased operations assistance revenue with slow ridership recovery.

Of these potential scenarios, City Coach staff are targeting growth possibilities in both Scenarios 1 and 2. Based on their positive financial position, strong revenue forecasts, and trends from the last two years City Coach staff believe that they have the ability to implement increased service focused on new travel patterns using innovative service models and tweaked revenue hours.

## MICROTRANSIT

Amid drastic changes in the transit industry, City Coach staff have been examining ways to pivot their existing services to better serve local residents. The pandemic has offered a unique view of transit and opened a dialogue nationwide on ways to better utilize existing revenue to provide new service models that could better serve riders. One of these recent trends is the idea of microtransit.

Microtransit is a model that works similar to existing ADA paratransit or door-to-door dial-a-ride services, but is open to the general public and typically serves a specific community or area. Smaller vehicles such as mini-vans or other passenger cars are used to serve lower density neighborhoods whose profile is not conducive to traditional fixed-route transit. The potential benefits of this service are lower costs per trip and better service for individual riders. City Coach is already running City Coach Direct, a form of microtransit, and under Scenario 1 and 2 the agency would be able to expand that service during peak hours that match new post-COVID travel trends.

## LOOKING AHEAD

When considering the future of City Coach, administrative staff believe microtransit will be an important part of their recovery from the pandemic regardless of revenue outcomes. City Coach Direct, which already serves the entire service area, allows the agency to serve areas further west and southeast of the current City Coach service area at a reasonable cost, meaning revenue shortages would not have a significant impact on those service levels.

The forecasts provided by MTC for the purposes of planning for Scenario 1, increased revenue and strong ridership, would also allow City Coach to provide reconfigured fixed-route services in addition to the expanded microtransit. The agency would be able to provide more fixed-route service to cover peak travel hours that have shifted earlier in the morning and the increased travel during the afternoon peak compared to 2019.

In either scenario City Coach would be able to improve access for equity priority communities through the implementation of increased microtransit service.

Overall, the system would add approximately 2,331 revenue hours over the study period, an increase of approximately 8% from current levels. However, ridership is projected to increase 16% over the same period, indicating that service productivity will increase during the study term. These increases are expected due to the improved service quality that riders would experience through reduced wait times and more direct trips on City Coach Direct as well as improved peak hour fixed-route service.

## REPORT PREPARATION

The preparation of this report has been funded in part by a grant from the U.S. Department of Transportation (DOT) through section 5303 of the Federal Transit Act. The contents of this SRTP reflect the views of the City of Vacaville , and not necessarily those of the Federal Transit Administration (FTA) or MTC. The City of Vacaville is solely responsible for the accuracy of the information presented in this SRTP.

## PRE-PANDEMIC STATE OF SERVICE

### FIXED ROUTE OPERATING STATISTICS

City Coach operated approximately 37,000 fixed route annual revenue hours from 2015-2018, reducing service 18% in 2019 due to falling ridership. City Coach began transitioning to on-demand service in 2020.

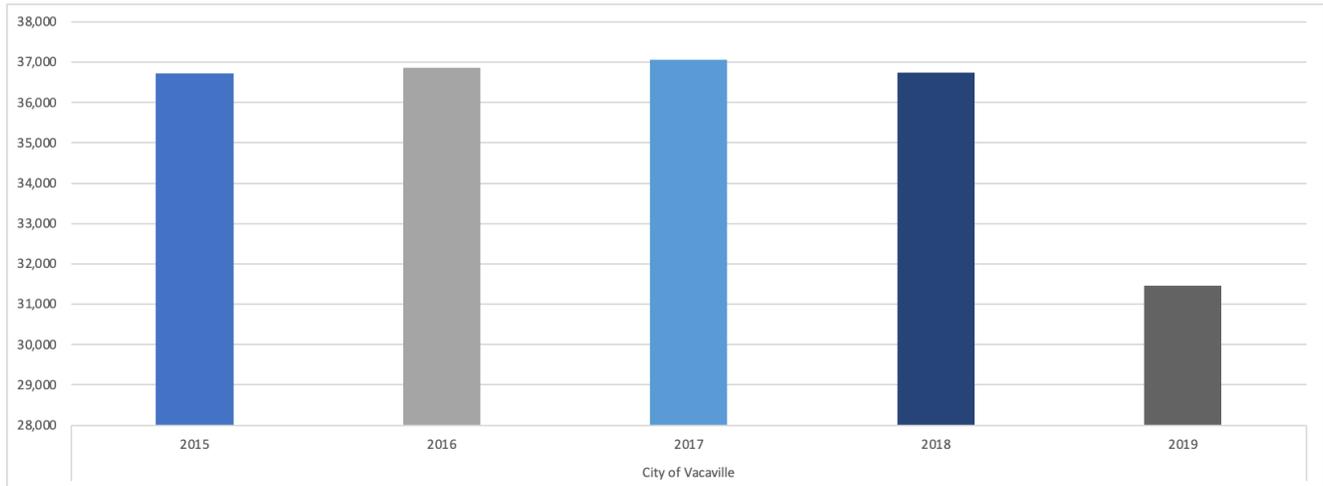


Figure 1 – Fixed Route Revenue Hours Operated

In 2019, City Coach reduced dial-a-ride hours by 7% to just below 5,300 per year.

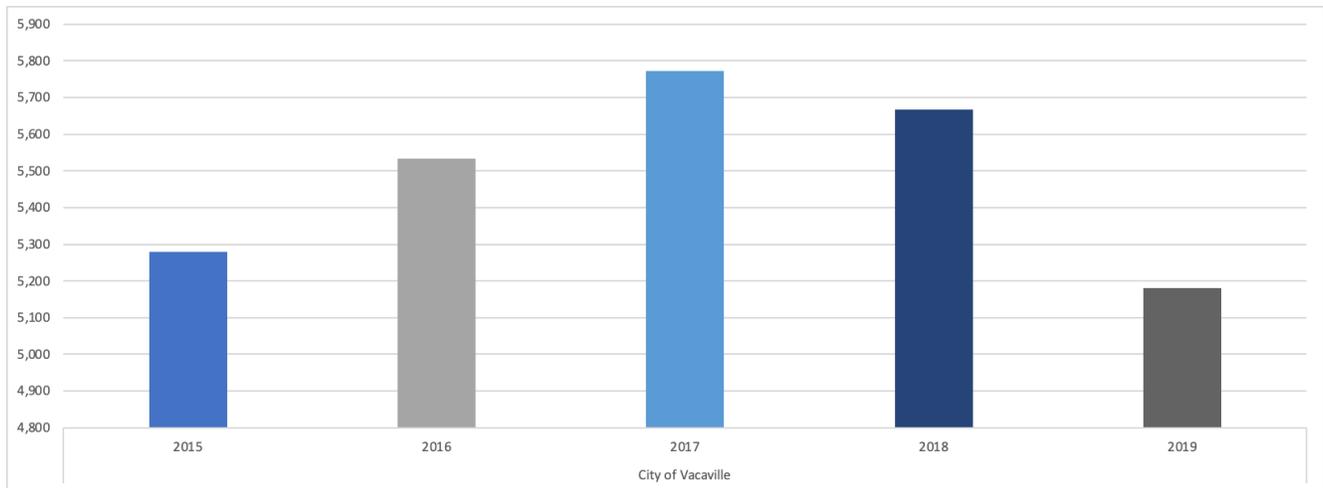


Figure 2 – Dial-a-Ride Revenue Hours Operated

Similar to hours, City Coach reduced fixed route operating miles by 16% in 2019. City Coach reduced Dial-a-Ride hours by 8% in 2019.

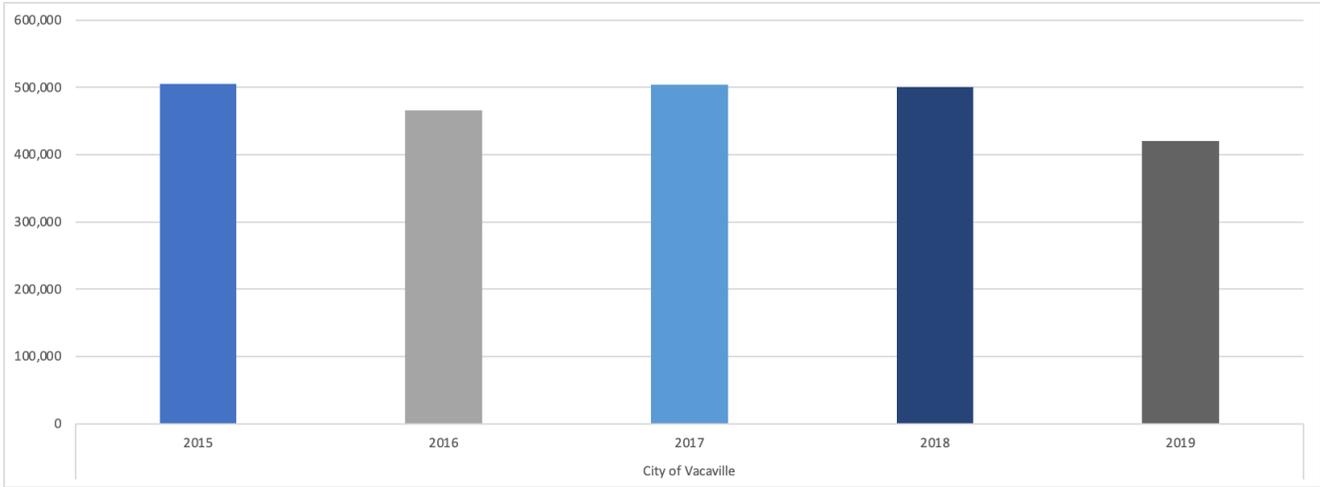


Figure 3 – Fixed Route Revenue Miles Operated

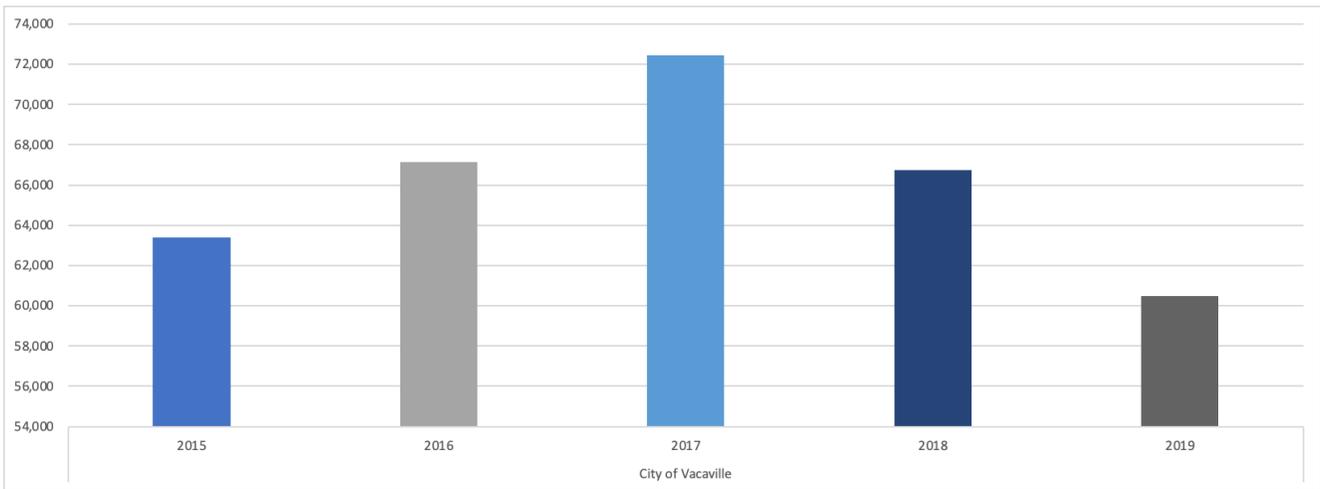


Figure 4 – Dial-a-Ride Revenue Miles Operated

**OPERATING EFFECTIVENESS**

City Coach utilizes the metric of passengers per revenue hour to measure system productivity. Prior to the pandemic, City Coach fixed routes averaged 12.1 passengers per hour, however, productivity was dropping annually by approximately 3%. Similarly, dial-a-ride effectiveness was dropping prior to the pandemic. The 2019 dial-a-ride productivity of 2.5 represented an 11% drop from 2018 and a 16% drop from the peak of 2.9 in 2017.

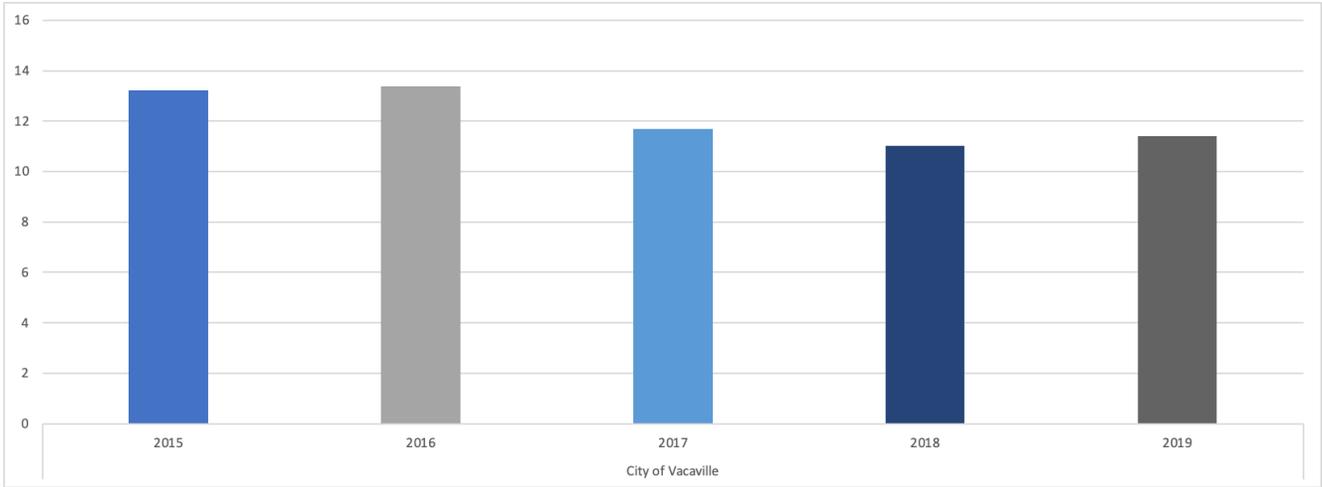


Figure 5 – Fixed Route Passengers per Revenue Hour

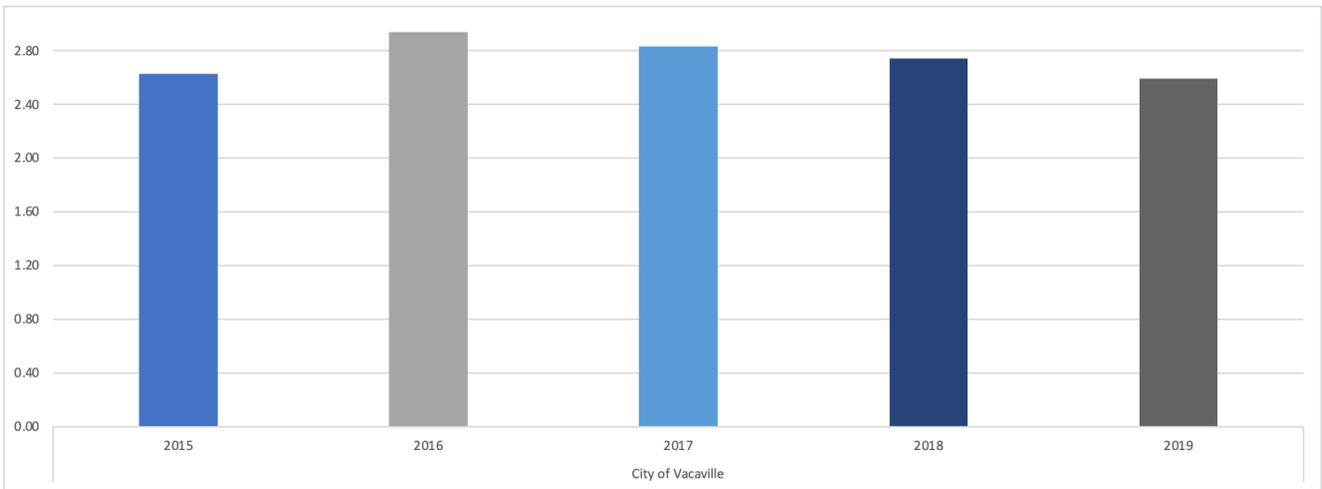


Figure 6 – Dial-a-Ride Passengers per Revenue Hour

To measure how City Coach ridership is keeping up with service area population growth, the City uses the metric of passengers per service area capita (Figure 7). While the region has been growing at an average of 7% for the past five years, City Coach ridership has not kept up. In 2016, City Coach observed 5.6 passengers per service area capita by 2019, this dropped to 3.5 passengers per service area capita a reduction 38%.

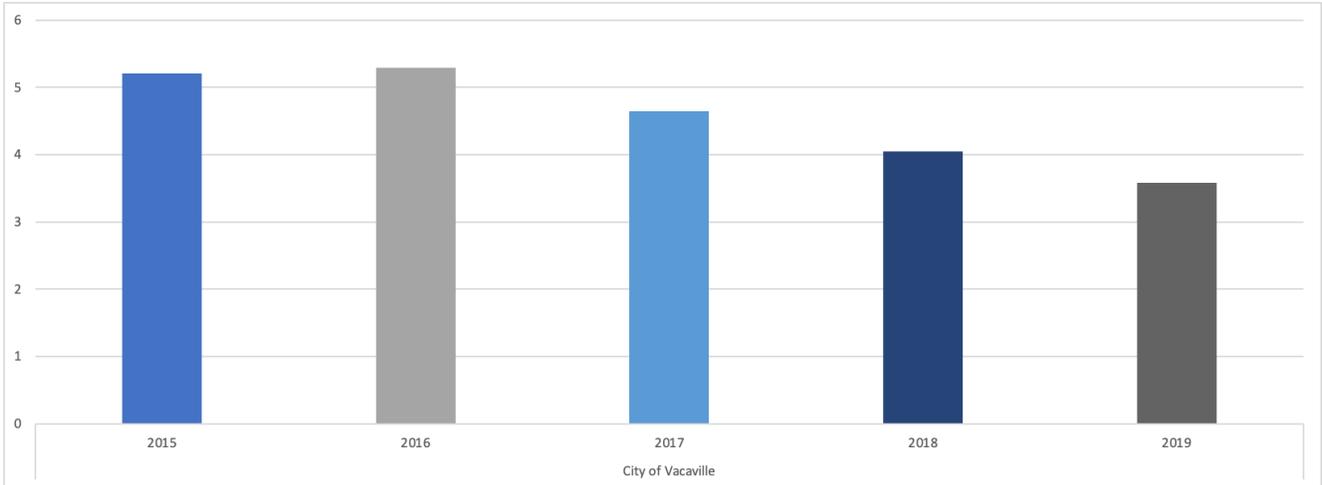


Figure 7 - Passengers per Service Area Capita

**FINANCIAL METRICS**

Prior to the pandemic, City Coach had an average annual operating expense of approximately \$1.9M for its fixed route services and \$450,000 for its dial-a-ride operations

