

STRIPING & PAVEMENT MAINTENANCE PROGRAM

Public Works & Utilities
Department





The Lifecycle of a Street

How do we
get from...



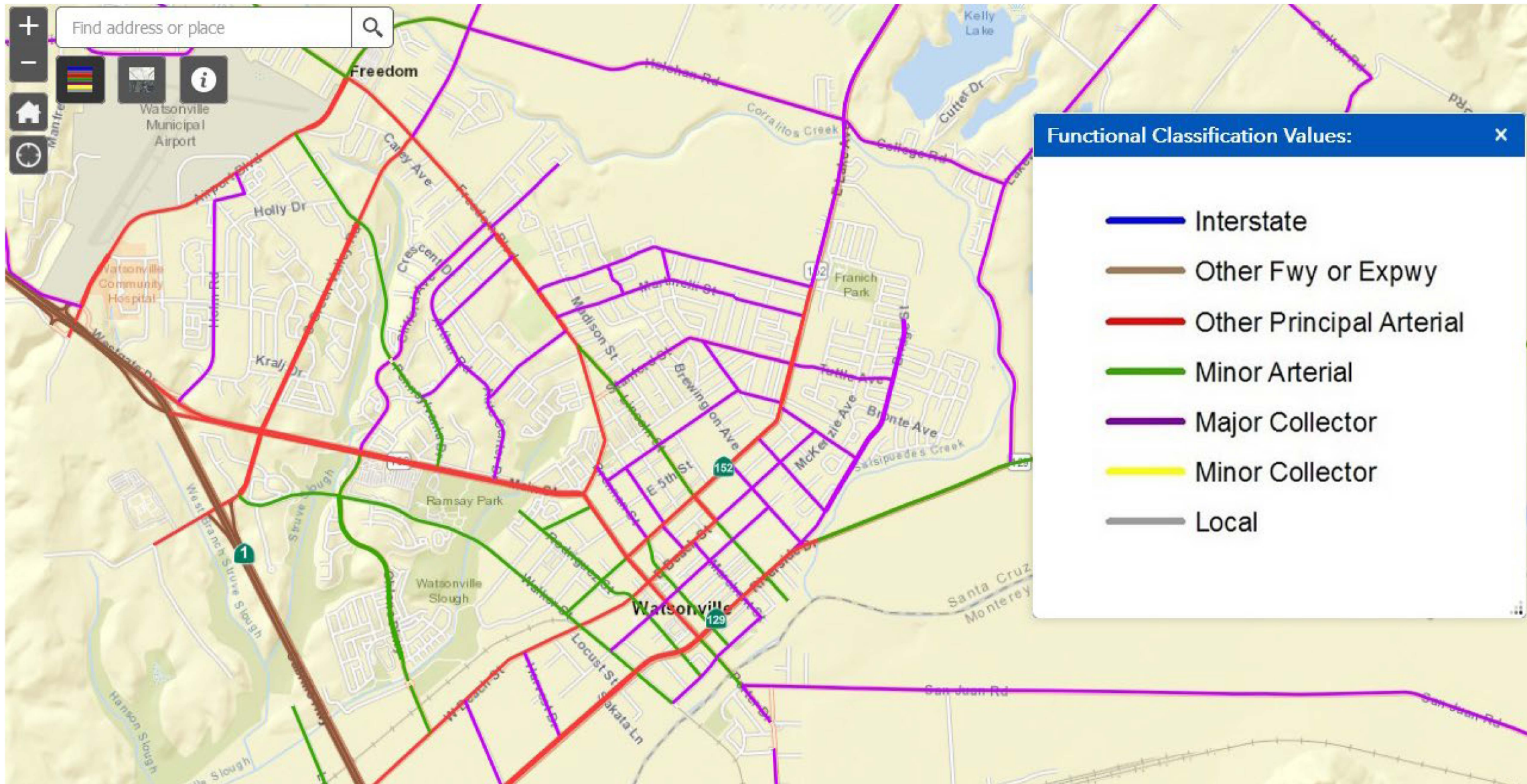
to



Causes of Deterioration

- Age
- Traffic Load
- Environment or | Climate
- Drainage (water)
- Material deficiencies
- Utility Cuts





Watsonville Streets Network

- 84 miles total of centerline miles consisting of:
 - 15 miles of Arterials
(such as Freedom Blvd, Green Valley Rd, Airport Blvd)
 - 14 miles of Collectors
(such as Martinelli, Bridge St, Harvest Dr.)
 - 55 miles of local residential streets

Where does data come from?

