



# The Future of Transit

## A Vision for Sonoma County

February 27, 2020

# AGENDA

- 01** Introduction/Overview
- 02** Current Transit System and Funding Framework
- 03** Goals: Comprehensive Transportation Plan
- 04** Vision for Enhanced Service
- 05** Vision for Affordability
- 06** Vision for Improved Facilities
- 07** Vision for Fleet Electrification
- 08** Vision for Coordination

# Presenters

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Brant Arthur, Sonoma County Transportation Authority

Dana Turrey, Sonoma County Transportation Authority

Rachel Ede, Santa Rosa CityBus

Jared Hall, Petaluma Transit

Bryan Albee, Sonoma County Transit



The SCTA is embarking on the next update of the Sonoma County Comprehensive Transportation Plan (CTP) to examine transportation needs and revisit our vision for transportation throughout Sonoma County.

# Current Transit System and Funding Framework

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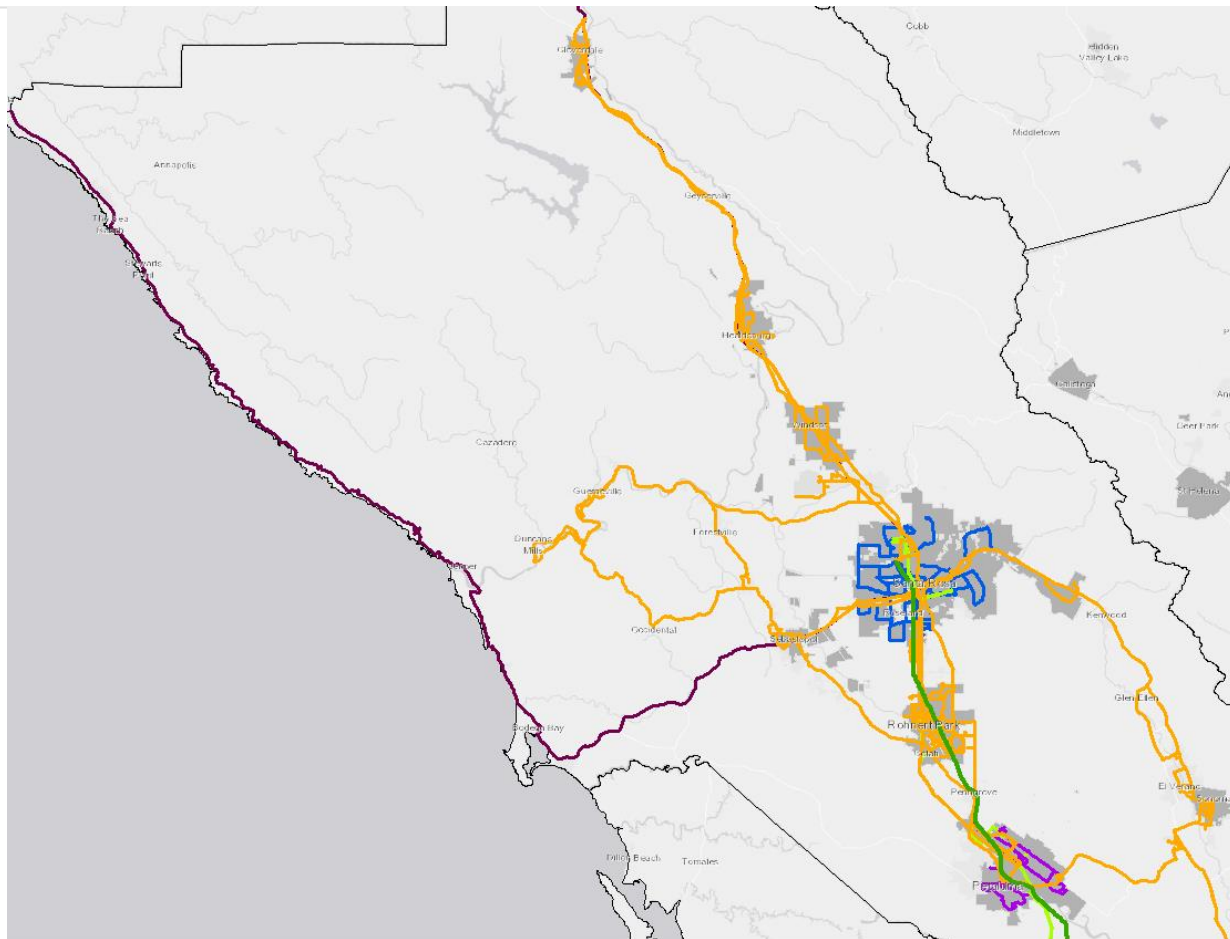
# Current Transit System

## Local Transit

- Santa Rosa CityBus
- Petaluma Transit
- Sonoma County Transit  
Local and Inter-City Routes