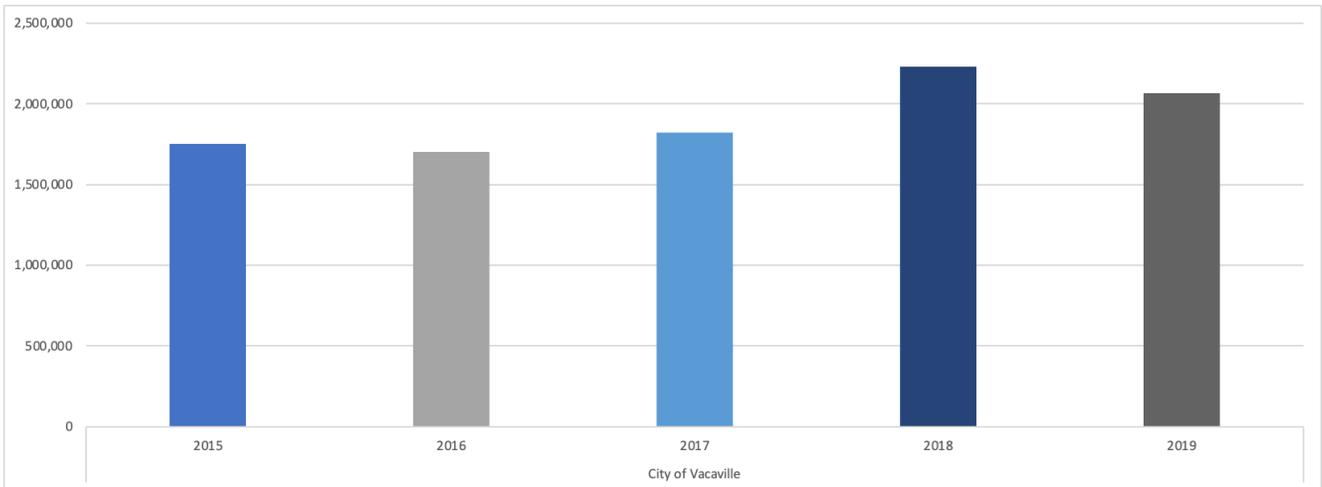


Figure 8 - Fixed Route Annual Operating Expense

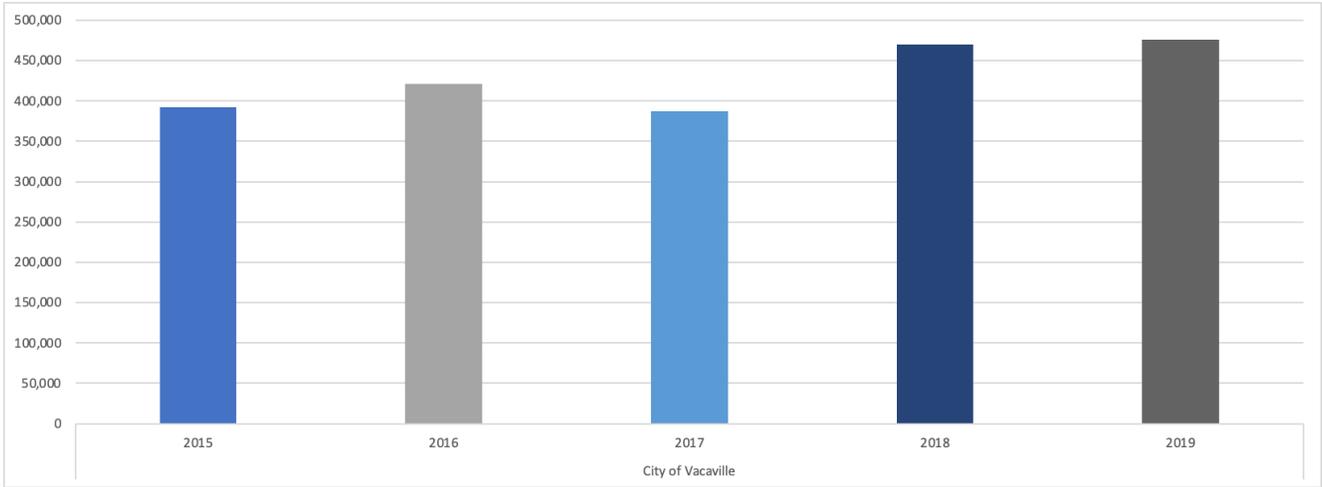


Figure 9 – Dial-a-Ride Annual Operating Expense

On a per passenger trip basis, City Coach expenses were increasing at 5% per year, indicating that costs were rising while ridership declined.

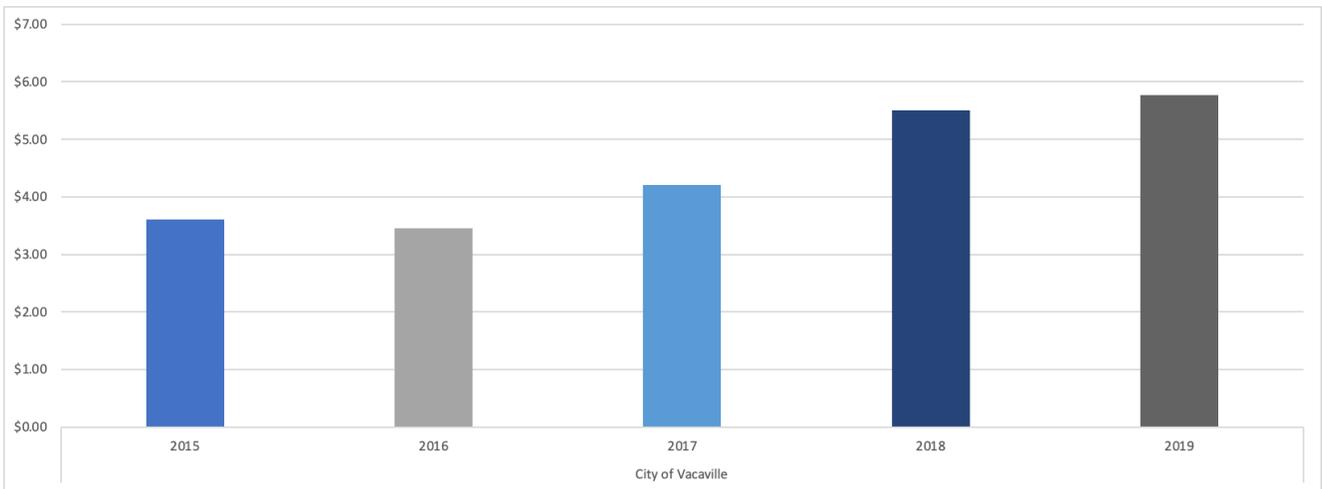


Figure 10 – Fixed Route Average Cost per Trip

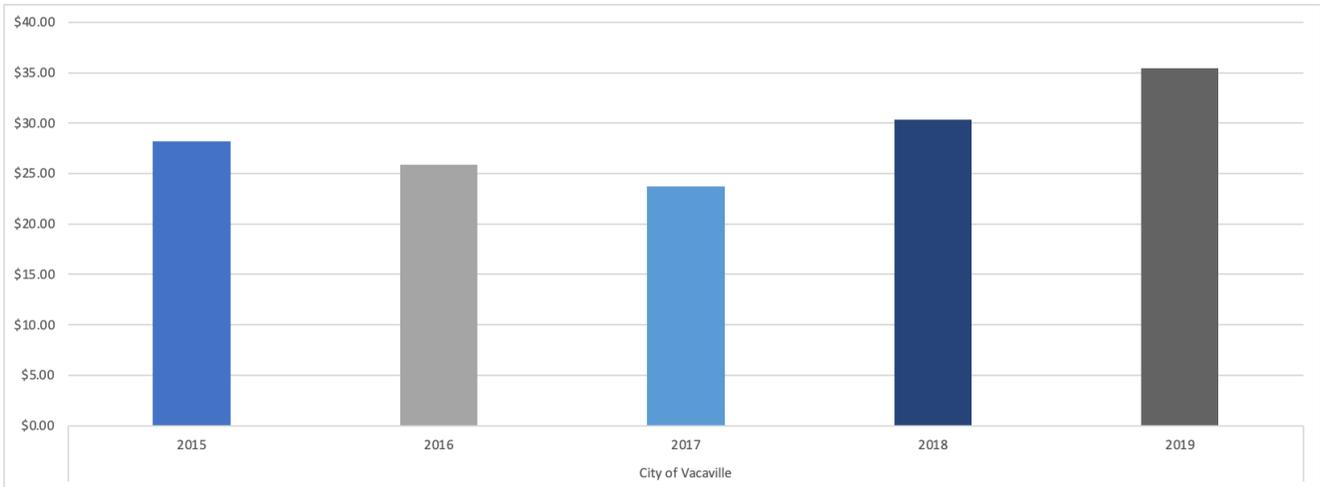


Figure 11 – Dial-a-Ride Average Cost per Trip

As part of this Short-Range Transit Plan, the city reviewed agencies similar to Vacaville and its City Coach operation. Peers were selected based on a number of operating, demographic, and service effectiveness characteristics. Utilizing this data, the city can determine how its pre-pandemic, pandemic-level, metrics compared, and then use peer-level performance to create a playbook for post-pandemic service changes. In terms of efficiency, City Coach operated at an average cost per hour of \$54, over 15% below its peer agencies. Prior to 2020, City Coach saw an average annual cost increase of 9%.

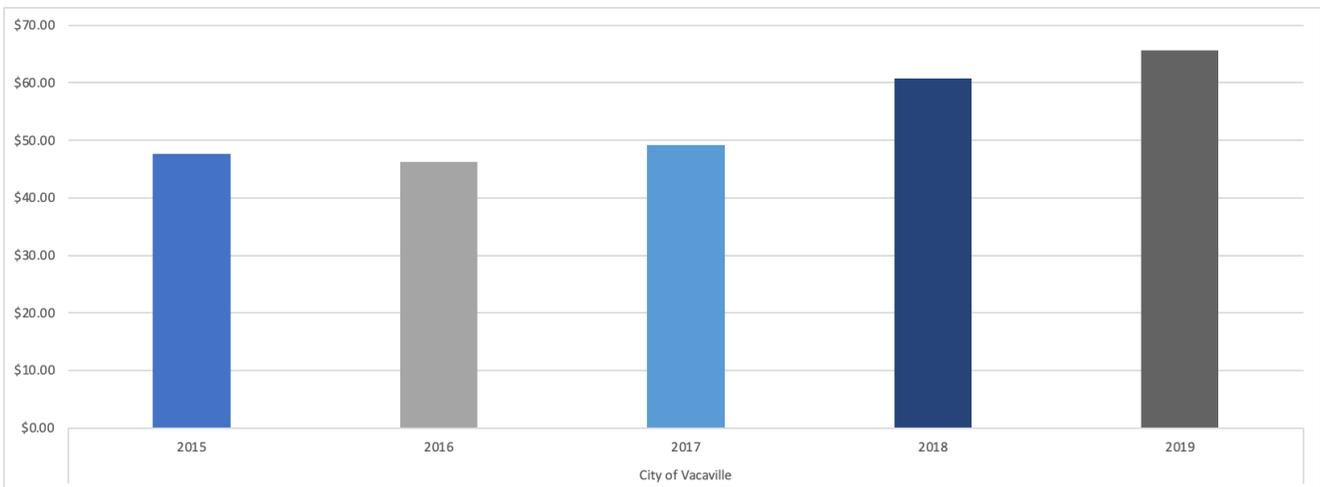


Figure 12 – Fixed Route Average Cost per Hour

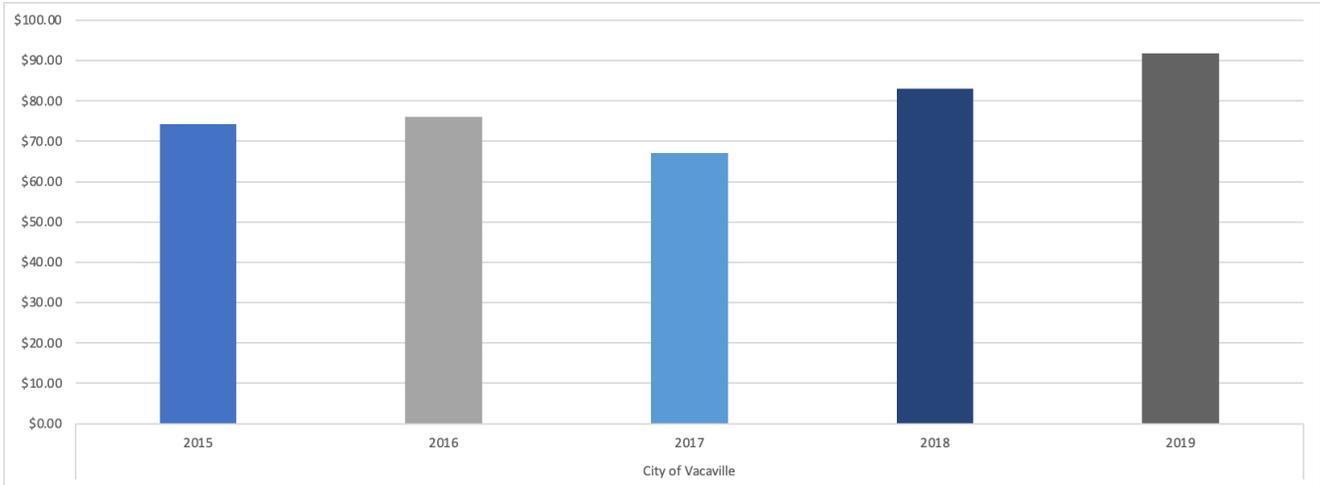


Figure 13 - Dial-a-Ride Average Cost per Hour

When comparing fare revenue to operating expense (farebox recovery), City Coach observed an average ratio of 18.6%. This amount has stayed fairly steady in the two years leading up to the pandemic.

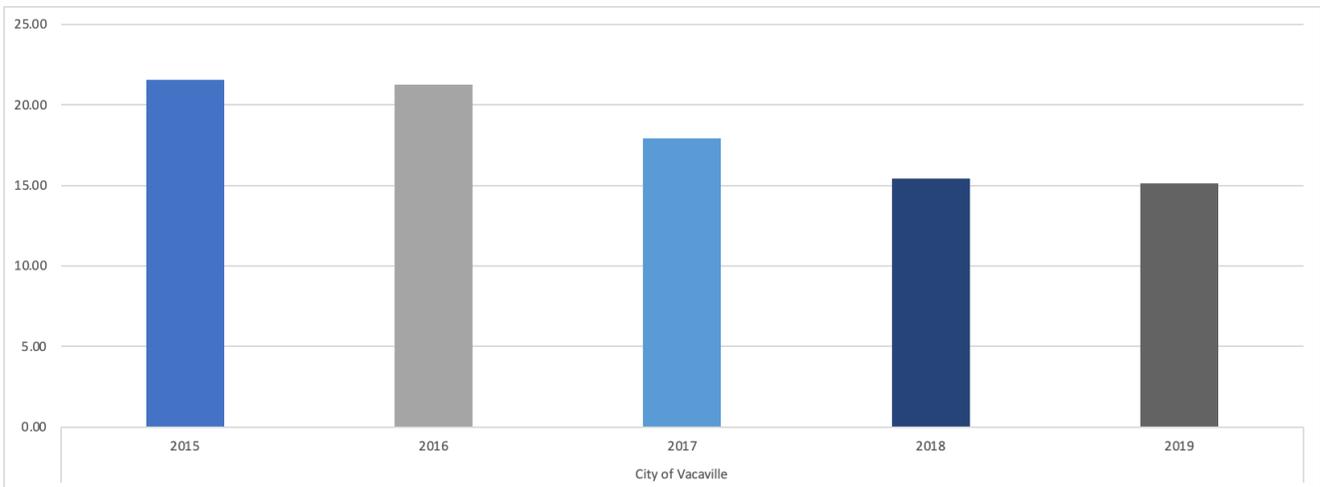


Figure 14 - Farebox Recovery Ratio

City Coach has not charged fares since the pandemic began but will resume collecting fares in February 2023. Vacaville’s base fare of \$1.50 has been left unchanged for 15 years. While ridership has grown on City Coach Direct, fixed route ridership did not benefit from fare suspension. The City, like many smaller transit operators believed (and continues to assert) that charging fares to return a 10-12% farebox recovery was not as important as trying to ensure riders were able to board without fear of any issues related to cash transactions. Agencies in Solano County have been considering fare increases to combat declining fare revenue and to meet State and regional farebox recovery goals.

City Coach Direct is new way to get around Vacaville. Riders can call to request a trip and a smaller shuttle will pick them up and take them to a destination anywhere in the city.

The City has lower thresholds than other transit departments/agencies in the State due to its demographic makeup. As a result, any increase in fares may result in lower ridership as a result of elasticity. At this point, the City is investigating how fares can be adjusted especially with City Coach Direct's on-demand service providing a better rider experience than traditional fixed route service.

## PRE-PANDEMIC TRAVEL DEMAND

### TRIP GENERATORS

To understand travel demand prior to the pandemic, City Coach employed the use of a travel demand model. This model utilizes a combination of GPS and location-based data with U.S. Census demographic data and route data to determine how residents of the city move. The model determines major trip generators within the city by time of day and then using machine learning algorithms joins trip generators to create trips. These trips are then analyzed by time of day and proximity to transit.

Figure 15 – Pre-Pandemic Travel Demand



Approximately 68% of all trips start and end within central Vacaville where the majority of City Coach's services operate. An additional 28% begin or end in Fairfield.

When reviewing trip generators for the City of Vacaville by time of day, it is clear that there is a distinct travel pattern in the AM, Midday and PM. The majority of trip generators occur within central Vacaville. This area includes major residential and commercial regions. There is significant travel into Fairfield from Vacaville and in the areas where there is new development.

Table 1 - Pre-Pandemic Travel by Time period and Hour

Time Period	Number of Trips	Average Trip Length	Average Trip Time
AM Peak	5,196	4.08 miles	8.27 mins
Midday	23,850	4.36 miles	8.78 mins
PM Peak	21,092	4.35 miles	8.75 mins

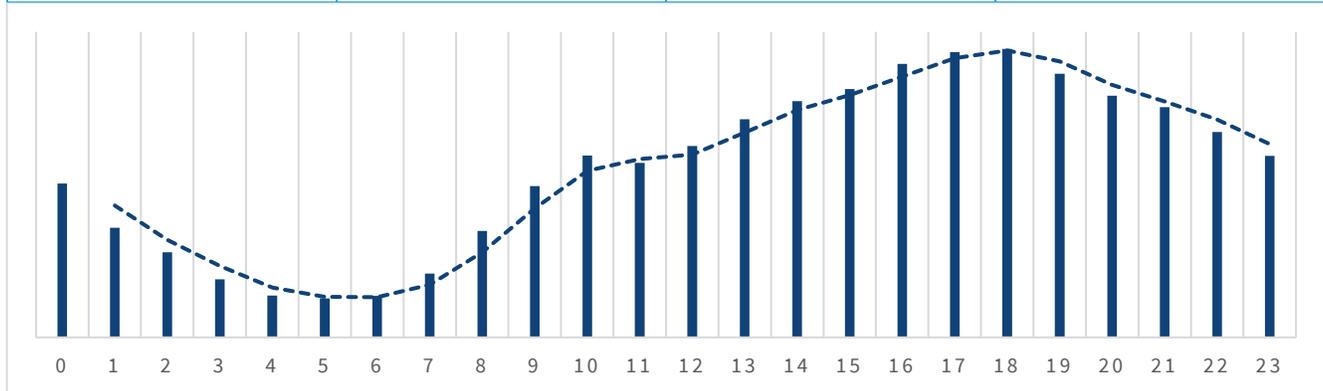


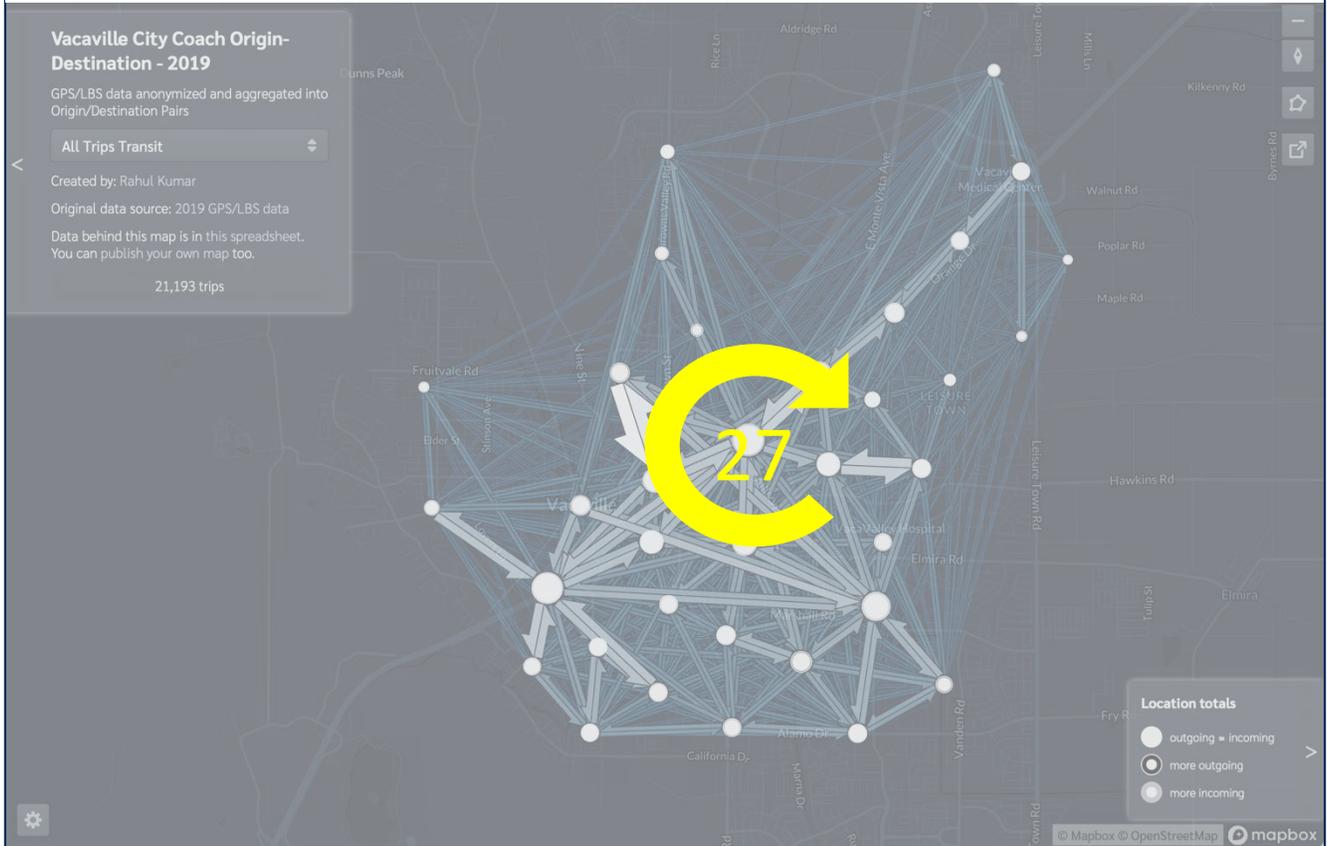
Figure 16 - Travel Demand by Hour of Day

In all, approximately 80,000 trips are taken every day in Vacaville. The majority of these trips occur between 1pm and 6pm. Indicating that Vacaville has a strong retail and services employment sector.