- Inspections and measurements

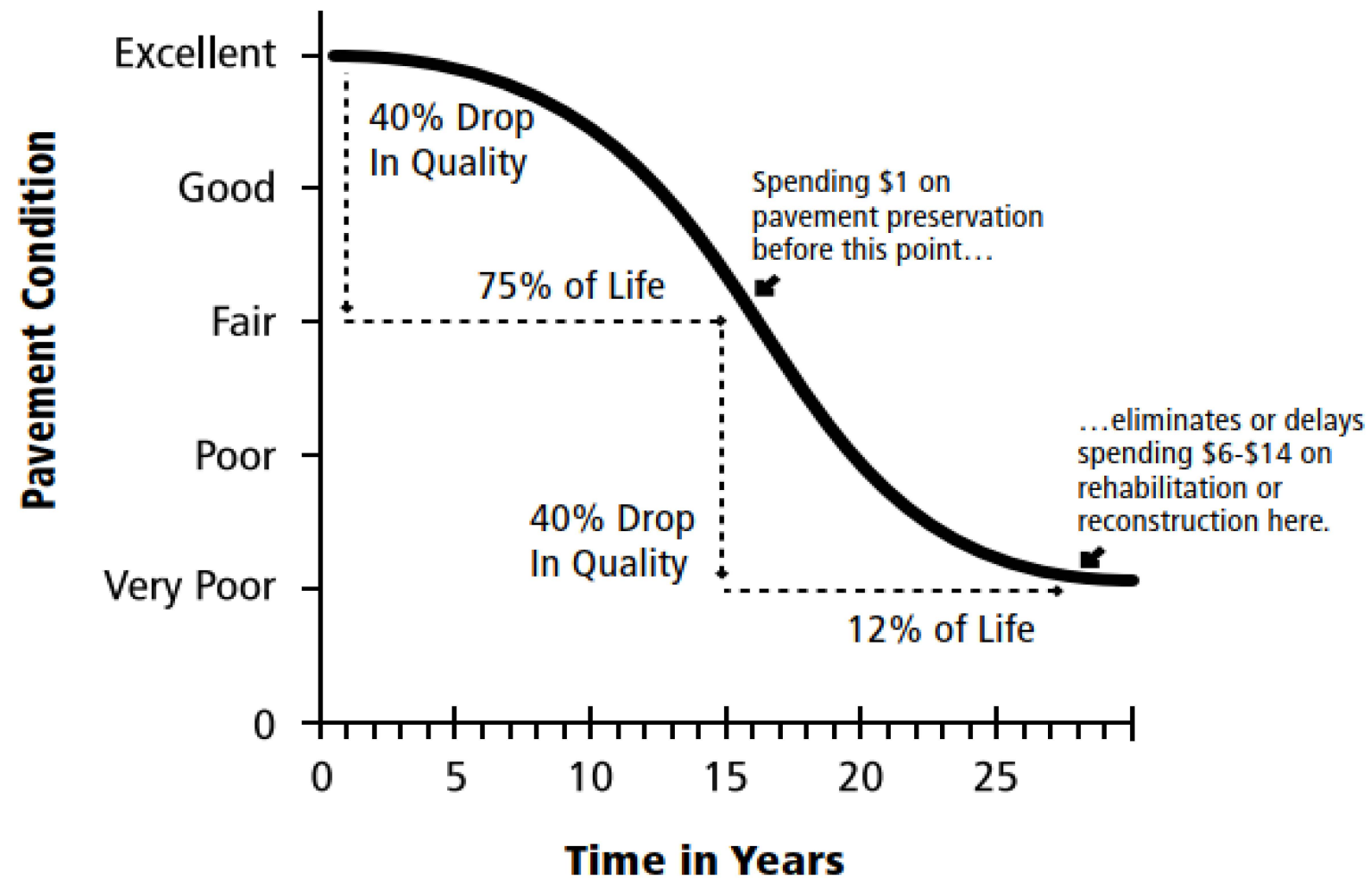
What do we do with all the measurements?

- Input into program that calculates the PCI
- Generate reports
- Evaluate maintenance strategies
- Develop a budget



Historical Pavement Condition Trends





Pavement Condition Reports

- Budget Needs—how much do we need each year? 5 years? 10 years?
- Each road's condition and how it degrades over time
- Prioritizes roads for treatment
- Type of maintenance required, major reconstruction? Or minor sealing?