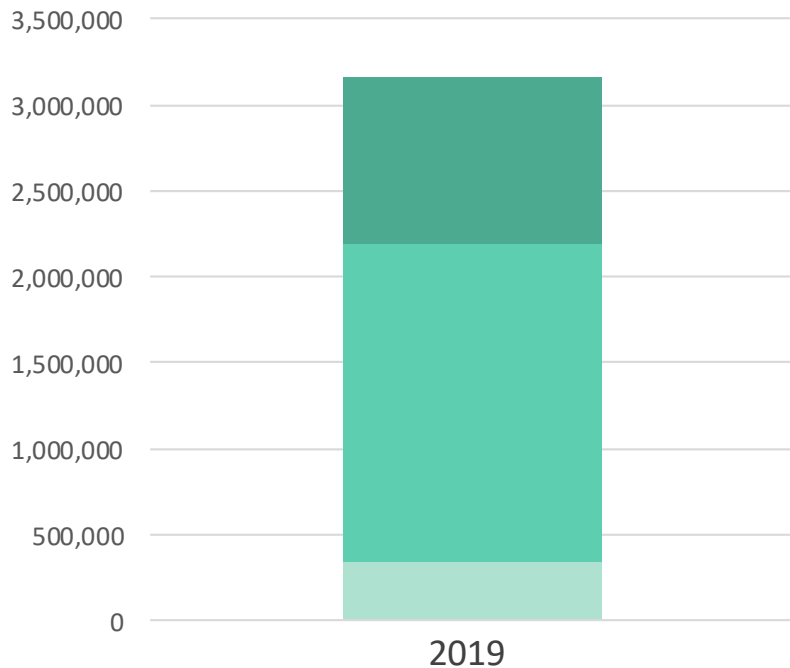
## Regional Transit

- SMART
- Golden Gate Transit
- Mendocino Transit



# Who's on the Bus?

Annual Local Bus Transit Trips



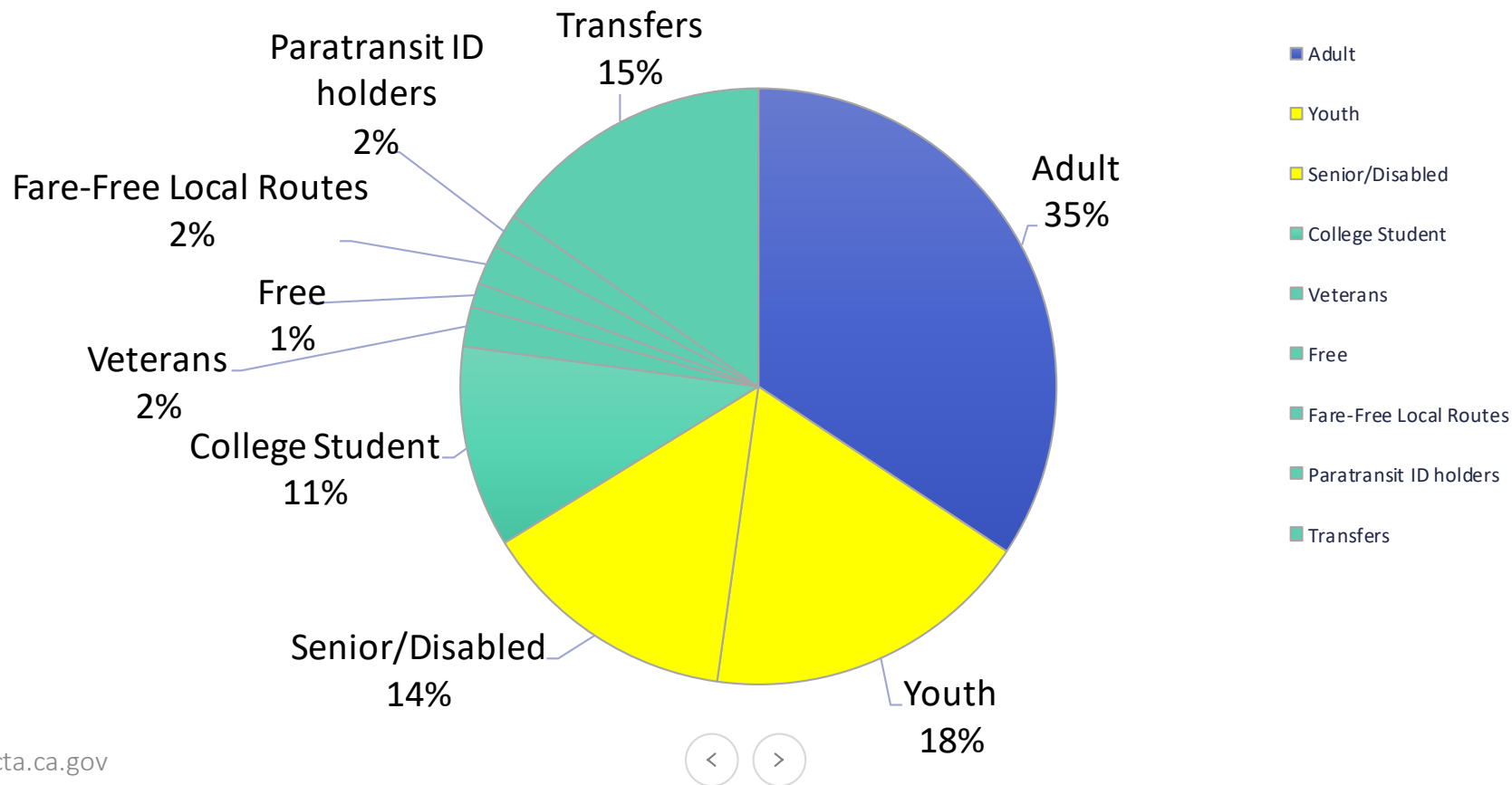
■ Petaluma Transit ■ Santa Rosa CityBus ■ Sonoma County Transit