**TRANSIT EFFECTIVENESS**

To determine how effective the existing transit network is in covering these trip generators, the city looked at the proximity of those generators to existing fixed route transit. 27% of trips taken within the city can be completed using City Coach fixed route services. The remaining 73% are either outside City Coach’s existing fixed route service area or are completed when City Coach isn’t operated (late night, early AM).

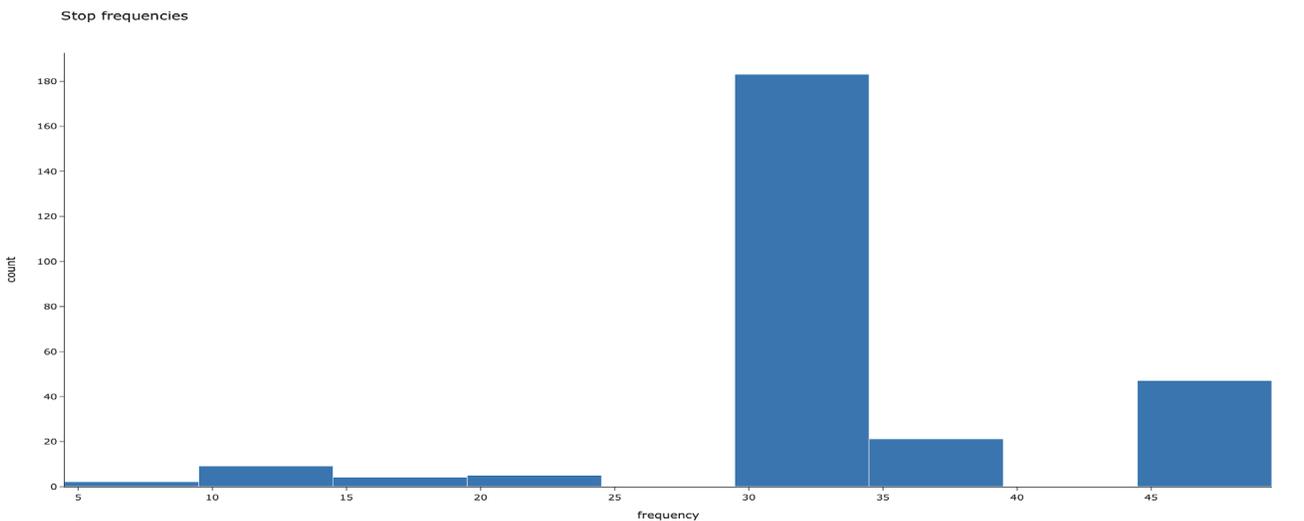
Figure 17 - Pre-Pandemic Transit Effectiveness



### TRANSIT SERVICE QUALITY

To review service quality, the city first measured average frequency to each bus stop. While City Coach does operate some frequent service, the majority of routes operate at a frequency of 30-minutes or greater.

Figure 18 - Average Headway by Stop



After looking at frequency, the city reviewed the proximity of high-quality bus stops (locations with average frequencies above 30 minutes) to major trip generators. City Coach Direct provides shorter wait times and travel times due to its on-demand nature and can cover the entire City in a single seat ride.

*Table 2 - Pre-Pandemic Transit Travel Time Comparison by Time Period*

Time Period	Number of Trips	Average Trip Time	Transit Trip Time
AM Peak	5,196	8.27 mins	13.19 mins
Midday	23,850	8.78 mins	14.09 mins
PM Peak	21,092	8.75 mins	13.87 mins

Prior to the pandemic, on average, transit users experience **59%** greater travel times. A regular transit user would have expected to spend **52 additional hours** commuting on transit over driving.

## CURRENT STATE OF SERVICE

Due to the COVID-19, the city reduced operated hours from 2019 by 22%. Service was truncated on a number of routes, and demand-response service also saw sizeable reductions. When taking into account the 2019 reductions, the net reduction from 2018 in fixed route service on the street was 33%.

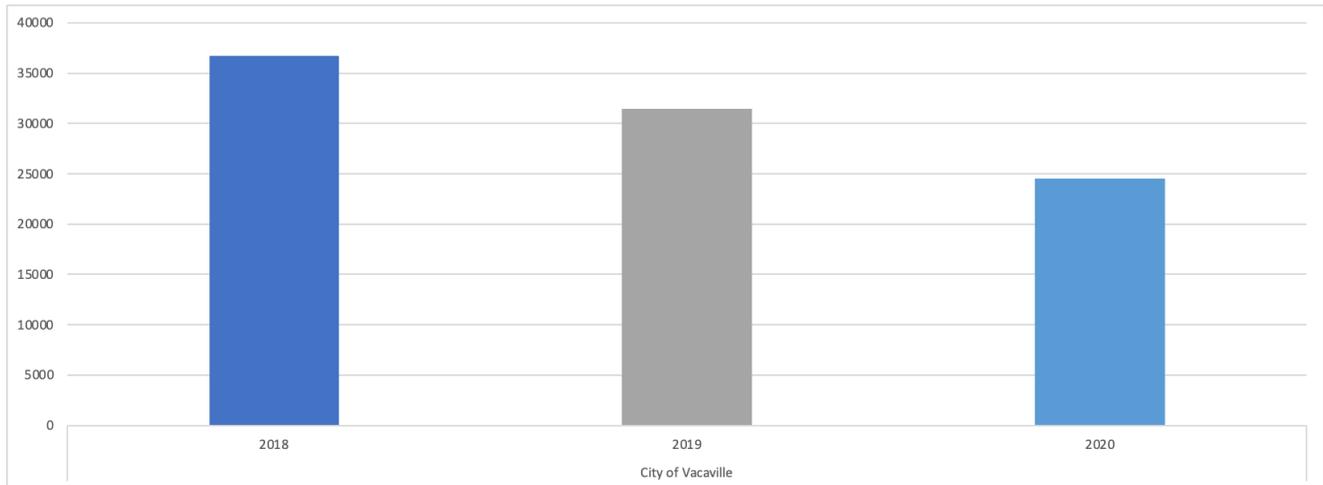


Figure 19 - Pandemic Fixed Route Service Hours

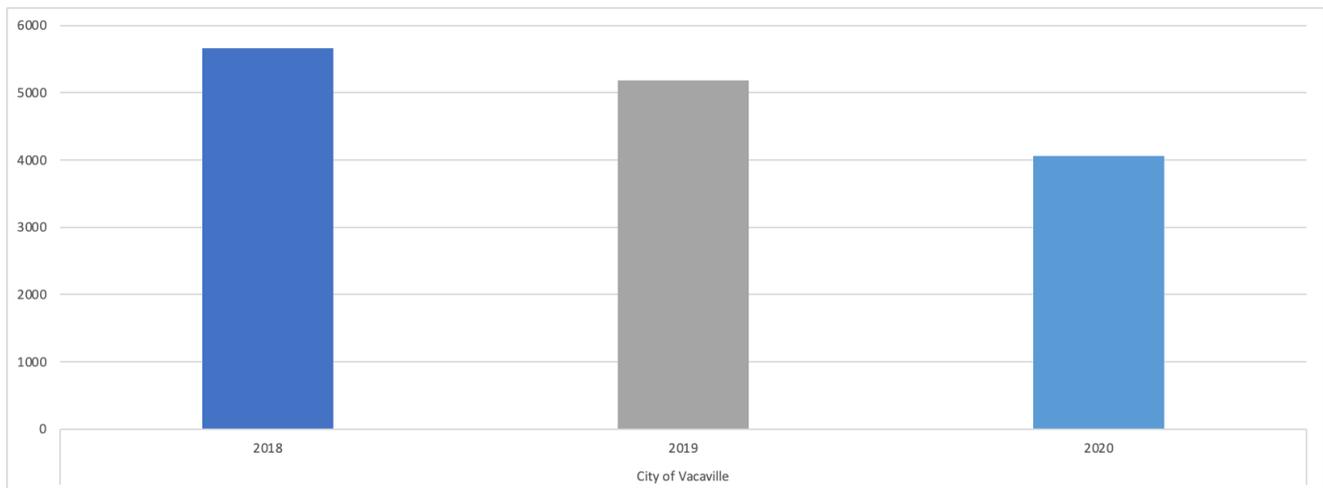


Figure 20 - Pandemic Demand Response Service Hours

The pandemic-level productivity of 10.7 passengers per hour represented a 3% drop from the preceding annual system average. Due to City Coach's reduced operating hours, productivity dropped only 12% in 2020 when compared to the hourly reduction of 22%.

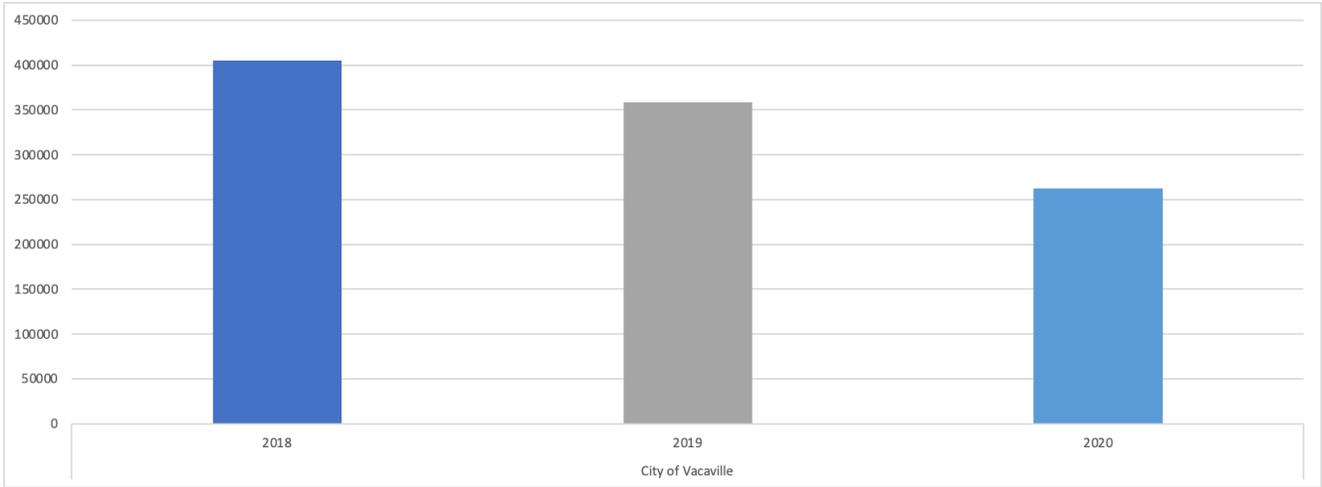


Figure 21 - Pandemic Fixed Route Passenger Trips

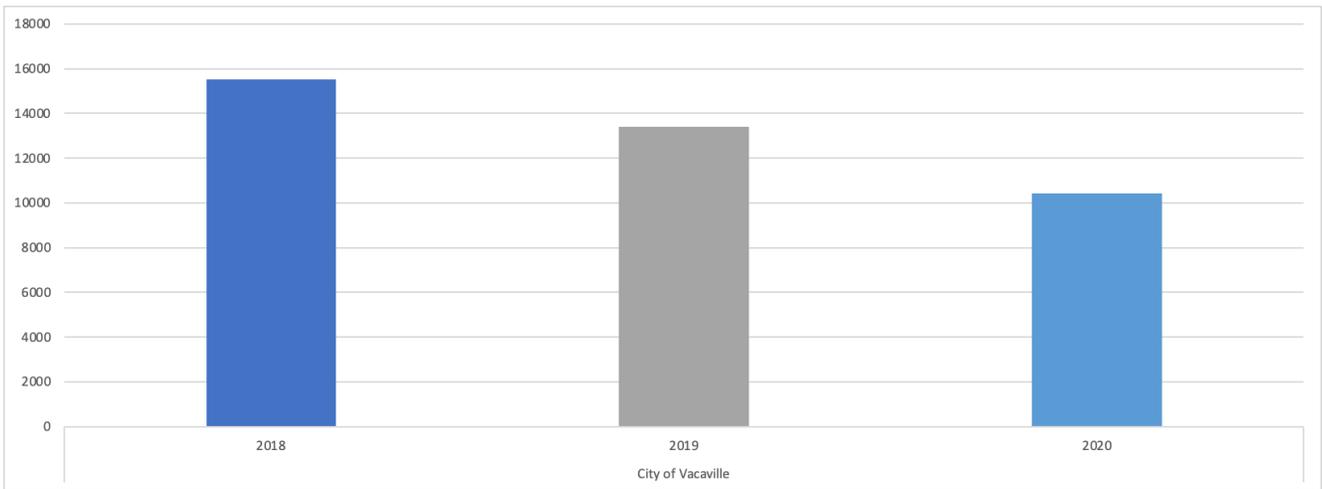
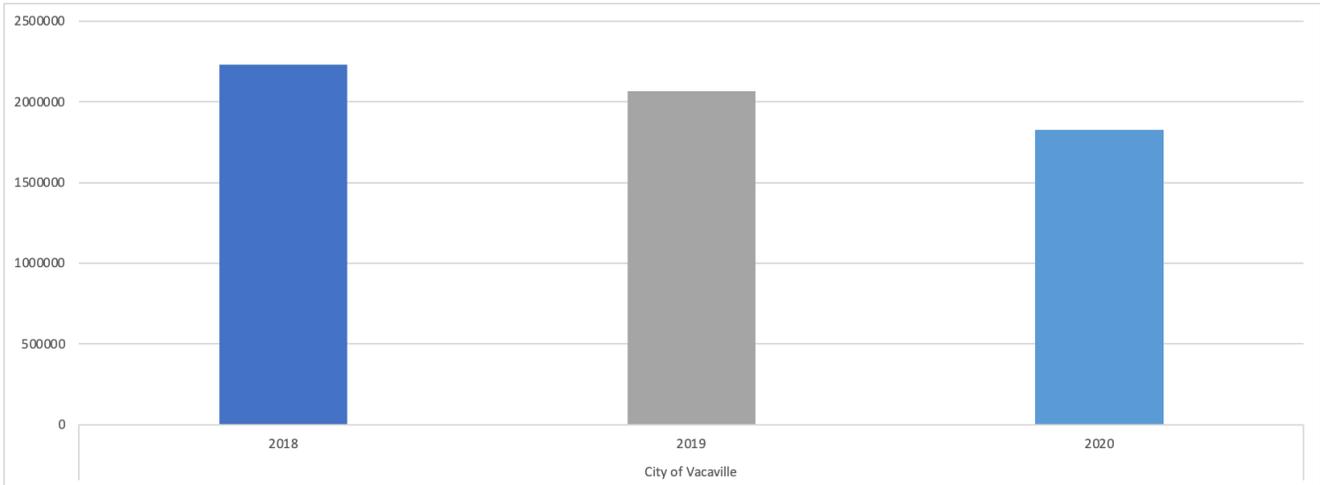


Figure 22 - Pandemic Demand Response Passenger Trips

## FINANCIAL PERFORMANCE

In 2020, financial performance dropped 11% to \$1.82M. In the four years preceding the pandemic, City Coach's annual operating expenses increased approximately 4.5%. Given the same inflation in 2020 and a projected operating budget of \$2.16M, the actual reduction in operating expenses in 2020 was approximately 18%.



*Figure 23 - Pandemic Fixed Route Operating Expenses*

## OVERVIEW OF EXISTING SERVICES

### FIXED ROUTE

**Route 1** formerly served the Vacaville Transportation Center (VTC), Leisure Town, and Orange. The route was suspended in March 2020 due to the COVID-19 pandemic. At this point, there is no plan to resume operating Route 1 as its service area is covered by City Coach Direct.

**Route 2** serves Downtown Vacaville via the Vacaville Transit Plaza (VTP), also known as the Downtown Transit Center. From that central point it serves the Browns Valley Parkway and In-Shape Health Club areas to the north. It also serves Jepson Middle School and the Eldridge Avenue area to the west. Finally, it heads south to the Davis Street Park and Ride before terminating back at the VTP.

**Route 3** begins at the Vacaville Transportation Center (VTC). It serves the southern side of Vacaville which includes Costco and Will C. Wood High School. It then heads east to serve Nelson Park, Callison, Cambridge, and Foxboro Elementary Schools. It finally heads back north, stopping at the WinCo Foods grocery store before returning to the VTC.

**Route 4** starts at the VTC. It heads east on Nut Tree Parkway and Orange Drive, parallel to I-80, serving the Vacaville Commons Shopping Center, Vacaville Premium Outlets, and various hotels and other retail. It then turns north to serve the Kaiser Permanente Vacaville Medical Center and Solano Community College before returning along the same route to the VTC.

**Route 5** begins at the VTC. It heads east, first serving the Walmart Supercenter and Sam's Club. It then turns right down Nut Tree Road, serving the VacaValley Hospital complex and various retail stores. The route then turns west onto Alamo Drive, serving the Lucky grocery store and Walmart Neighborhood Market. The route then turns northeast and serves Downtown Vacaville via the VTP before returning to the VTC on a symmetrical route.

**Route 6** starts at the VTC. It heads east parallel to I-80 along Nut Tree Parkway and then west on East Monte Vista Avenue, serving numerous retail areas along those roads including Target, the Outlets, and Best Buy. It then proceeds north on Brown Street, serving the neighborhoods near Markham Elementary School before heading to Downtown Vacaville and the VTP. It then proceeds back to the VTC following the same route.

### SPECIAL SERVICES

City Coach offers a complementary ADA-accessible service called Special Services. This service is available to any person, previously certified, who is unable to use the general fixed-route service that is available within Vacaville. The service area includes the entirety of the Vacaville city boundary, and the regular fare is \$2.00 per trip with discounted ticket books available at various locations. Fares have been suspended since March 2020 due to the COVID-19 pandemic.

To become certified to use Special Services individuals must schedule an in-person assessment through a third-party County certification service. Once certified riders may call to schedule rides at least 24 hours in advance. Same-day trips may be booked if capacity is available.

## CITY COACH DIRECT

The City of Vacaville offers a unique origin to destination service for the general public called City Coach Direct. City Coach Direct is run using smaller vehicles and provides a service similar to transportation network companies such as Uber or Lyft. Riders can call the City Coach Direct dispatch service to request a ride and will soon be able to book a ride using the TripSpark app.

## RIDERSHIP COMPARISON BY YEAR

Overall passenger counts on City Coach services still lag 2020-2021 levels. On most services, ridership is 50% lower than pre-pandemic levels, however, ridership in 2022 for the year to date are only 30% below pre-pandemic levels.

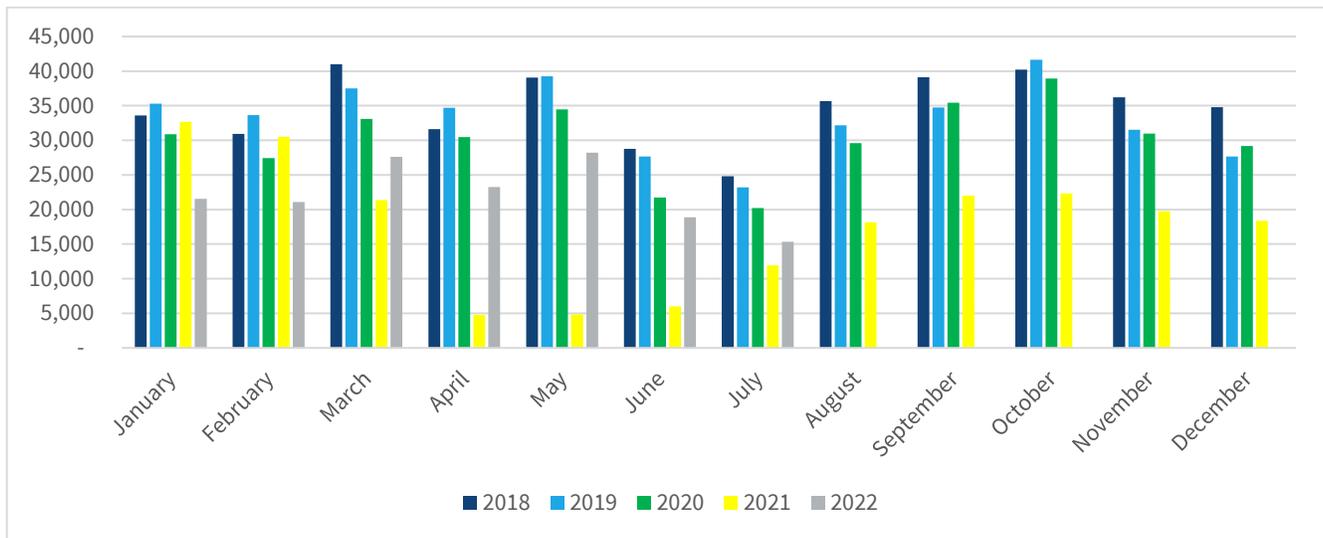


Figure 24 - Ridership by Month by Year

## CURRENT POPULATION TRAVEL PATTERNS

Current travel patterns reflect changes that started taking hold during the pandemic. With a higher work from home population, it is expected that the peak seen in 2019 will shift. The chart below shows all trips, not just trips on transit and indicates that travel patterns are now more intense all day. In fact, this study observed 31% more regional trips taken in 2022 vs 2019. Regional trips are defined as trips greater than 5 miles from City of Vacaville limits. Based on aggregated travel data pulled from cell phones, across all modes of transportation (including car trips), regional trips surrounding Vacaville increased by 31% in 2022, as compared to 2019, indicating an overall increase in travel throughout the area.

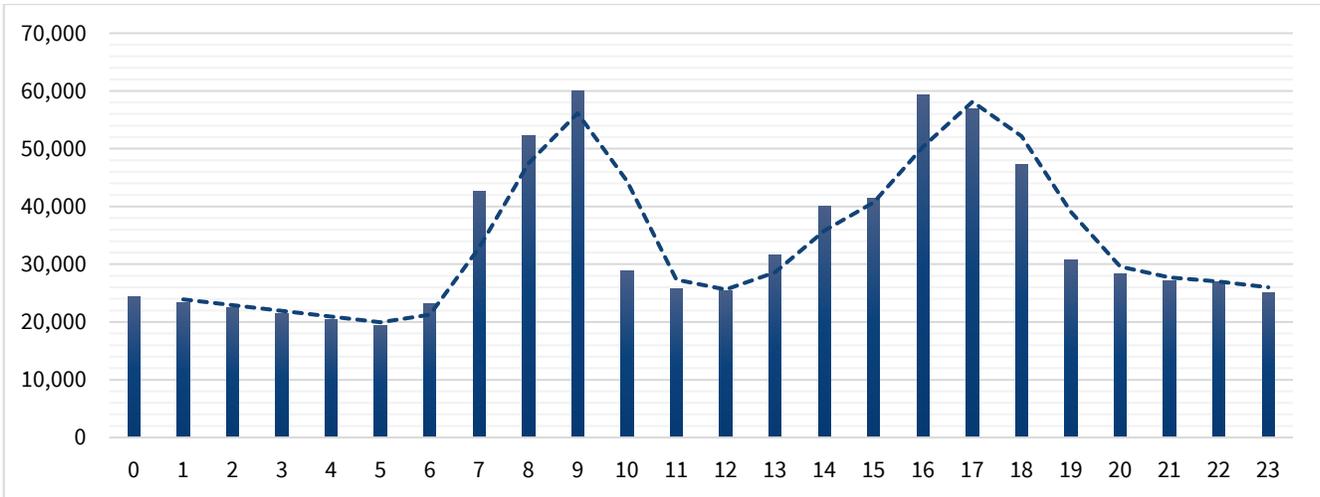


Figure 25 – 2022 Hourly Trip Distribution

When comparing 2019 to 2022, it is clear that trips start earlier in the day than prior to the pandemic. In 2022, trips start earlier and there are more in the early afternoon. Once again, this is an indication of all trips taken, not just trips on transit. Transit trips remain below pre-pandemic levels.

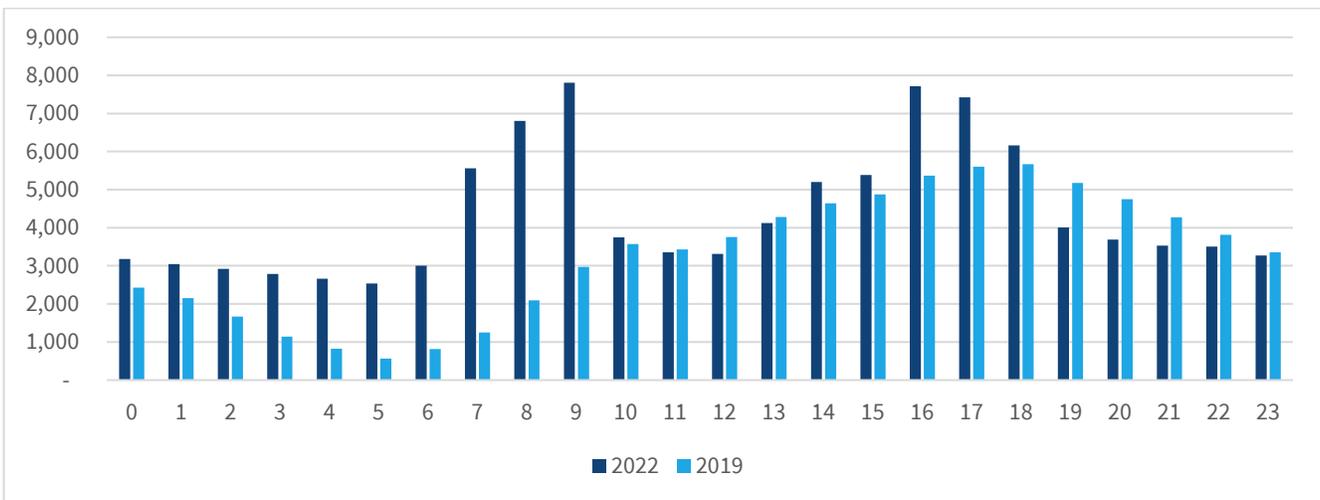
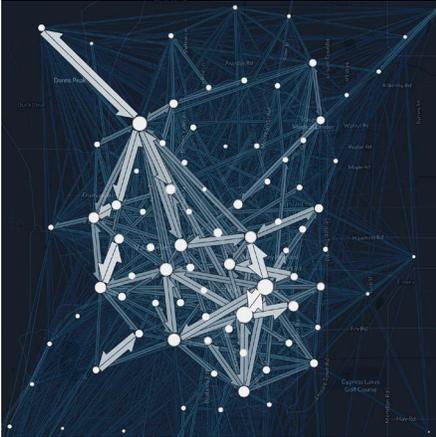


Figure 26 - Pre and Post Pandemic Travel Demand by Hour Compared

## GEOGRAPHIC TRAVEL PATTERNS

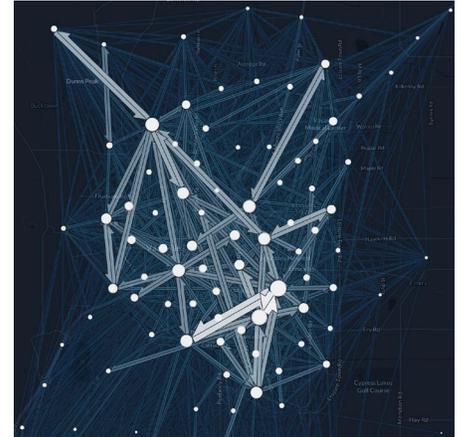
Geographically, the AM peak period has the highest intensity throughout Vacaville. While travel intensity does subside in the midday, travel picks up again in the PM peak period. There is also more travel towards Leisure Town Rd in the PM peak.



*Figure 29 - AM Peak Trip Patterns*



*Figure 28 - Midday Travel Patterns*



*Figure 27 - PM Peak Travel Patterns*

## SCENARIO PLANNING CONCEPTS

---

In order to comply with MTC SRTP guidelines, three scenarios were laid out to determine how City Coach service would be impacted by various drops in funding. In order to properly complete this task a full cost allocation model was created.

### COST ALLOCATION MODELING

It is critical to properly forecast out costs and revenues, as well as ridership, as part of the SRTP. To do so, the project team has built a cost allocation model. The cost allocation model divides annual operating costs into fixed and variable criteria. Fixed costs are those that the City will incur regardless of the level of service it operates. These are what we call “keeping the lights on” expenses. Variable costs are broken into per hour costs and per mile costs and ebb and flow based on service levels. This separation of expenses will be useful when costing out recommendations and building scenarios.

#### FIXED COSTS

The following criteria are included in fixed costs:

*Table 3 - Fixed Expenses*

Expense Category
SALARIES/WAGES - ADMINISTRATION
FRINGE BENEFITS
SERVICES/MAINT - OPERATIONS
ACCOUNTING
LEGAL
PRINTING/COPYING
MISC SERVICES - ADMIN - Other
OFFICE SUPPLIES
UTILITIES
DUES/SUBSCRIPTIONS
TRAVEL/MEETINGS
ADVERTISING/PROMOTION
MISC EXPENSE

In FY 21/22 these expenses account for approximately \$296,287 of the City’s annual transit operating budget.

#### VARIABLE COSTS

The remainder of the operating expenses are considered variable. The largest portion of these expenses are resulting from the operating contract. As stated above, variable costs are broken into a per hour cost and a per mile cost to correctly capture the variable most likely to generate costs. For example, insurance and fuel and tires are per mile expenses.

Table 4 - Variable Expenses

Expense	Variable Per Hour	Variable Per Mile
FUEL/LUBRICANTS		X
TIRES/TUBES		X
MATERIALS/SUPPLIES OPERATIONS COVID-19 MATERIALS		X
MATERIALS/SUPPLIES OPERATIONS - ...		X
MATERIALS/SUPPLIES OPERATIONS		X
CONTRACT SERVICES	X	
INSURANCE		X

For FY 21/22, the City is estimating \$1.7 million expenses that are considered variable per hour expenses and \$267k per mile variable expenses.

## SCENARIO PLANNING

As part of the SRTP the City is considering three financial scenarios.

- **Scenario 1 – Robust Recovery:** There is adequate funding to return overall revenue to 100% of pre-pandemic levels, with escalation. This would not assume proportionate recovery across all revenue sources.
- **Scenario 2 – Revenue Recovery with Fewer Riders:** Federal relief funds are eventually exhausted, although other funds recover to pre-pandemic levels. However, farebox revenue remains stagnant (20-50% below pre-pandemic levels, depending on current status) for the next five years.
- **Scenario 3 – Some Progress:** Federal relief funds are eventually exhausted and total revenue available to the agency is 15% below pre-pandemic levels for the next five years.

The cost allocation model allows for the incorporation of all of these scenarios and has built sensitivities into the model to determine the impact to ridership from each scenario. For example, if revenue levels were to drop, what would the resulting hours of service be? And, how much could ridership drop due to reduced service hours? The model also includes additional sub-scenarios based on non-transit market factors that will influence the City’s decision making over the next decade. These sub-scenarios include:

- Service Increases and Decreases
- Fare Changes
- Population Changes
- Employment Changes
- Gas Price Increase or Decrease
- Work From Home Changes
- Quality of Service Improvements
- Income Changes

Each of these variables has shown to have an impact on transit ridership.

<b>Year 1</b>			
<b>Assumptions</b>			
<b>Revenue</b>	7%		
<b>Gas Prices</b>	-5%		
<b>Economy</b>	-5%		
<b>Work From Home</b>	-2%		
<b>Service Levels</b>	5%		
<b>Service Quality</b>	4%		
	<b>Per Hour</b>	<b>Per Mile</b>	
<b>Fixed Route</b>	\$ 81.04	\$ 1.18	
<b>Dial-A-Ride</b>	\$ 77.11	\$ 1.08	
<b>Variables</b>	<b>Hours</b>	<b>Miles</b>	<b>Passengers</b>
<b>Fixed Route</b>	54,901	578,023	553,197
<b>Dial-A-Ride</b>	13,567	148,986	24,170
<b>Total</b>	68,468	727,009	577,367
<b>Service Level +/-</b>	3,255	5%	
<b>Cost per Hour</b>	\$ 106.19	1.9%	
<b>Productivity</b>	8.43	5.1%	

Figure 30 - Scenario Planning Example

## ASSUMPTIONS

For each scenario there are some market level conditions that the City has built into its projections. There are three major drivers for lost transit ridership:

1. The increased amount of work from home employees.
2. Gas prices do impact the choice to use transit. Gas prices in 2022 are between 30-50% higher than at any point in the last 5 years. However, for potential riders to make the switch to transit, a third criteria must be considered...
3. Service Quality – City Coach Direct has been designed to better connect riders in Vacaville with their destinations. Services such as this benefit cities like Vacaville by both improving service quality and at similar costs to fixed route.

Additionally, the City must also consider other market factors such as inflation. While increases in consumer prices do not impact transit on an annual basis, they do impact wage negotiations. The City’s operations contractor manages all wage related collective bargaining so it is not expected that the City will be impacted in Year 1 of the plan. However, there will be a significant increase in the next contract. As mentioned earlier, the City is reviewing the potential of increasing fares to combat rising costs. This will be carefully analyzed due to the impact to ridership, especially coming out of the pandemic.

# SCENARIO 1 – ROBUST RECOVERY

Year 1				Year 2				Year 3				Year 4				Year 5			
Assumptions																			
Revenue	7%			Revenue	6%			Revenue	6%			Revenue	5%			Revenue	5%		
Gas Prices	-5%			Gas Prices	-2%			Gas Prices	0%			Gas Prices	0%			Gas Prices	0%		
Economy	-5%			Economy	-3%			Economy	1%			Economy	1%			Economy	2%		
Work From Home	-2%			Work From Home	-1%			Work From Home	-1%			Work From Home	-2%			Work From Home	-3%		
Service Levels	5%			Service Levels	2%			Service Levels	3%			Service Levels	1%			Service Levels	1%		
Service Quality	4%			Service Quality	2%			Service Quality	2%			Service Quality	1%			Service Quality	1%		
	Per Hour	Per Mile			Per Hour	Per Mile			Per Hour	Per Mile			Per Hour	Per Mile			Per Hour	Per Mile	
Fixed Route	\$ 62.87	\$ 1.18		Fixed Route	\$ 65.07	\$ 1.22		Fixed Route	\$ 67.35	\$ 1.26		Fixed Route	\$ 69.71	\$ 1.31		Fixed Route	\$ 72.15	\$ 1.35	
Dial-A-Ride	\$ 59.82	\$ 1.08		Dial-A-Ride	\$ 61.92	\$ 1.11		Dial-A-Ride	\$ 64.08	\$ 1.15		Dial-A-Ride	\$ 66.33	\$ 1.19		Dial-A-Ride	\$ 68.65	\$ 1.24	
Variables	Hours	Miles	Passengers																
Fixed Route	25,486	208,165	288,002	Fixed Route	26,111	213,268	303,021	Fixed Route	26,805	218,939	318,690	Fixed Route	27,132	221,608	326,245	Fixed Route	27,471	224,381	333,817
Dial-A-Ride	4,437	37,797	11,460	Dial-A-Ride	4,546	38,724	12,058	Dial-A-Ride	4,666	39,754	12,682	Dial-A-Ride	4,723	40,238	12,982	Dial-A-Ride	4,782	40,742	13,284
<b>Total</b>	<b>29,923</b>	<b>245,962</b>	<b>299,462</b>	<b>Total</b>	<b>30,656</b>	<b>251,992</b>	<b>315,079</b>	<b>Total</b>	<b>31,472</b>	<b>258,693</b>	<b>331,372</b>	<b>Total</b>	<b>31,855</b>	<b>261,846</b>	<b>339,227</b>	<b>Total</b>	<b>32,254</b>	<b>265,123</b>	<b>347,101</b>
Service Level +/-	1,353	5%		Service Level +/-	734	2%		Service Level +/-	815	3%		Service Level +/-	384	1%		Service Level +/-	399	1%	
Cost per Hour	\$ 82.58	2.2%		Cost per Hour	\$ 85.47	3.5%		Cost per Hour	\$ 88.46	3.5%		Cost per Hour	\$ 91.56	3.5%		Cost per Hour	\$ 94.77	3.5%	
Productivity	10.01	4.9%		Productivity	10.28	3%		Productivity	10.53	2%		Productivity	10.65	1%		Productivity	10.76	1%	

Figure 31 - Scenario 1 Forecasting

## How would priorities and goals change with revenue constraints? What would inform or trigger service change decisions?

For Scenario 1, the City is assuming that Federal revenues will continue at a current pace. State revenue will not be significantly impacted by a worldwide recession and annual increases will at a minimum offset inflation. Finally, farebox revenues will not return to pre-pandemic levels in year 1, however will do so by the end of the SRTP period.

The additional service afforded by increased funding would result in an average 5% increase in ridership per year for the SRTP period.

## How much service would be available?

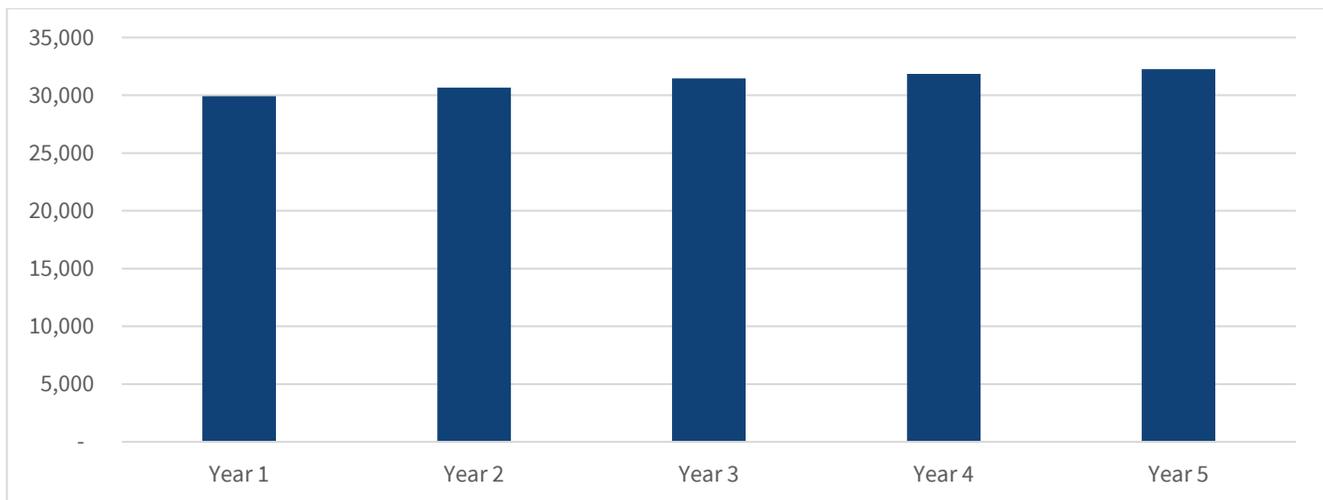


Figure 32 - Scenario 1 Service Hours by Year

Under Scenario 1, the City would add approximately 2% more service each year.

## How would the deployment of service change by mode? Geography or route? and Time of Day?

### PRIORITY 1 – INCREASE SERVICE TO BETTER MEET DEMAND

Under Scenario 1, the City could provide more service earlier in the morning and earlier in the afternoon where there appear to be more trips compared to the pre-pandemic timeframe. While many routes start early, service does not extend to the mid-evening period/late night.