## Where are bus passengers going?

1. Home
2. Work
3. College
4. Social or recreational
5. Shopping
6. School (K-12 student)
7. Personal
8. Medical

# Who's on the Bus?

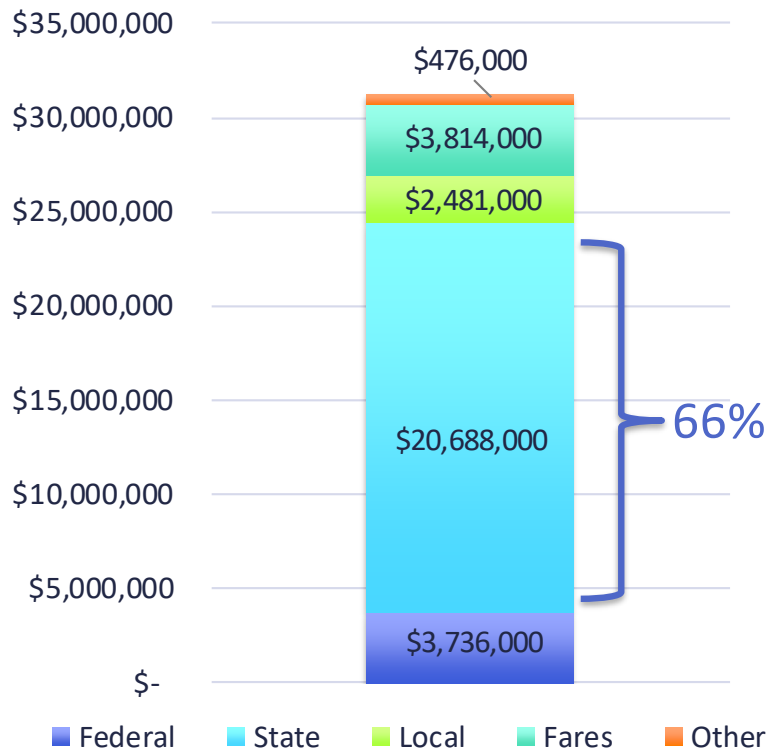
Trips by Fare Category