Time Period	% of Travel	Transit Proportion
Early AM	12%	0
AM Peak	20%	33%
Midday	23%	37%

<b>PM Peak</b>	23%	35%
<b>Late Night</b>	15%	0
<b>Total</b>	851,759	23%

Table 5 - Travel Demand Satisfied by Transit

Currently the City covers less than 25% of the potential transit trips. Potential transit trips are defined as trips taken within the service area that start and end within ¼ mile of an operating transit route. As City Coach doesn't operate early AM (0:00AM-06:59AM) and late night (after 08:00pm).

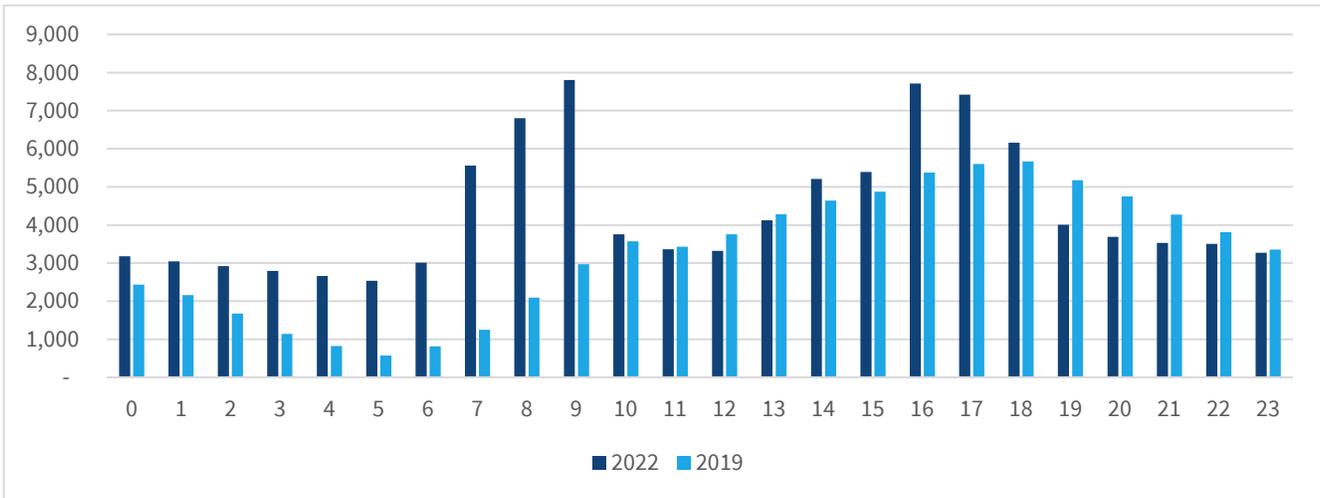


Figure 33 – Pre and Post Pandemic Travel Demand by Hour Compared

## PRIORITY 2 – BETTER ALIGN SERVICES TO WHERE PEOPLE WANT TO GO

As shown in Figure 34 below City Coach fixed route serves the major trip generators in Vacaville. However, there is new travel demand further west and southeast of the current City Coach service area. Scenario 1 would allow City Coach to service those areas either through fixed route or expanded City Coach Direct services.

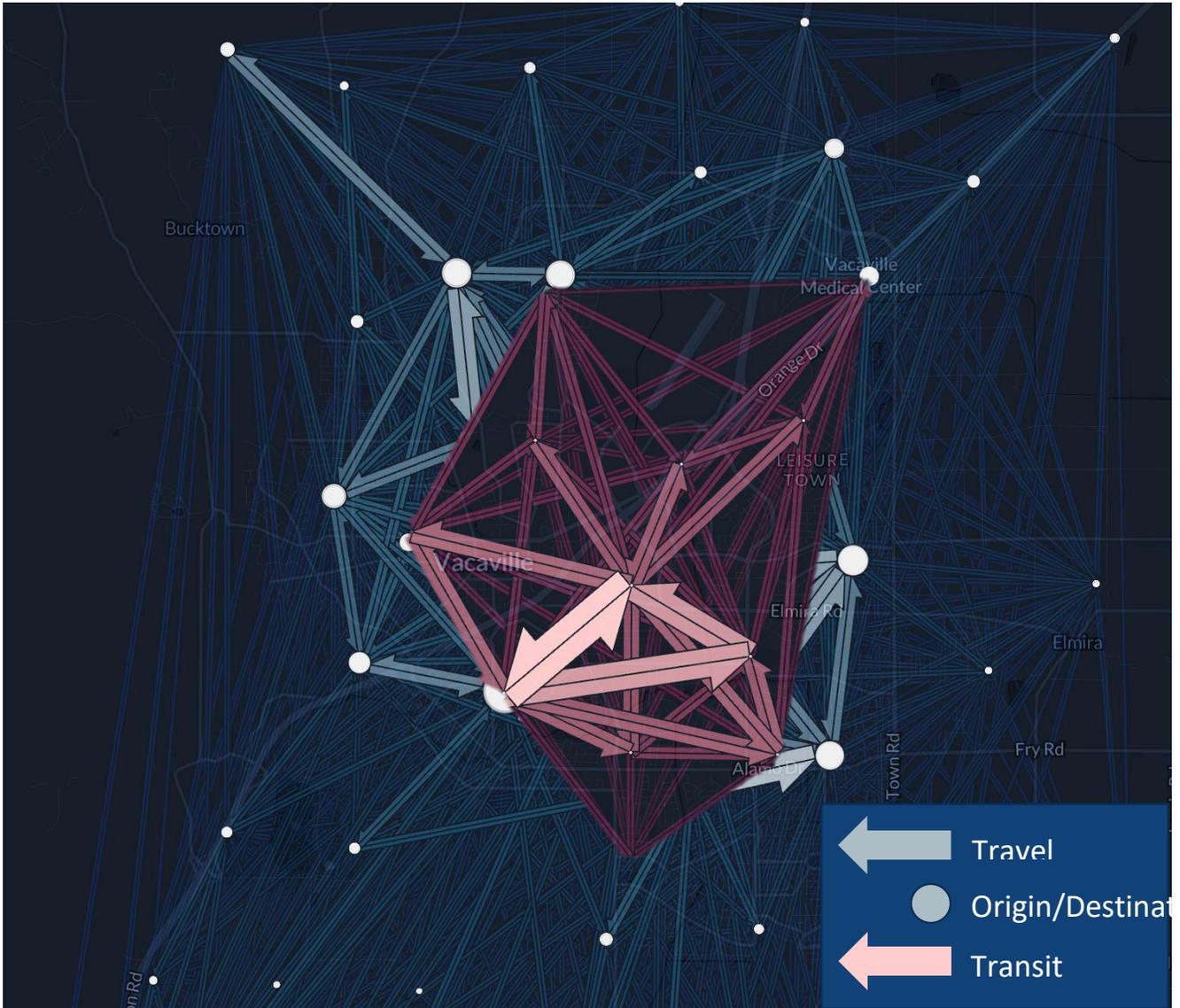


Figure 34 - Travel Demand and Transit Potential

## How would equity priority communities be considered under this scenario?

The SRTP will use a measurement known as the Mobility Vulnerability Index (MVI) to determine where equity priority communities are and how they will be treated under each Scenario. Transit systems across the U.S. speak about attracting “choice” riders and understand the need to also serve the “transit dependent”. This latter category, transit dependency, is normally derived from combining multiple socio-economic indicators such as poverty level, housing status, and language proficiency. This allows transit systems to determine a population’s propensity to use transit. Our experience is that transit dependency may not be a good indicator of whether someone will actually use transit.

Which is why the approach used to determine need for City Coach users is not to look at transit dependency as a potential for ridership growth but to instead look at whether services are provided equitably. The MVI takes a number of these socio-economic indicators and weights them based upon historical information to determine what portions of the service area will most be impacted by changes to the public transit system. The MVI is derived from 16 indicators collected by the annual American Community Survey and the census block group (CBG). These indicators are placed into three categories: Mobility, Housing, and Education. The three categories are then weighted, and each census block group is then ranked on a scale of 0-100 on how vulnerable they are to mobility changes.



Figure 35 - Mobility Vulnerability

This data can also be used to determine impacts of congestion and where the community has education and food deserts. Finally, when looking at this data, it will be important to ensure that the voices of these communities are heard during the recommendation phase of this project. The MVI illustrates the concentration of communities and individuals who are more vulnerable to changes in transportation so that transit agencies can connect with these communities directly to ensure they provide proper feedback on any service changes.

When measuring mobility vulnerability, the City has also measured the travel time to major trip generators for residents living in vulnerable areas on public transit. This measurement can show how effective transit is as a lifeline service, but also the quality of service. Vulnerable populations

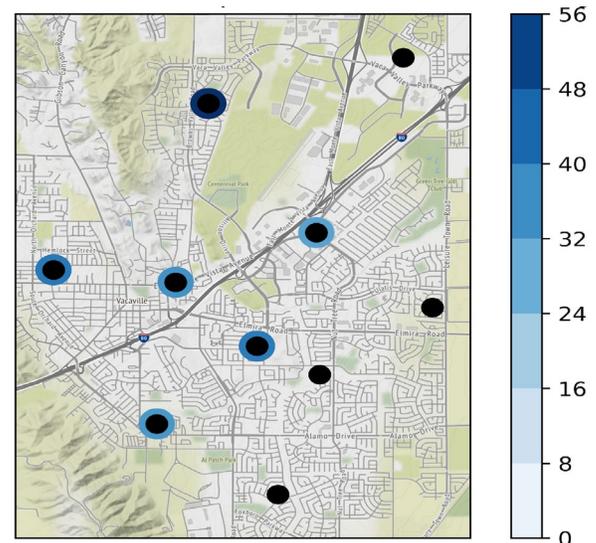


Figure 36 - Travel Time for Equity Priority Communities

have an average one-way travel time of **45 minutes** to major trip generators when using fixed routes. City Coach Direct allows faster commutes with lower wait times when compared to fixed routes.

## How would these revenue constraints impact staffing and budgeting?

Under Scenario 1 there would be no anticipated changes to staffing and/or budgeting.

## How would different service levels impact fleet requirements or spare ratios?

The existing fleet would be able to complete the proposed additional service hours without expansion. The City would respect its current fleet replacement ratio.

## SCENARIO 2 – REVENUE RECOVERY/FEWER TRIPS

Year 1				Year 2				Year 3				Year 4				Year 5			
Assumptions																			
Revenue	3%			Revenue	4%														
Gas Prices	-5%			Gas Prices	-2%			Gas Prices	0%			Gas Prices	0%			Gas Prices	0%		
Economy	-5%			Economy	-3%			Economy	1%			Economy	1%			Economy	2%		
Work From Home	0%			Work From Home	-1%														
Service Levels	1%			Service Levels	0%			Service Levels	1%			Service Levels	1%			Service Levels	1%		
Service Quality	3%			Service Quality	1%			Service Quality	2%			Service Quality	2%			Service Quality	2%		
	Per Hour	Per Mile			Per Hour	Per Mile			Per Hour	Per Mile			Per Hour	Per Mile			Per Hour	Per Mile	
Fixed Route	\$ 62.87	\$ 1.18		Fixed Route	\$ 65.07	\$ 1.22		Fixed Route	\$ 67.35	\$ 1.26		Fixed Route	\$ 69.71	\$ 1.31		Fixed Route	\$ 72.15	\$ 1.35	
Dial-A-Ride	\$ 59.82	\$ 1.08		Dial-A-Ride	\$ 61.92	\$ 1.11		Dial-A-Ride	\$ 64.08	\$ 1.15		Dial-A-Ride	\$ 66.33	\$ 1.19		Dial-A-Ride	\$ 68.65	\$ 1.24	
Variables	Hours	Miles	Passengers																
Fixed Route	24,586	200,817	279,536	Fixed Route	24,680	201,583	287,042	Fixed Route	24,811	202,650	296,087	Fixed Route	24,946	203,753	305,684	Fixed Route	25,085	204,892	315,301
Dial-A-Ride	4,280	36,463	11,124	Dial-A-Ride	4,296	36,602	11,422	Dial-A-Ride	4,319	36,796	11,782	Dial-A-Ride	4,343	36,996	12,164	Dial-A-Ride	4,367	37,203	12,547
<b>Total</b>	<b>28,867</b>	<b>237,280</b>	<b>290,660</b>	<b>Total</b>	<b>28,977</b>	<b>238,185</b>	<b>298,464</b>	<b>Total</b>	<b>29,130</b>	<b>239,446</b>	<b>307,869</b>	<b>Total</b>	<b>29,289</b>	<b>240,750</b>	<b>317,848</b>	<b>Total</b>	<b>29,452</b>	<b>242,096</b>	<b>327,847</b>
Service Level +/-	29%	1%		Service Level +/-	110	0%		Service Level +/-	153	1%		Service Level +/-	159	1%		Service Level +/-	164	1%	
Cost per Hour	\$ 82.58	2.2%		Cost per Hour	\$ 84.62	2.5%		Cost per Hour	\$ 85.81	1.4%		Cost per Hour	\$ 89.73	4.6%		Cost per Hour	\$ 91.45	1.9%	
Productivity	10.07	5.5%		Productivity	10.30	2%		Productivity	10.57	3%		Productivity	10.85	3%		Productivity	11.13	3%	

Figure 37 - Scenario 2 Forecasting

Scenario 2 essentially keeps service levels flat however, the service plan for Scenario 2 focuses on service quality with new, innovative transit modes such as microtransit. While service levels are expected to stay flat due to funding constraints, ridership is expected to grow due to better, targeted service.

## How would priorities and goals change with revenue constraints? What would inform or trigger service change decisions?

Under scenario 2, modeling shows that service levels would be effectively flat for the duration of the SRTP period. Therefore, the priorities would focus on service quality, coverage, and serving equity priority communities effectively.

Farebox recovery ratio would be under 10% for the duration of the SRTP period as fare recovery is not expected in this scenario. Therefore, the City could review fare-free transit on its fixed route.

## How much service would be available?

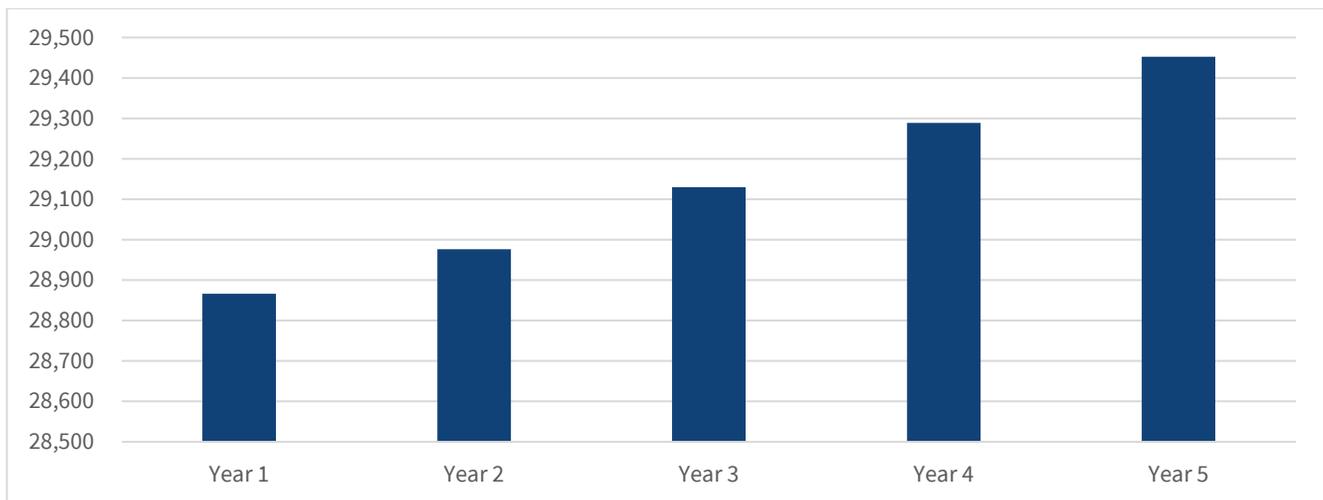


Figure 38 – Scenario 2 Service Hours by Year

Service levels would be virtually flat, only increasing 0.6% during the SRTP period. This would entail service growth not keeping up with population growth and would result in an even lower transit mode share than current.

## How would the deployment of service change by mode? Geography or route? And Time of Day?

Service would be added to the key areas where demand has increased since the pandemic began using on-demand/microtransit. Additionally, service would be added along the major arterials that connect most of the City to provide faster, more frequent travel throughout the City.

## How would equity priority communities be considered under each scenario?

As shown in Figure 34 and 35 above, City Coach’s on-demand service would continue to support equity priority communities.

## How would these revenue constraints impact staffing and budgeting?

Under Scenario 2 there would be no anticipated changes to staffing and/or budgeting.

## How would different service levels impact fleet requirements or spare ratios?

The existing fleet would be able to complete the proposed additional service hours without expansion. The City would respect its current fleet replacement ratio.

# SCENARIO 3 – SOME PROGRESS

Year 1				Year 2				Year 3				Year 4				Year 5			
Assumptions																			
Revenue	0%			Revenue	0%			Revenue	0%			Revenue	0%			Revenue	0%		
Gas Prices	-5%			Gas Prices	-2%			Gas Prices	0%			Gas Prices	0%			Gas Prices	0%		
Economy	-5%			Economy	-3%			Economy	1%			Economy	1%			Economy	2%		
Work From Home	-2%			Work From Home	-1%			Work From Home	-1%			Work From Home	-2%			Work From Home	-3%		
Service Levels	-2%			Service Levels	-4%														
Service Quality	-1%			Service Quality	-2%														
	Per Hour	Per Mile			Per Hour	Per Mile			Per Hour	Per Mile			Per Hour	Per Mile			Per Hour	Per Mile	
Fixed Route	\$ 62.87	\$ 1.18		Fixed Route	\$ 65.07	\$ 1.22		Fixed Route	\$ 67.35	\$ 1.26		Fixed Route	\$ 69.71	\$ 1.31		Fixed Route	\$ 72.15	\$ 1.35	
Dial-A-Ride	\$ 59.82	\$ 1.08		Dial-A-Ride	\$ 61.92	\$ 1.11		Dial-A-Ride	\$ 64.08	\$ 1.15		Dial-A-Ride	\$ 66.33	\$ 1.19		Dial-A-Ride	\$ 68.65	\$ 1.24	
Variables	Hours	Miles	Passengers																
Fixed Route	23,767	194,122	254,537	Fixed Route	22,915	187,164	242,700	Fixed Route	22,094	180,457	230,403	Fixed Route	21,302	173,991	218,884	Fixed Route	20,539	167,758	207,712
Dial-A-Ride	4,137	35,247	10,129	Dial-A-Ride	3,989	33,984	9,658	Dial-A-Ride	3,846	32,766	9,168	Dial-A-Ride	3,708	31,592	8,710	Dial-A-Ride	3,576	30,461	8,265
<b>Total</b>	<b>27,904</b>	<b>229,369</b>	<b>264,666</b>	<b>Total</b>	<b>26,904</b>	<b>221,148</b>	<b>252,357</b>	<b>Total</b>	<b>25,940</b>	<b>213,223</b>	<b>239,571</b>	<b>Total</b>	<b>25,011</b>	<b>205,583</b>	<b>227,594</b>	<b>Total</b>	<b>24,115</b>	<b>198,219</b>	<b>215,978</b>
Service Level +/-	(666)	-2%		Service Level +/-	(1,000)	-4%		Service Level +/-	(964)	-4%		Service Level +/-	(929)	-4%		Service Level +/-	(896)	-4%	
Cost per Hour	\$ 83.41	3.2%		Cost per Hour	\$ 86.24	3.4%		Cost per Hour	\$ 90.15	4.5%		Cost per Hour	\$ 93.30	3.5%		Cost per Hour	\$ 95.71	2.6%	
Productivity	9.48	-0.6%		Productivity	9.38	-1%		Productivity	9.24	-2%		Productivity	9.10	-1%		Productivity	8.96	-2%	

Figure 39 - Scenario 3 Forecasting

Under Scenario 3, City Coach would actually be required to reduce service and as a result, lose riders. The City’s current funding levels will not require any service contraction and Scenario 3 is highly unlikely to occur.

## How would priorities and goals change with revenue constraints? What would inform or trigger service change decisions?

Under this scenario, City Coach’s operating costs would exceed what is forecasted in the City budget. The City would need to consider all options to maintain high quality service for its riders. In this scenario, ridership is projected to drop from pandemic level lows. Service levels would need to contract as well, at an average of -3.3% per year. Service would need to be reviewed in detail and contracted in areas that would not affect equity priority communities. Frequency and span of services would be affected.

**It should be noted that this scenario is not expected to occur as the City has sufficient funding to operate its services without contraction, even if funding were to be reduced going forward.**

## How much service would be available?

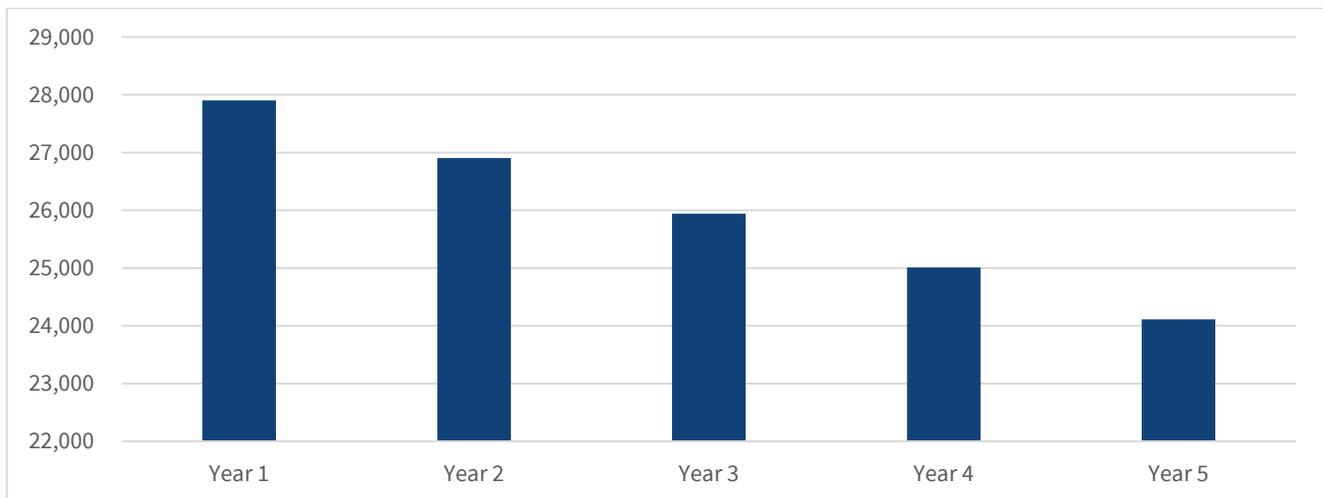


Figure 40 – Scenario 3 Service Hours per Year

Service would contract an average of 3.3% per year due to rising costs related to inflation and the City’s operating contract. While this is a small change, the larger impact is that no additional service would be added to growing areas around the City.

## How would the deployment of service change by mode? Geography or route? And Time of Day?

The City would continue to provide coverage based service and would need to pause any expansion to new developments. Service growth would not keep up with population growth. No change in geography or service span is expected.

## How would equity priority communities be considered under each scenario?

As shown in Figure 34 and 35 above, City Coach’s on-demand service would continue to support equity priority communities.

## How would these revenue constraints impact staffing and budgeting?

Under Scenario 3 there would be no anticipated changes to staffing and/or budgeting.

## How would different service levels impact fleet requirements or spare ratios?

The existing fleet would be able to complete the proposed additional service hours without expansion. The City would respect its current fleet replacement ratio.

## APPENDIX

---

### CITY OF VACAVILLE HISTORY

The City of Vacaville is located in Solano County, CA, and sits approximately 35 miles from Sacramento, and 55 miles from San Francisco, in the northeastern portion of the San Francisco Bay Area. The city was founded in 1851 and named after Juan Manual Vaca, an original resident of the 45,000-acre land grant on which the town was sited, and in 1892 the town was incorporated as a city. As of the 2020 census, The City of Vacaville had a population of roughly 102,400 residents, making it the third largest city in Solano County.

Much of the City's early development focused on agriculture, and the area was well known for shipping fruit and nut products throughout the country. A popular attraction, Nut Tree, or "California's Legendary Road Stop," began as a roadside fruit stand in 1921 and eventually grew to become a world-renowned restaurant complex for almost 75 years, before closing in 1996 and reopening in 2009 as a shopping center. In recent years, the community saw continued growth and has welcomed some of the world's most successful bioscience companies, including Genetech, Alza and Chiron, and Travis Air Force Base, home to the 60th Air Mobility Wing, is less than 10 miles away in neighboring Fairfield<sup>1</sup>.

### POPULATION AND DEMOGRAPHICS

Vacaville is one of the larger cities in Solano County and the 74<sup>th</sup> largest city in California. 37% of the population is below 18 or above 65 years old. As it relates to commuting patterns, approximately 0.4% of city residents take transit, this compares to 1.4% of Solano County residents who take transit and 2.1% of California residents who use public transportation.

From a demographic standpoint, 52% of Vacaville residents identify as non-white alone, which is below Solano County's 65% who identify as the same. The population in Vacaville also has 10% higher median income than Solano County and 19% higher than California. 6.3% of residents live below the poverty line, and an additional 19% live below the median income of just over \$93,000.

---

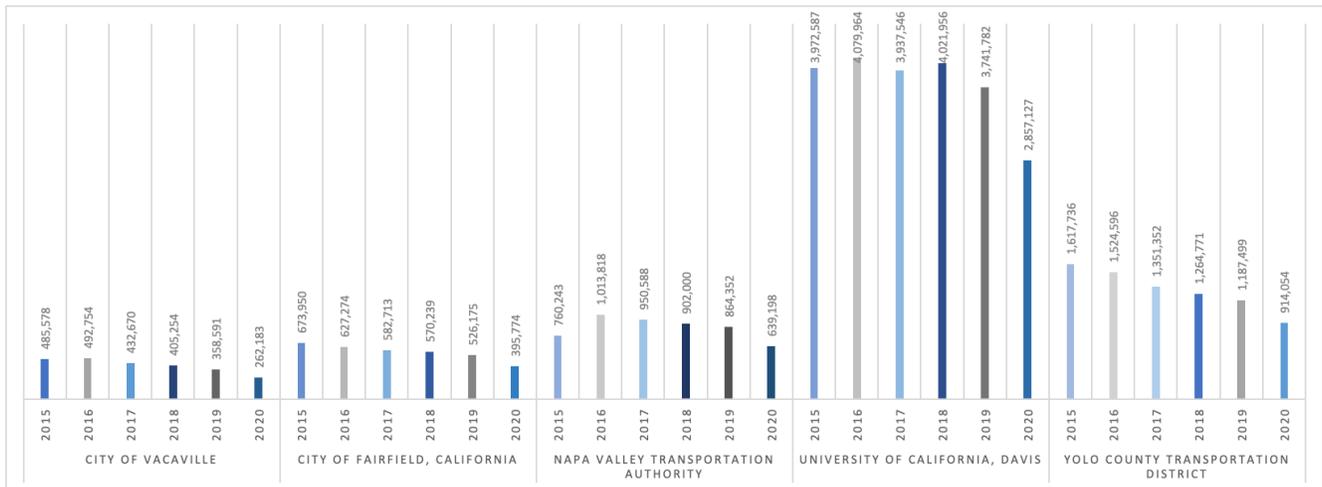
<sup>1</sup> [1] <https://www.ci.vacaville.ca.us/about-us/vacaville-s-history?locale=en>

## PEER REVIEW

As part of this Short-Range Transit Plan, the city reviewed agencies similar to Vacaville and its City Coach operation. Peers were selected based regional geography and service types operated. Utilizing this data, the city can determine how its pre-pandemic, pandemic-level, metrics compared, and then use peer-level performance to create a playbook for post-pandemic service changes. It should be noted that City Coach’s rider profile is quite different than the peer group. City Coach operates in a more affluent area where the majority of residents have access to at least one vehicle (see demographics Table 6). As a result, ridership and service hours are much lower than the peer group.

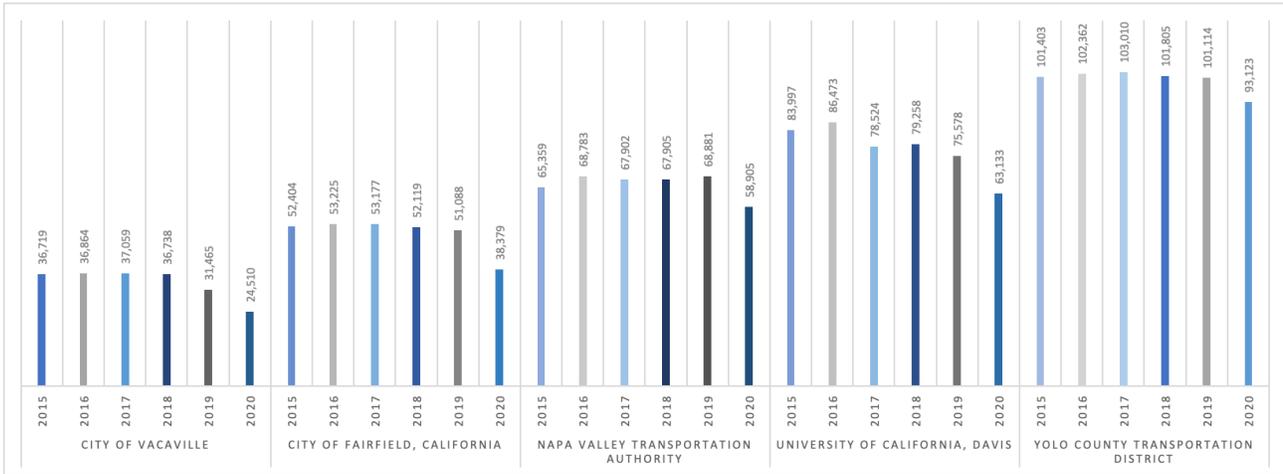
Beginning with fixed route passenger trips, the city averaged 435,000 trips per year prior to the pandemic. This is 70% below the peer group. In 2020, ridership in the peer group dropped an average of 24% riders. City Coach ridership dropped 40% to 263,000, this represented a reduction approximately 7% higher than experienced by the peer group.

Figure 20 - Peer Review - Unlinked Passenger Trips by Year



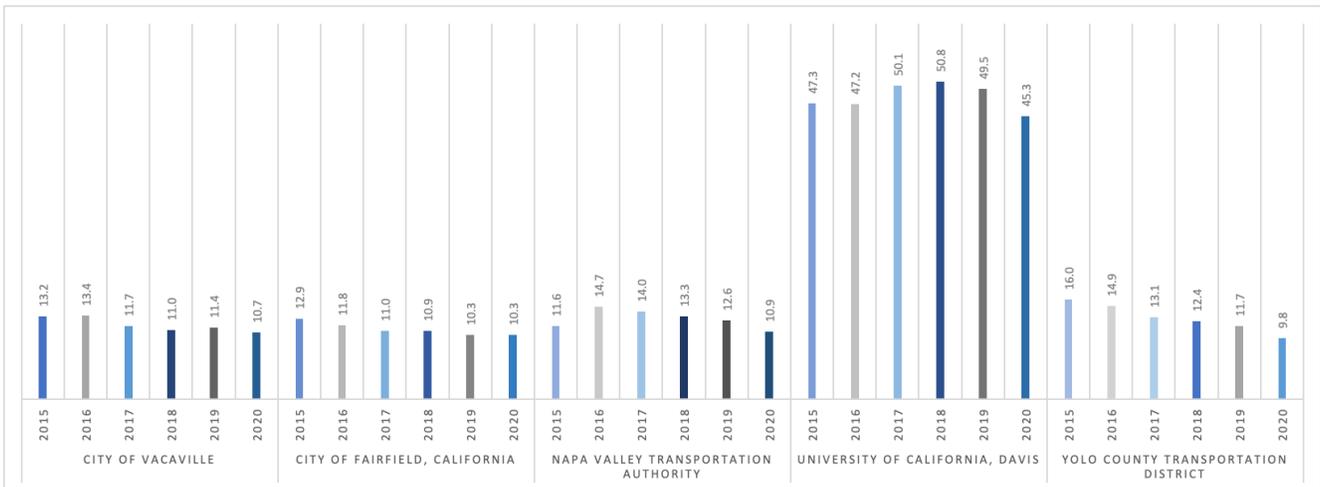
Prior to the pandemic, City Coach operated approximately 48% fewer service hours compared to the peer group, with an average of 34,000 annual revenue hours. In 2020, City Coach operated 24,510 hours, a drop of 22% compared to 2019. The peer group reduced annual revenue hours by a similar 15% due to the pandemic.

Figure 21 - Peer Review - Annual Revenue Hours



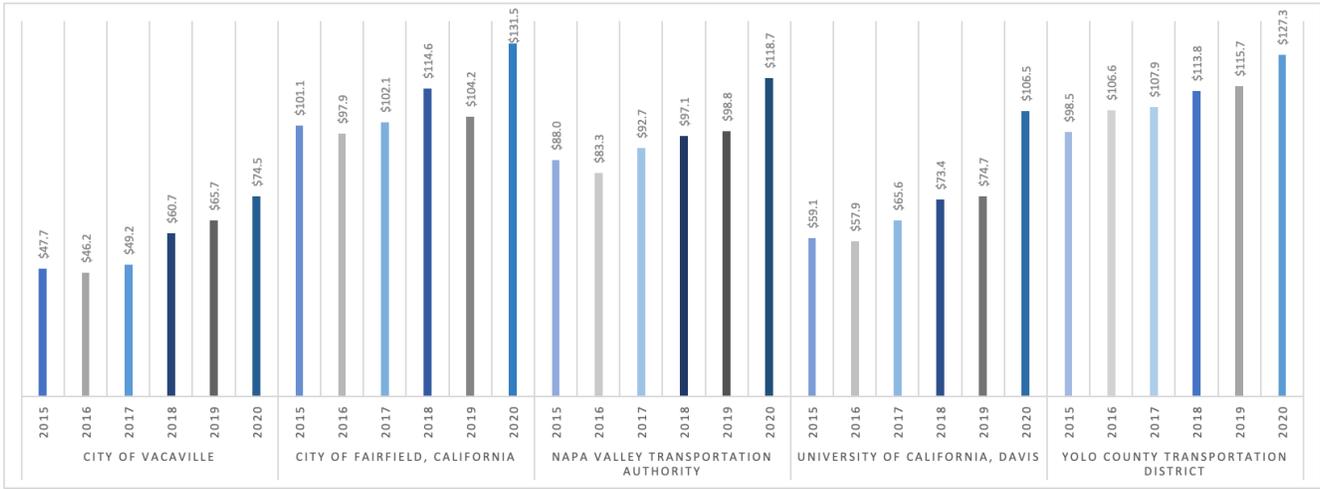
When reviewing system productivity, the peer group apart from Unitrans at UC Davis averaged 12.6 passengers per hour in the years leading up to the pandemic. This decreased to 10.4 passengers per hour in the pandemic, a drop of 17%. City Coach carried approximately 12.1 passengers per hour prior to the pandemic, which dropped to 10.7, also a drop of 21%.

Figure 22 - Peer Review - Passenger Trips per Revenue Hour



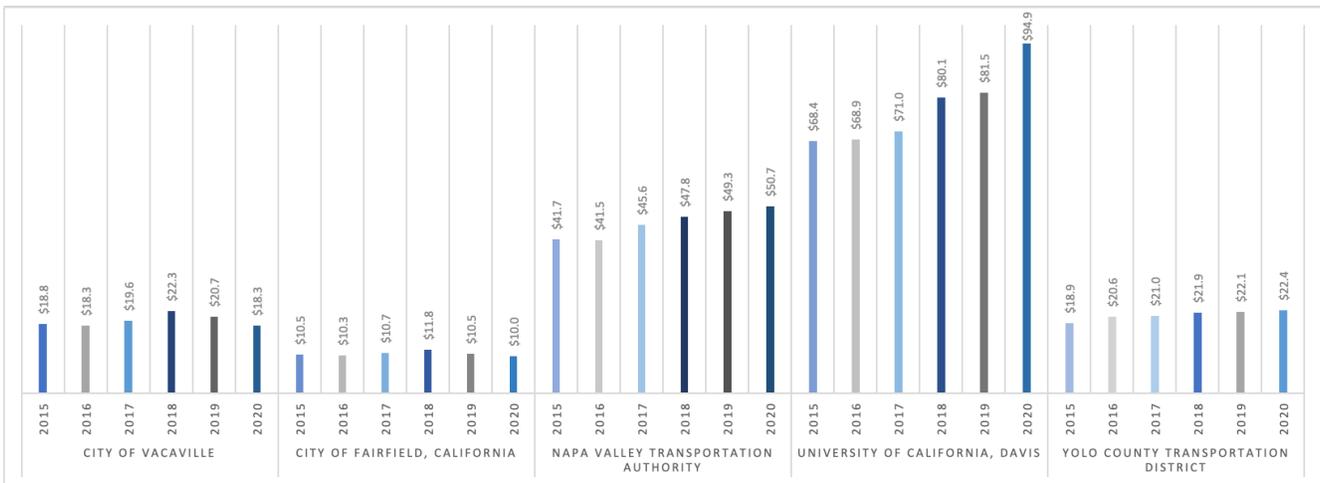
On average, the peer group operated at a cost per hour of \$89.36 prior to the pandemic, which increased to \$111.70 per hour, a 25% increase in 2020. City Coach operated at a cost per hour 36% below the peer group prior to the pandemic at an average of \$53.90, which increased to \$74.53 in the pandemic, a 38% jump.

Figure 23 - Peer Review - Cost per Revenue Hour



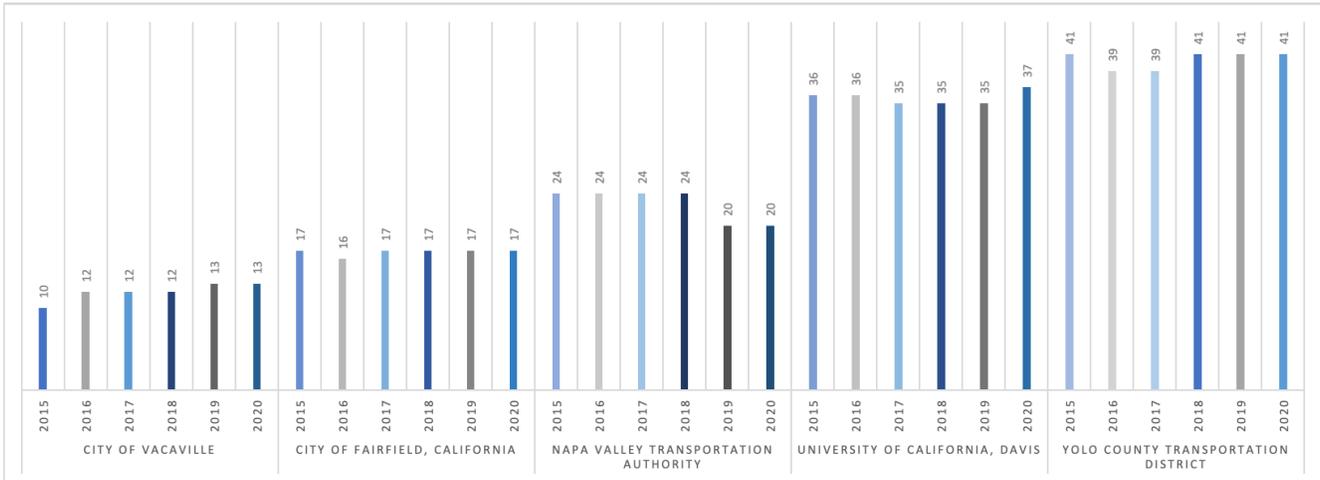
The city also reviewed cost per service area capita to determine how it compares to the peer group. While the average cost per service area capita is \$35 for the peer group, the city spent an average of \$20 prior to the pandemic. This indicates that further investment in transit is needed in Vacaville to keep up with similar transit systems. Most systems in the peer group increased their cost per capita during the pandemic. The average of \$42.64 in 2020 represented an increase of 18% over pre-pandemic investment. The city of Vacaville further reduced service investment by 8% during the pandemic.

Figure 24 - Peer Review - Operating Expense per Service Area Capita



When looking at vehicles in operation, the majority of systems in the peer group operated an average of 26 peak vehicles. Most agencies did not reduce vehicles during the pandemic instead choosing to reduce span of service or days in service. City Coach operated approximately 13 vehicles in peak service prior to the pandemic and did not add or remove any vehicles in 2020.

Figure 25 - Peer Review - Peak Vehicles in Service



## MARKET ASSESSMENT

The Market Assessment section of the SRTP provides background on the population and demographics of City Coach’s service area. The goal is to provide background on the population characteristics to better understand who makes up the market of current and potential riders.