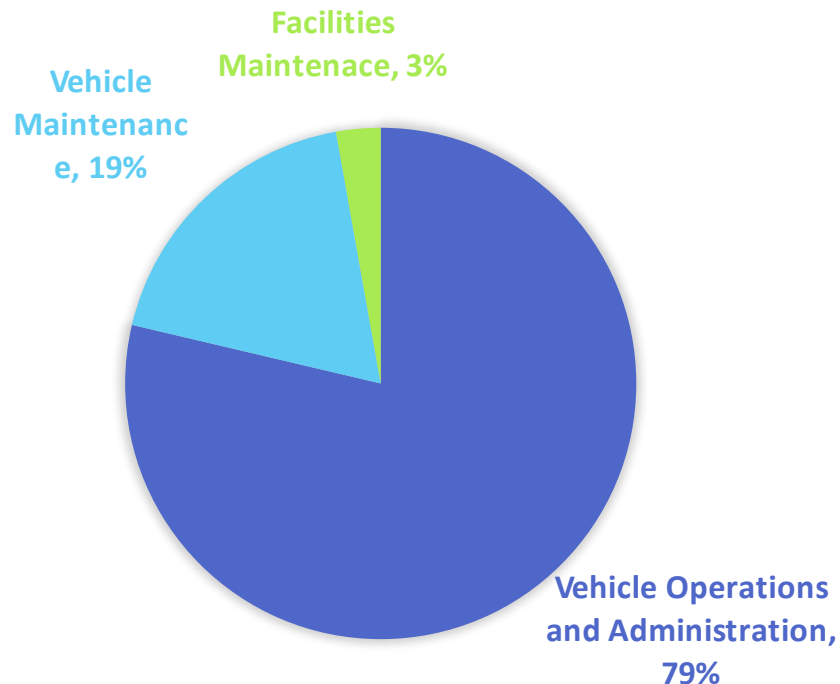


# Transit Funding Framework

## Expenditures by Source (2017)

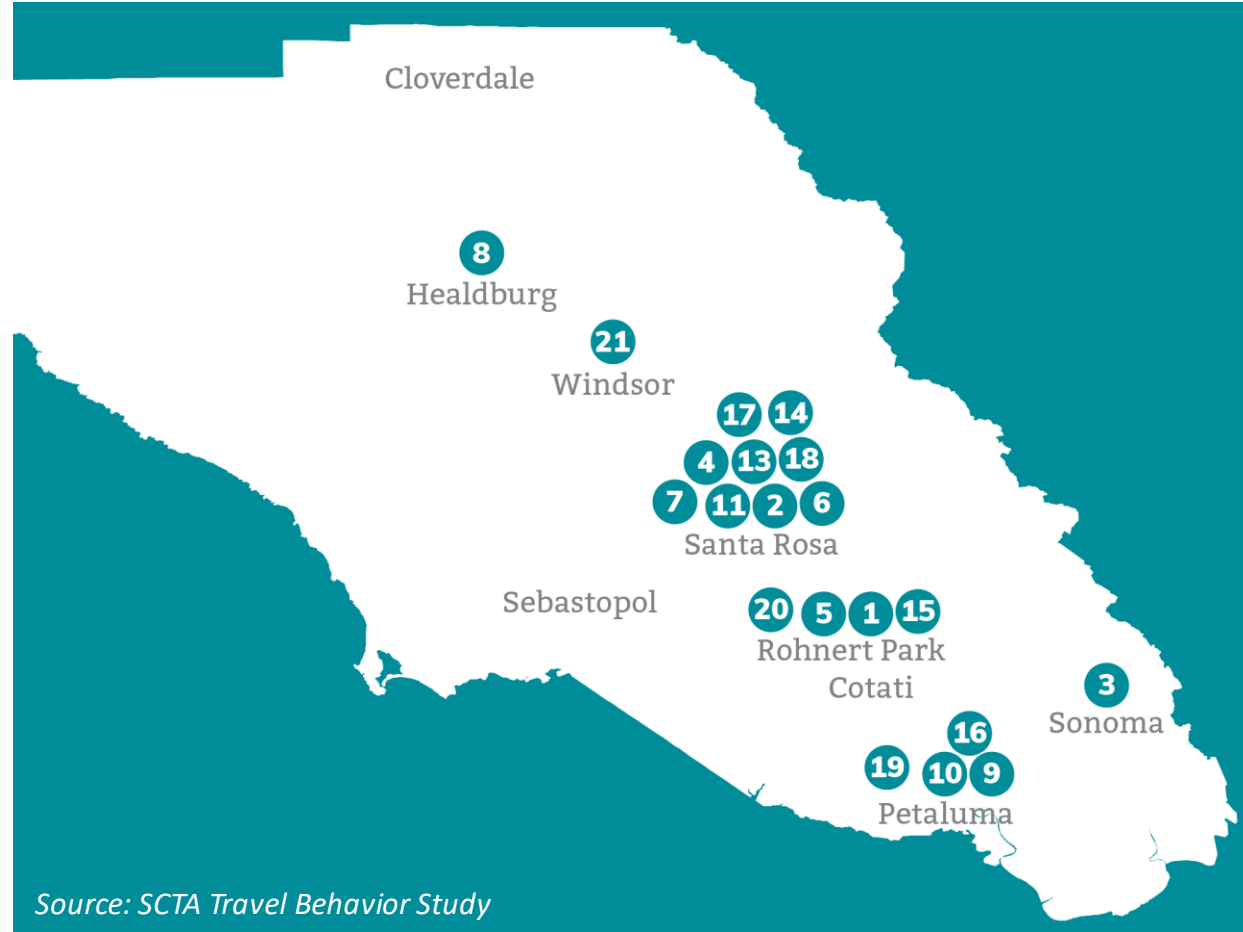


## Expenditures by Type (2017)



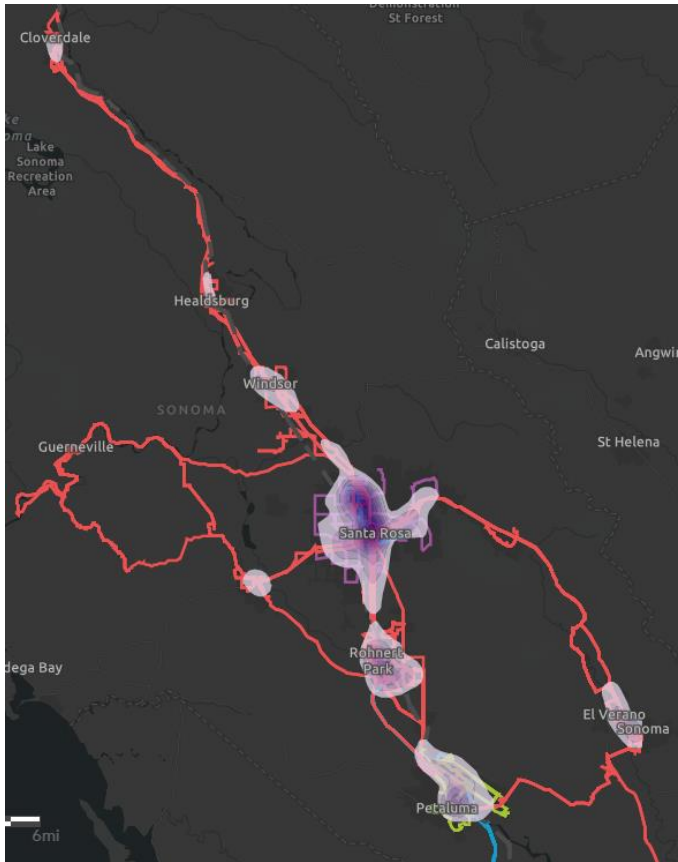
# Largest Trip Generators in Sonoma County