Table 6 - Population and Demographics

Population and Demographics	California	Solano County	Vacaville
Total Population	39,237,836	451,716	102,386
<b>Age</b>			
Under 18	8,828,513	99,378	22,832
Over 65	5,807,200	73,630	15,051
<b>Commuting</b>			
Drive Alone	13,146,038	172,752	40,310
Take Public Transit	843,498	11,292	1280
No Vehicles Available	2,746,649	7,537	1,224
Disabled Population	6,734,666	52,311	10,535
<b>Ethnicity</b>			
White Alone (not Hispanic)	14,321,810	168,038	50,988
Black Alone	2,550,459	66,854	9,727
Asian Alone	6,081,865	73,178	9,522

Hispanic Alone	15,459,707	123,318	24,982
Two or more races	1,569,513	32,072	9,010
<b>Housing</b>			
Total Housing Units	14,366,336	160,366	36,012
Housing Units in multi-unit structures	4,527,186	36,079	7,817
Average household size	2.94	2.87	2.81
Owner-occupied housing units	7,420,725	99,587	23,480
<b>Income</b>			
Median Household Income	\$ 78,672	\$ 84,638	\$ 93,291
Individuals living below the poverty line	4,512,351	42,010	6,655
Less than \$20,000	744,552	13,790	2,592
\$20,001-\$50,000	1,707,621	27,956	5,774
\$50,001-\$100,000	3,623,861	47,547	10,179
>\$100,000	5,201,713	67,204	15,791

**POPULATION**

City Coach provides public transit in Vacaville located in Solano County. The City population has grown 11% in the last 10 years. With the COVID-19 pandemic, more residents are staying within the counties for employment, shopping and healthcare than ever before. Much of the employment is service related, however, with commutes at an all-time low, due to work from home allowances, many residents are finding they don't need to commute to work.

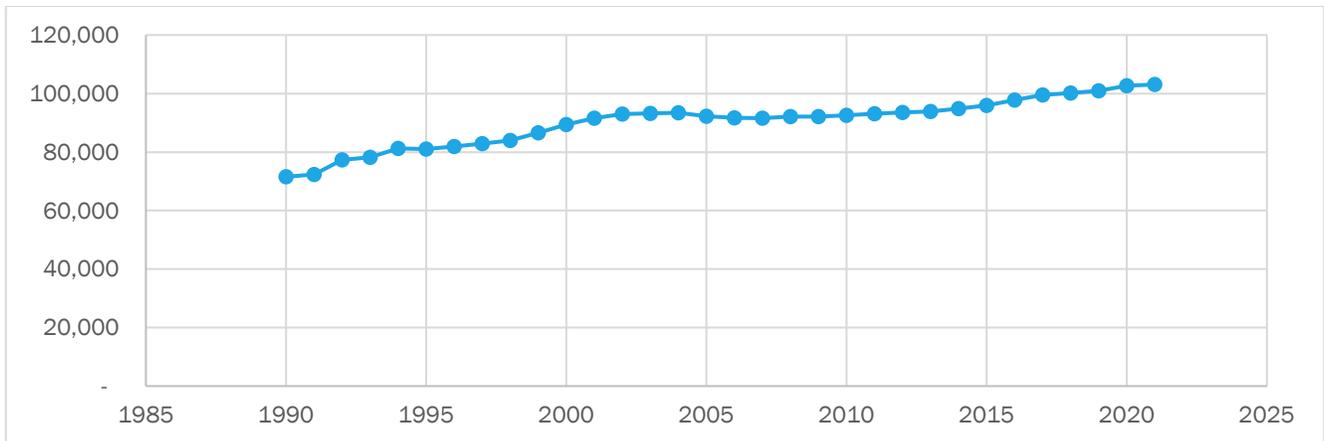


Figure 41 – Population by Year

Compared to neighboring cities, Vacaville is one of the largest in terms of population.

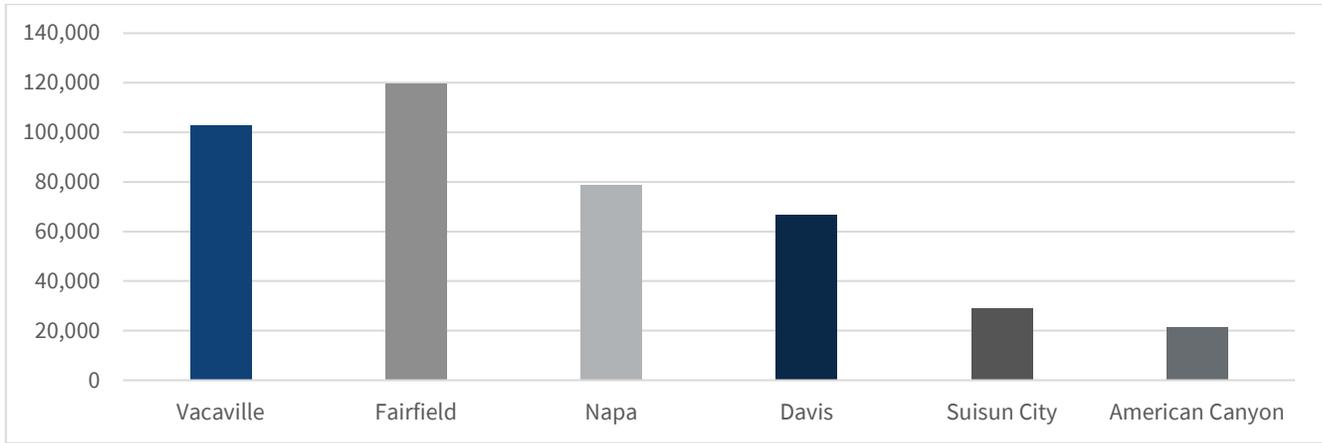


Figure 42 – Population of Neighboring Cities

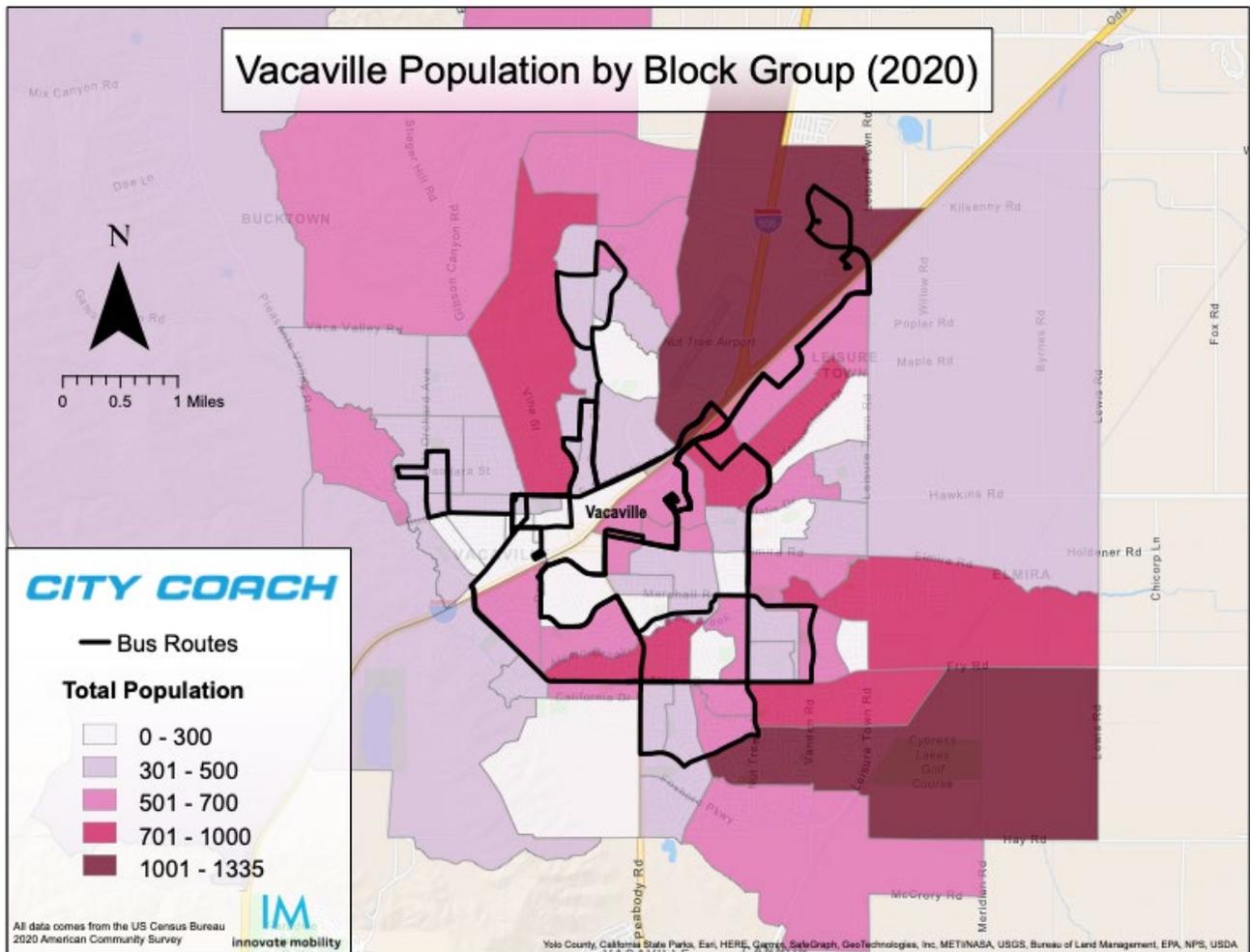
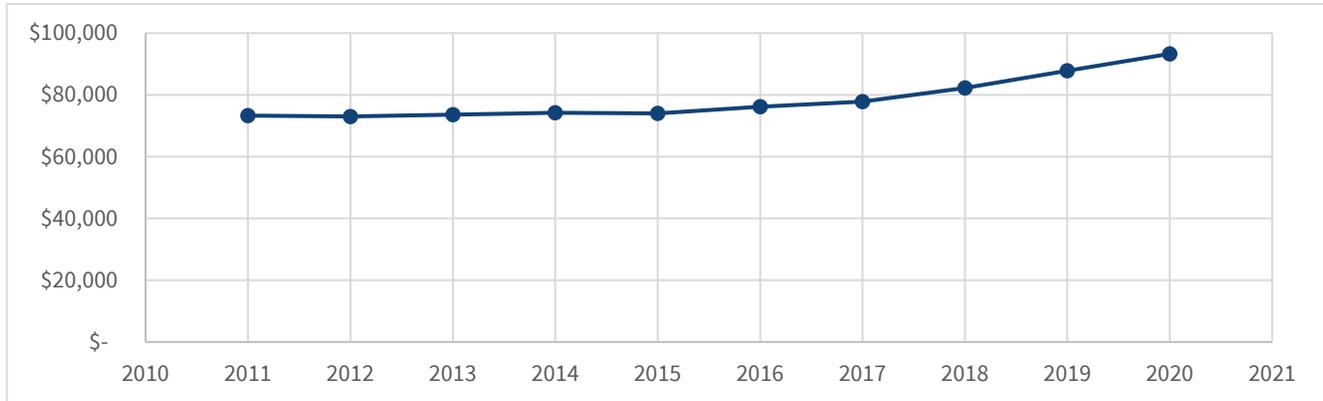


Figure 43 - Population by Block Group

## INCOME

In terms of income, Vacaville's median income has soared 27% in the last 10 years. Vacaville's median income is approximately 20% higher than the State of California's. As a result, City Coach finds it difficult to grow ridership.



*Figure 44 - Median Household Income by Year*

Compared to neighboring cities, Vacaville's median income is second only to American Canyon.

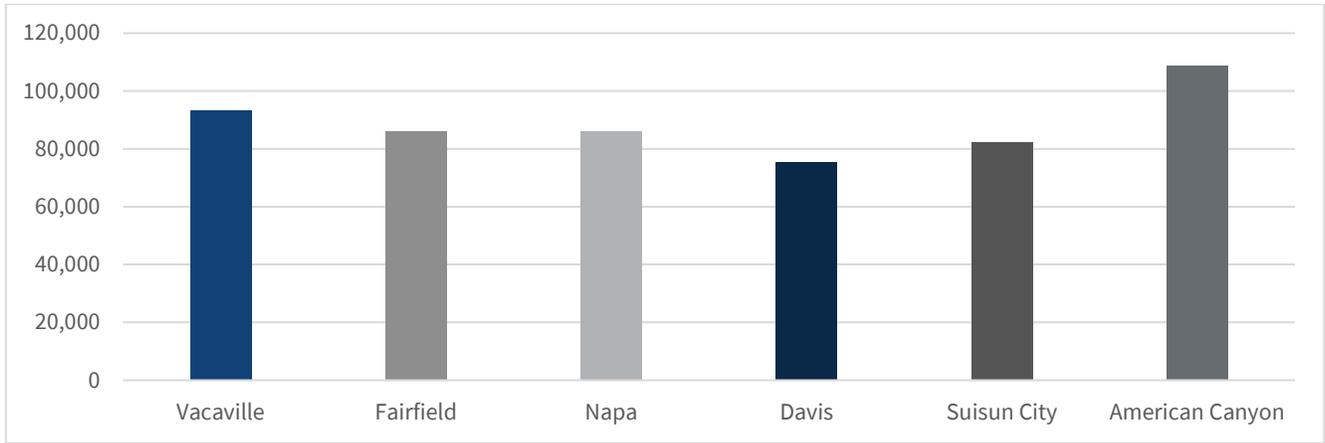


Figure 46 - Median Household Income of Neighboring Cities

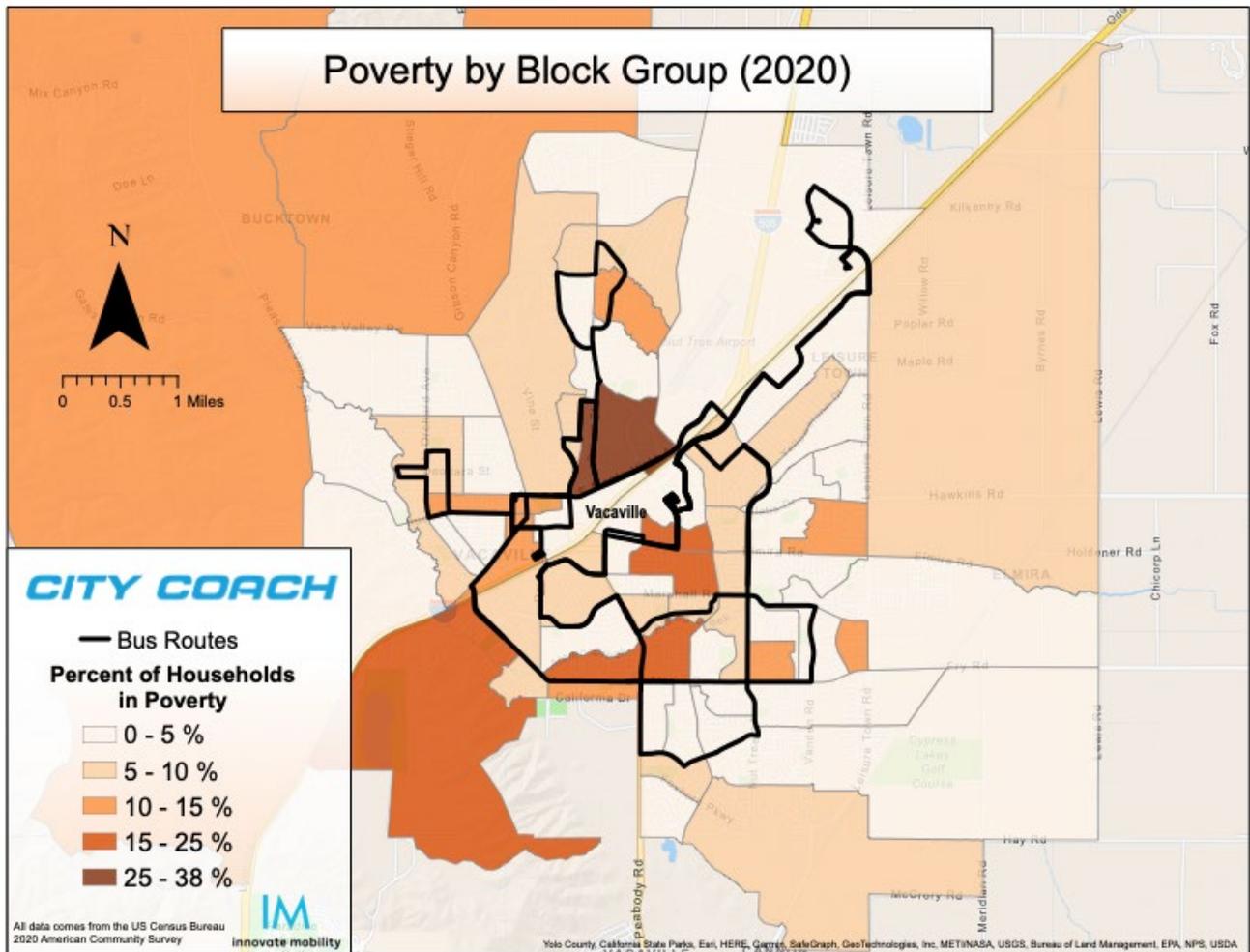


Figure 45 - Poverty by Block Group

**EMPLOYMENT**

The COVID-19 had a far greater impact on employment than any other major event in the past 30 years. However, the impact was shorter in duration than the Great Recession. Vacaville’s unemployment rate has returned to pre-pandemic levels as of May 2022.

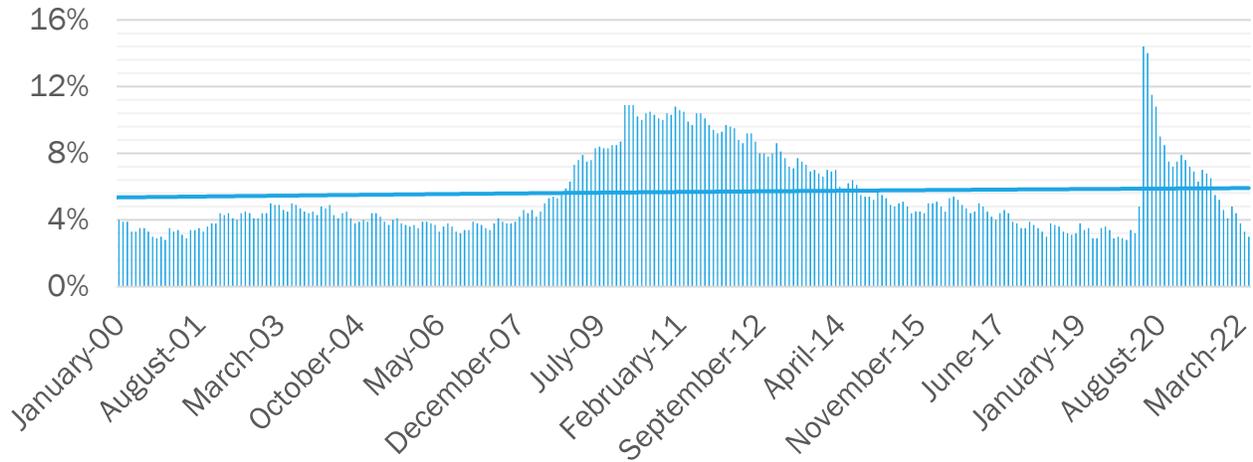


Figure 47 - Unemployment Rate by Year

The unemployment rate of neighboring cities has also rebounded post-pandemic with Vacaville at 3% unemployment as of May 2022.

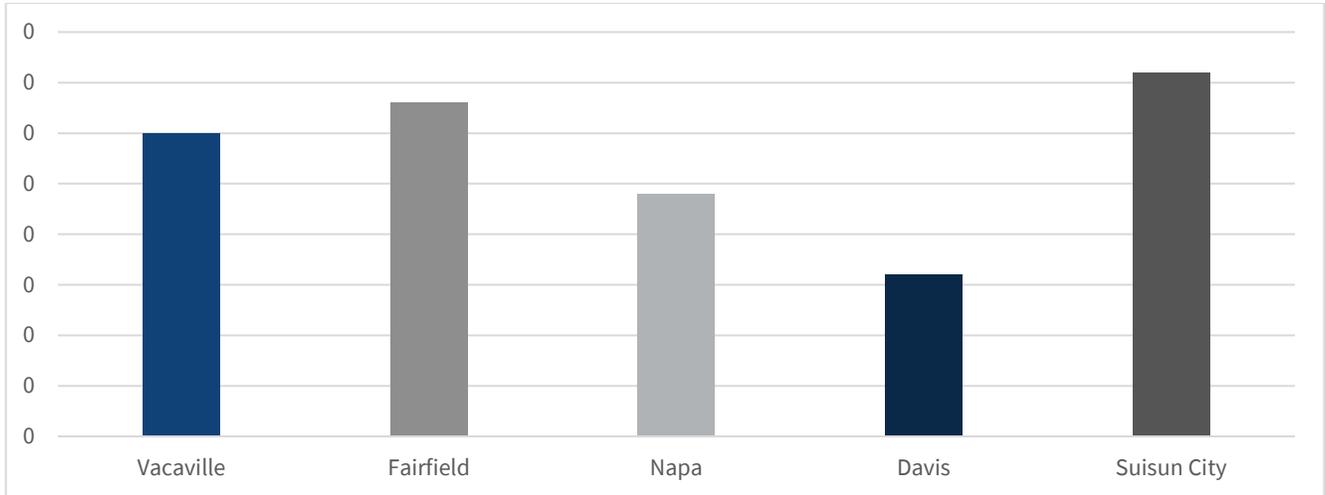


Figure 48 - Unemployment Rate of Neighboring Cities

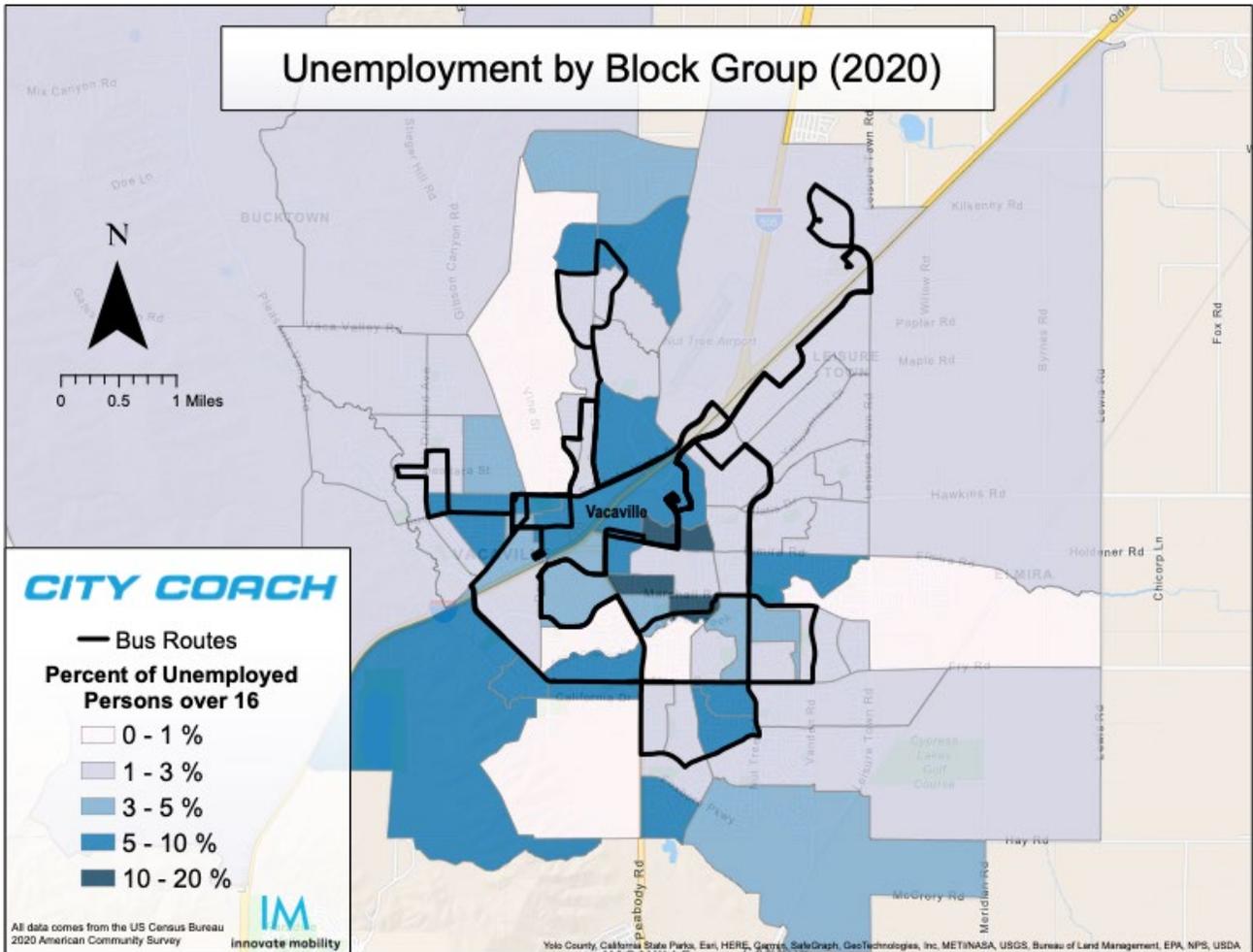


Figure 49 - Unemployment by Block Group

## EDUCATION

When looking at highest level of degree achieved, there is a direct correlation between the poverty map and level of education. In areas of dense poverty, we see dense populations without a GED. These are also areas where the majority of residents live below the poverty line.

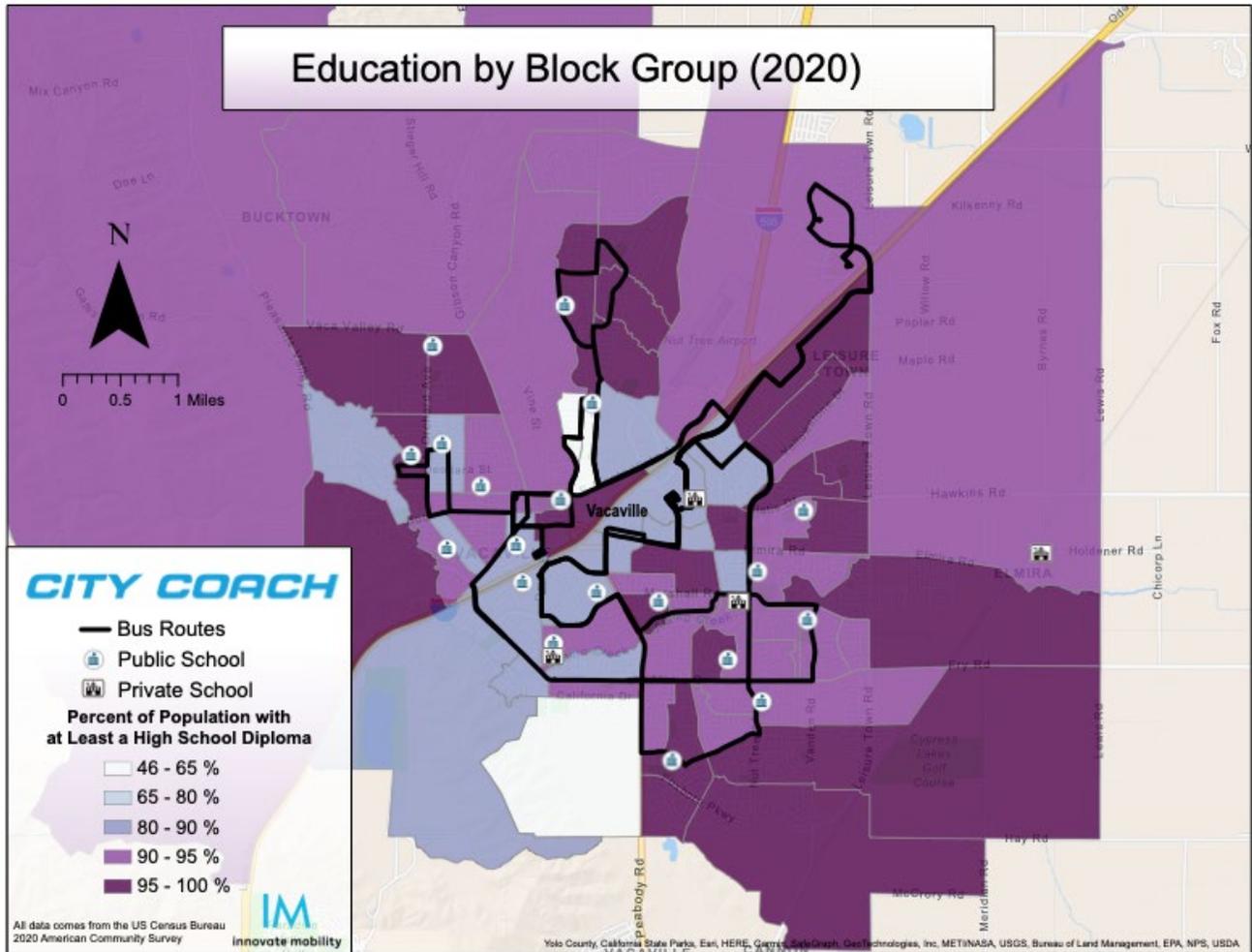


Figure 50 - Vacaville Education Access

## RACE AND ETHNICITY

Using 2020 self-reported census data, Vacaville was mapped by both density and density by race and ethnicity. The map below shows a fairly integrated region, with some pockets of racial concentration.

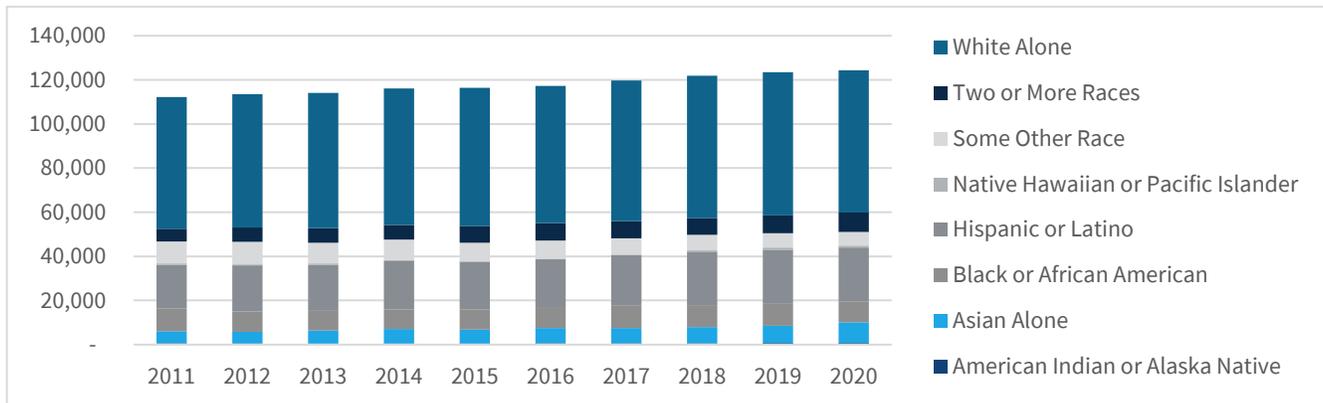


Figure 51 - Population by Race (Self-Reported)

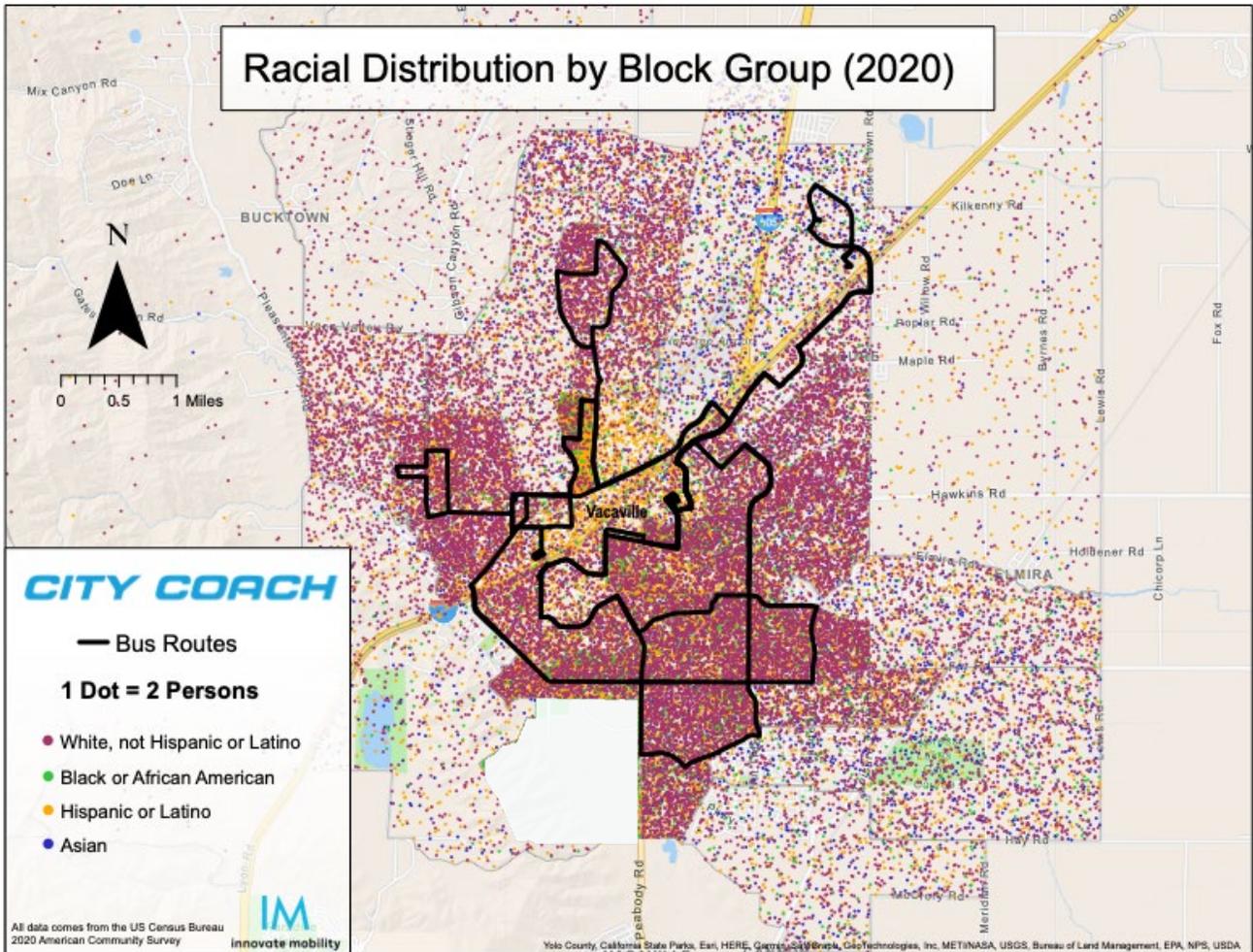


Figure 52 - Racial Distribution

## VACAVILLE CITY COACH HISTORY

In 1981, the City of Vacaville introduced the Vacaville City Coach to serve as its public transit system. Initially, Vacaville City Coach operated a deviated-fixed route service with flag stops (requested stops along a designated section of road), and route deviations to comply with ADA (Americans with Disabilities Act 1990) regulations. In 1989, Vacaville City Coach underwent a major transition, and began operating traditional fixed route service comprised of 2 bi-directional loops around the City. Following recommendations from the 1993 Short Range Transit Plan (1993), Vacaville City Coach introduced a five-route bi-directional service with one vehicle operating on each route to meet an increase in ridership demand from new development. Only minor service changes were made between 1994 and 2006, including optimizing route segments based on ridership, replacing the loop routes with three linear routes, later expanding from three to ten fixed routes operated with seven buses (1999), and the addition of a city center shuttle in 2001.

A major route realignment took place in 2007, adding new routes in areas not previously served, making all routes except one bi-directional, establishing 30-minute bus frequency headways, and reducing the cost of all City Coach monthly passes by seven dollars. Between 2007 and 2015 City Coach saw steady or increasing ridership numbers throughout Vacaville until 2015 when ridership peaked before beginning a slow decline through 2019. This was a period when many transit systems across the country saw ridership numbers declining for a variety of reasons including the growth of TNC's (Transportation Network Companies) like Uber and Lyft, high levels of automobile ownership, and low fuel costs.

With the wide-ranging impacts of the COVID-19 global pandemic that began in 2020, ridership on public transit declined dramatically across the country and around the world. Schools and colleges shifted to remote learning almost overnight, and workplaces in nearly every sector shut down or dramatically reduced operating hours, resulting in numerous layoffs, and millions of employees working from home anywhere from weeks to months to years. During this time many transit systems saw a decrease of over 90% in total ridership. During this period Vacaville City Coach's ridership fell 60-80%.

Ridership, however, has been dropping since 2016, falling from a high of 492,754 trips in that year to 262,183 in 2020. This is while the population in Vacaville has increased 7% over the same period.

## GOVERNANCE AND DEPARTMENT ORGANIZATION

The City of Vacaville was previously governed by a five-member City Council, including the Mayor.

In May 2018, the City Council adopted Resolution No. 2018-043, declaring its intention to transition from at-large to district-based City Councilmember elections beginning with the general election in 2020, with only the mayoral seat remaining at-large. The Vacaville City Council is composed of seven members, one direct elect Mayor, and six members representing unique Council Districts. The Vacaville City Council provides transit policy direction.

Mayor Ron Rowlett – Term 4 years - expires Jan 2023

Election District: 1, Roy Stockton - Term 4 years - expires Jan 2025

Election District: 2, Gregory Ritchie II - Term 4 years – expires Jan 2023

Election District: 3, Michael Silva, 2024 – Term 4 years – expires Jan 2025

Election District: 4, Nolan Sullivan – Term 4 years – expires Jan 2023

Election District: 5, Jason Roberts, 2024– Term 4 years – expires Jan 2025

Election District: 6, Jeanette Wylie, 2022 – Term 2 years – expires January 2023

## ORGANIZATIONAL STRUCTURE

The City of Vacaville Department of Public works operates the City Coach Public Transportation System. City Coach has a fleet of 25 buses, 7 cut-a-way and 18 compressed natural gas, which operate on 5 scheduled routes, Monday through Saturday. City Coach Direct utilizes 4 vans.

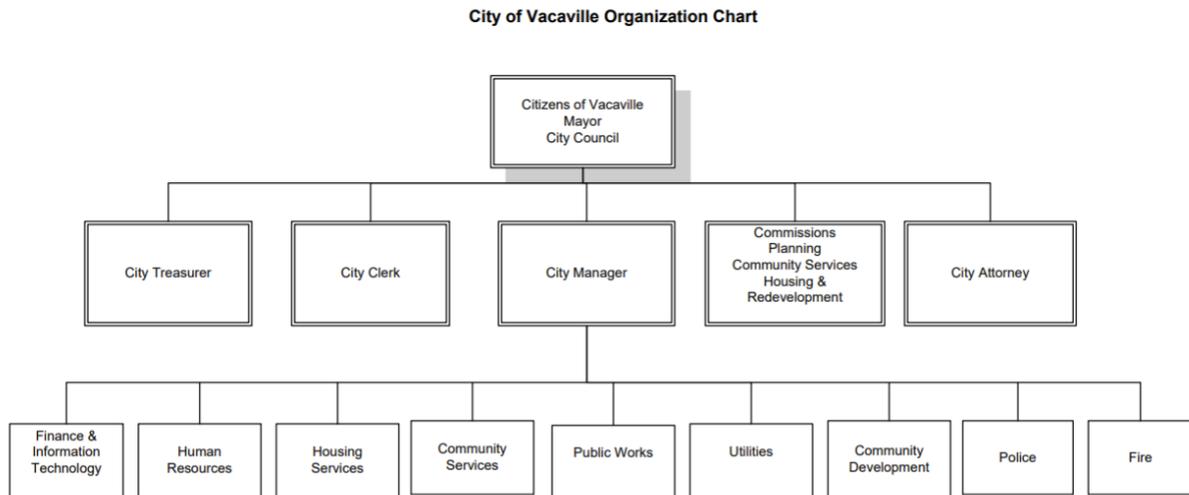


Figure 53 - City of Vacaville Department Structure

The Public Works' Management Analyst II (Transit Coordinator) is responsible for the general day-to-day management of Vacaville City Coach. As shown in Figure 54, the Transit Coordinator reports to the Assistant Director of Public Works. The City utilizes a transit service contractor to provide the labor and administration for the City's public transit system.

In 2021 Vacaville issued an RFP for a transit service provider and First Transit was awarded the contract. The current contract base years are August, 2021 through July, 2026, with option years from August, 2026 through July, 2029. The contractor's non-management staff is represented by Teamsters Local 315.

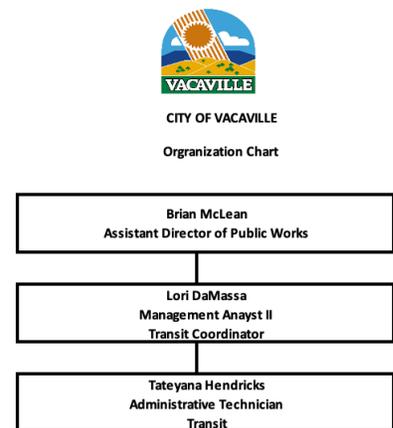


Figure 54 - City Coach Organization Chart