- 1 Rohnert Park West Side Commercial
- 2 Downtown Santa Rosa & Plaza Mall
- 3 Sonoma Central
- 4 Santa Rosa Airway Industrial Area
- 5 Rohnert Park EX Commercial
- 6 Santa Rosa Ave Commercial
- 7 Santa Rosa Sebastopol Road Corridor
- 8 Healdsburg Central East
- 9 Petaluma E Wash Commercial
- 10 Petaluma Downtown
- 11 Santa Rosa Market Place
- 12 Russian River Area
- 13 Santa Rosa Junior College
- 14 Santa Rosa County Center
- 15 Sonoma State University
- 16 Petaluma Fairgrounds
- 17 Santa Rosa Kaiser
- 18 Santa Rosa Bicentennial
- 19 Petaluma Blvd Commercial
- 20 Graton Casino
- 21 Windsor Town Green



Source: SCTA Travel Behavior Study

# Current Transit Frequencies



# Comprehensive Transportation Plan Goals

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# Goals: CTP 2016

## 1) Reduce Greenhouse Gas Emissions

- 59% of Greenhouse Gas Emissions come from on-road transportation

## 2) Plan for Safety and Health – Active transportation mode share

- Transit mode share for all trips is 0.4% and 2% for commute trips

## 3) Relieve Congestion

- Transit is the most efficient way to move people between destinations

## 4) Economic Vitality – cost of transportation

- Average household spends 23% of income on transportation

## 5) Maintain the System

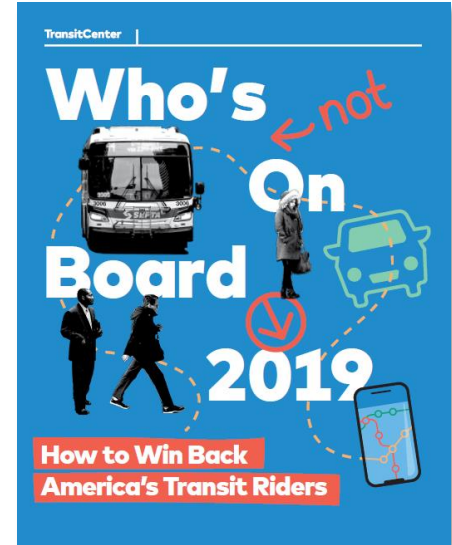
- Bus and facility maintenance keeps costs down and systems running smoothly

# Vision for Enhanced Service

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# Enhancing Service to Grow Ridership

- Transit service quality has been found to be the strongest determinant of bus ridership
- Improved service quality that retains regular riders also helps convert occasional riders to regular users and attracts new riders:
  - Frequency
  - Reliability
  - Safety
  - Speed and travel time
- Service availability also key in Sonoma County
  - Hours of operation, geographic coverage



Source: *Who's on Board 2019: How to Win Back America's Transit Riders*, TransitCenter, February 2019

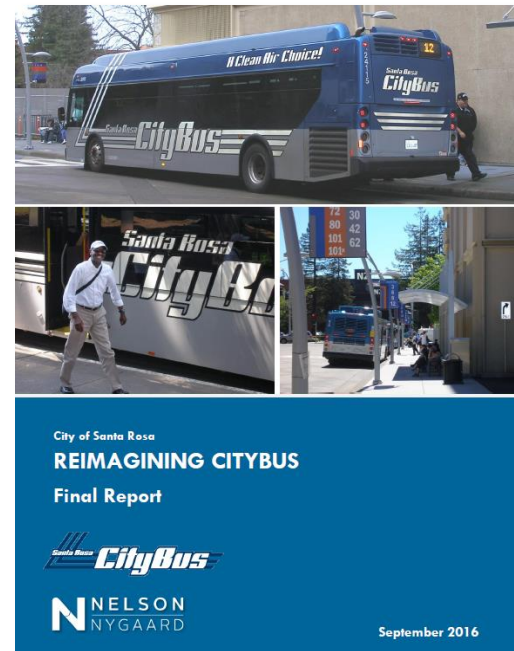
# Santa Rosa CityBus



- 14 fixed routes serving Santa Rosa
  - Oakmont deviated fixed-route service
  - Santa Rosa Paratransit
- Reimagining CityBus system redesign (2017):
  - New service levels based on demand
    - 15-minute frequency: Mendocino Ave., Sebastopol Rd.
    - 30 minute frequency on most routes
    - 60 minute frequency on circulators in low-ridership, lower-density areas
  - More direct, two-way service throughout system
  - Better connections to major destinations
  - Improved coordination with regional transit services



- Reimagining CityBus Plan—Phase II
  - Expand new 15-minute frequency network
    - Santa Rosa Avenue and Sonoma Avenue
  - Extend service until 11:00pm
  - Improve frequency and span of service on weekends
  - Targeted route restructuring for more direct service; peak frequency improvements
  - Increase transit speeds with rapid bus facilities
  - Implement innovative service models to complement and feed into fixed routes (e.g., microtransit and partnerships with Lyft/Uber)



*Report available at  
[www.srcity.org/reimagining](http://www.srcity.org/reimagining)*



- 6 fixed routes, 5 school tripper routes, paratransit
- 400,000 rides provided annually
- Recent Improvements:
  - Expanded service to connect to Kaiser Hospital & SMART Train
  - Additional evening service
  - Additional summer school bus service
- Currently updating Short Range Transit Plan

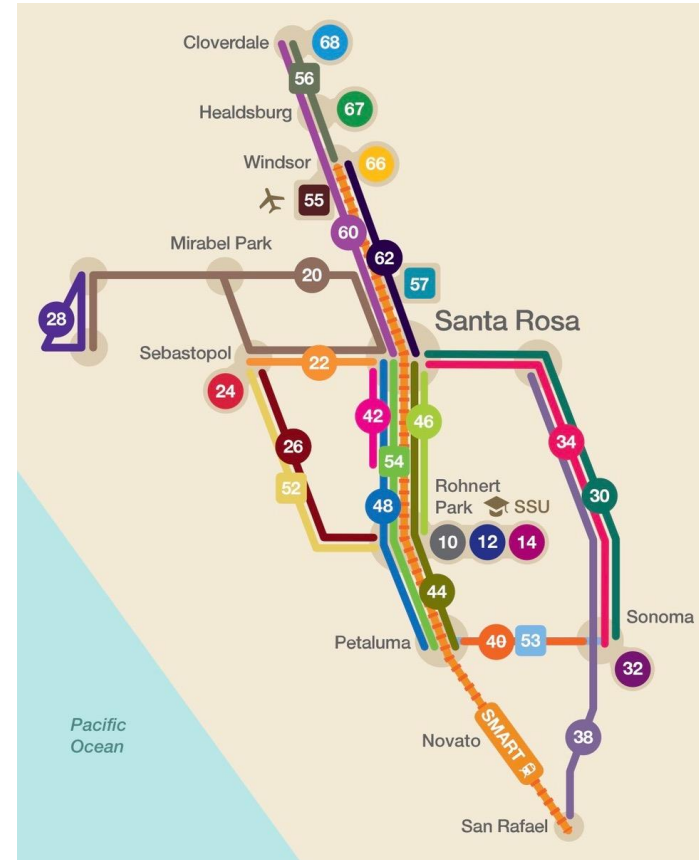
- **Expanded transit vision**

- 15-minute bus frequency on E. Washington St
- Additional school tripper service
- All day service on Petaluma Blvd S
- Improved transit service to west Petaluma
- Increase 60 minute bus route frequency to 30 minutes
- Extend weekday service until 10:00pm
- Additional weekend service – more trips and expanded hours
- Improved connectivity to Kaiser Hospital
- Increase transit service to Petaluma Fairgrounds
- Implement innovative service models to complement and feed into fixed routes (e.g., microtransit and partnerships with Lyft/Uber)



# Sonoma County Transit

- 29 Fixed-Routes linking all Cities and most Communities in Sonoma County
  - 9 Local Routes operating in Sebastopol, Windsor, Healdsburg, Cloverdale, Sonoma /Sonoma Valley and Guerneville/Monte Rio.
  - 13 Intercity routes providing connections to Santa Rosa CityBus at the Santa Rosa Transit Mall and Petaluma Transit at the Petaluma Transit Mall and regional services provided by Golden Gate Transit and SMART.
  - 6 routes providing connections to SMART stations at Airport Blvd, Guerneville Road, Cotati, Rohnert Park and Petaluma.
  - 1 seasonal route operating on summer weekends between Santa Rosa and the Sonoma Coast.



- **Future Expansion Plans – Phase I – 2020 thru 2023**
  - Expand local routes (Shuttles) to operate a uniform level of service Monday thru Saturday to facilitate easier local travel and to better coordinate with intercity routes at local transfer centers.
  - Continue to work with local entities to ensure on-going support for the local Shuttle “Fare-Free” program. Seek support from funders to expand the “Fare-Free” program to also include local paratransit trips.
  - Deploy zero-emission buses on all “Fare-Free” local routes as the first phase of fleet electrification (30 foot and 35 foot buses).
  - Develop en-route charging stations in Cloverdale, Healdsburg, Windsor, Sonoma and Monte Rio to support electric Shuttle buses.

- **Future Expansion Plans – Phase II – 2024 thru 2030**
  - Reduce headways and streamline the existing intercity route network to reduce passenger travel time, reduce route mileage and facilitate the use of zero-emission buses.
  - Expand intercity route coordination (at local transit centers) with enhanced local services (Phase I improvements) for improved work and school commutes and commute period links to regional services provided by Golden Gate Transit and SMART.
  - Develop electric bus charging facilities at route terminuses in Cloverdale, Petaluma, Monte Rio and Sonoma to support an electrified intercity route network (40 foot buses).

# **Vision for Improved Facilities**

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# Why Transit Facilities Matter

- People are more likely to use transit if they can walk to it and have a comfortable place to wait
- High-quality transit facilities reduce riders' perceived waiting time, reducing “time penalty” of transit use
- High quality transit facilities increase riders' sense of safety, a key factor in ridership growth



Source: *From Sorry to Superb: Everything You Need to Know About Great Bus Stops*, TransitCenter, October 2018



# Improving the Passenger Experience



- Upgrade passenger amenities at bus stops throughout the county
  - Upgrade and expand availability of bus shelters countywide, with focus on schools, employment sites, and other major trip generators
  - Install benches at all bus stops
  - Expand availability of real-time bus arrival information and other public information at bus stops countywide
  - Improve lighting at bus stops
  - Add additional bike racks at bus stops and intermodal facilities

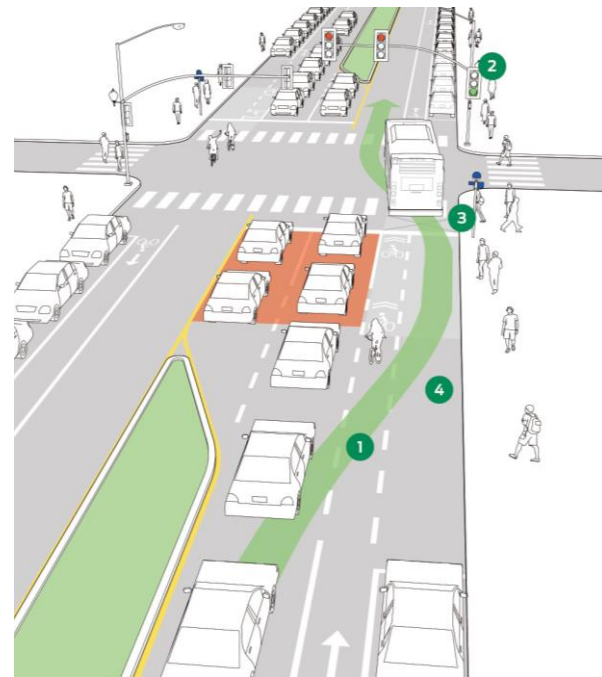
# Improving the Passenger Experience

- Maintain and improve/expand key intermodal hubs throughout the county
  - SCT intermodal facilities and park-and-ride lots
  - Santa Rosa Transit Mall, Coddington Transit Hub, Copeland Transit Mall
  - SMART station bus-rail interface, including wayfinding signage
- Continue to work with local jurisdictions to improve walkability, ADA accessibility, and pedestrian access to transit stops



# Facilities to Improve Transit Operations

- Speed up bus service to better compete with the automobile
  - Deploy Rapid Bus facilities such as transit signal priority, queue jump lanes on high-frequency bus corridors
- Support transition to 100% zero-emissions fleets
  - Expand electric bus charging capabilities at bus yards
  - Build network of remote charging stations to support en-route charging
- Ensure resiliency during power outages and emergencies
  - Deploy back-up charging systems for electric buses
  - Implement generator/battery back-up systems for major transit facilities



Source: *Transit Street Design Guide*, NACTO, April 2016

# Vision for Affordability

06

# Transit Fares & Special Programs

- All local systems have common fare definitions and a common cash fare for local adult, senior and disabled passenger trips.
- All Sonoma County bus operators use the “Clipper” system that enables single pass use on all Bay Area transit systems, including regional providers like Golden Gate Transit and SMART.





# Improving Transit Affordability

- All local bus systems provide unlimited “Free-Use” of their fixed-route services for college students attending the Santa Rosa Junior College and Sonoma State University.
- Santa Rosa CityBus and Sonoma County Transit offer free fixed-route rides to Veterans.
- Santa Rosa CityBus and Petaluma Transit offer free rides on fixed route to their respective Paratransit registrants.
- Petaluma Transit offers 1/3 off discount on all youth fares and passes and extends further discounts to quarterly youth passes purchasers.



# Improving Transit Affordability

- Sonoma County Transit's Fare-Free program enables local "Shuttle" riders in Sebastopol, Windsor, Healdsburg, Cloverdale, Guerneville/Monte Rio and Sonoma/Sonoma Valley to ride free.
- The "Fare-Free" program is subsidized by the local entities in which the Shuttles operate.



# Future Affordability Projects

- Many transit systems are piloting programs to lower or eliminate fares
  - “Fare-Free” programs
  - Income-based fare programs
  - Discounts for certain passenger types such as K-12 students or senior/disabled riders.
- Many programs rely on a subsidy
  - Provided by a state
  - Local program or contributions
- Fare revenue supports operations and helps meet state mandated farebox recovery requirements.





# **Vision for A Zero Emissions Fleet**

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*Sonoma County Transit Electric Bus –operating on the Sebastopol Shuttle (2020)*

- **Sonoma County Transit**
  - Received one 30' electric bus - 2019
  - Four additional 30' electric buses ordered – Summer 2020 (x2), Spring 2021 (x2) delivery
  - Will be deployed on the local Fare-Free shuttles
- **Santa Rosa City Bus**
  - Four 35' electric buses expected in 2021
  - Design in-progress for charging
  - Construction planned for 2020-21
- **Petaluma Transit**
  - Created solar assessment for facility
  - Ordered first electric pool car
  - Currently operating 3 diesel-electric hybrid buses



- **Innovative Clean Transit (ICT) state-wide regulation**
  - Requires all public transit agencies to gradually transition to a 100 percent zero-emission bus (ZEB) fleet by 2040– fixed route & paratransit
    - A ZEB Rollout Plan is required for each transit agency by 2023 (small transit agencies)
    - Beginning in 2029, 100% of new purchases by transit agencies must be ZEBs
    - Buses can be either Batter Electric Bus or Hydrogen Fuel Cell

- **Study Completed in January 2020**
  - Multi-agency study involving Sonoma Clean Power, Sonoma County Transit, Petaluma Transit, Santa Rosa City Bus, and Mendocino Transit
  - Analyzed electric bus fleet and facility needs in the near/mid term time frame (next 5 years)
  - Topics covered:
    - Available bus and charger options
    - Route analysis, determining if representative routes could be successfully run with available electric buses.
    - Facility needs analysis, analysis of existing fueling/charging infrastructure and rough estimates of changes needed within 5 years.

- **Increased cost of electric buses** –additional \$400-\$600k per bus compared to diesel equivalent
- **Vehicle chargers** – transit yard and mid-route chargers needed (\$25-50k per vehicle/charger)
- **Facility upgrades** – upgrades needed to accommodate electric buses (transformers, grid upgrades, etc.). Generator/battery backups.
- **Operating logistics** –Modifying service/operations to match electric vehicle operating range.
- **Training** – New training programs for drivers and mechanics on how to operate electric buses.
- **Resiliency considerations** – Maintaining bus operability/range during emergencies.



- Applying for state and federal grant funding – (VW settlement, HVIP, LO/NO)
- Low Carbon Fuel Standard credits
- Partnerships – working with SCTA, Sonoma Clean Power, PG&E to increase funding and make capital improvements



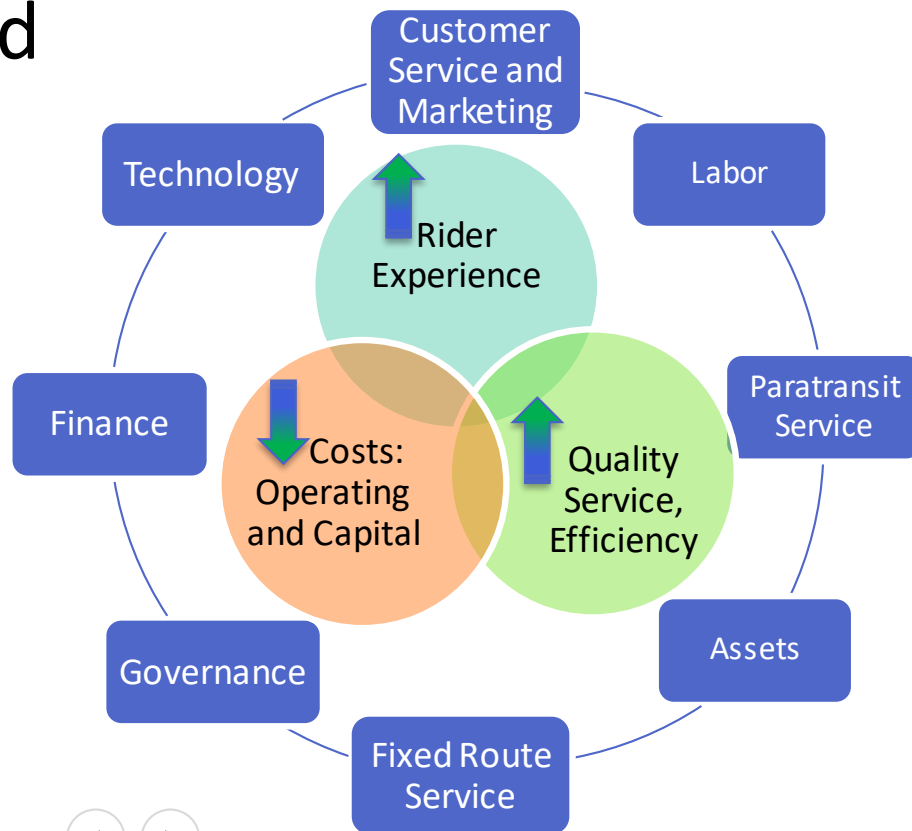
# Vision for Coordination and Integration

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# Coordination and Integration

## Transit Integration and Efficiency Study (2019)



QUESTIONS?

# THANK YOU!

Contact: [dana.turrey@scta.ca.gov](mailto:dana.turrey@scta.ca.gov)



# Next Event

## Moving Forward 2050 Forum

Finley Center, Santa Rosa

Wednesday, March 25

9 am to 12 pm

More info and free registration: [scta.ca.gov/2050](https://scta.ca.gov/2050)