The Tale of One Street: Freedom Blvd

Alta Vista Ave to Green Valley Rd

Timeline

- Grant Application (requires certified Pavement Maintenance Program)
- Coordinate with Utilities, both City and Franchise (PG&E, AT&T)
- Hire utility engineer
- Hire roadway designer to design around shallow utilities
- Allocation of funds required by the California Transportation Commission
- Advertise for bids
- Utility construction delayed due to supply chain issues
- Roadway construction began March 2023
- Anticipated completion Fall 2023



Before



After





Much more than just paving...

Peripheral items that were required:

- ADA improvements, curb ramps
- Traffic signal modifications for disabled pedestrians
- Multi-modal improvements, new bus pullout, bike signage

Challenges

- Underground utility project delayed due to supply chain issues
- Long lead time for signal poles
- Shallow underground utilities to be lowered
- PG&E scheduling delays
- Project Labor Agreement (PLA) limits contractors who bid and increases costs, less competition



Moving forward...

Paving is just one piece of a paving project

Pavement maintenance is taking longer and costing more due to increased requirements

Goal is to keep good streets good...

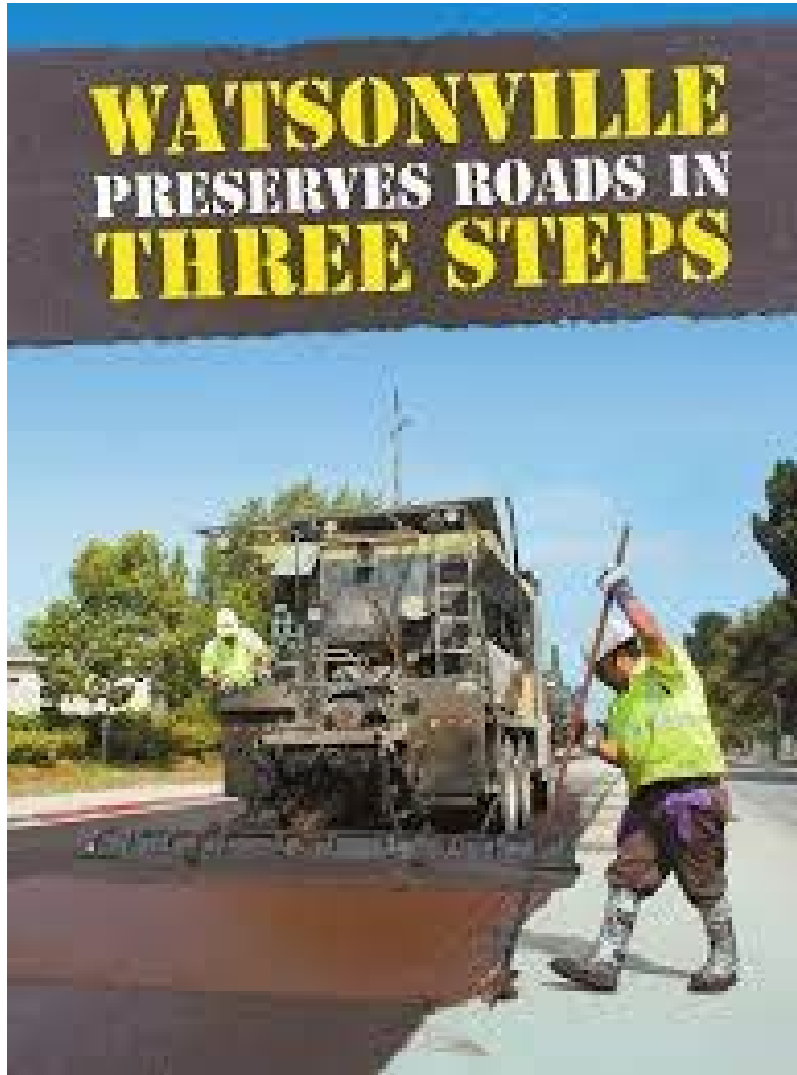
Repair

Patch

Dig-out

Reconstruct





WATSONVILLE PRESERVES ROADS IN THREE STEPS

Maintenance

- Done before pavement failure
- One or more layers or coatings
- Slurry to fill cracks
- Flexible rubberized asphalt layer to provide for wear
- Oil to seal and bind road materials

Peripherals

Utilities

Striping & Signage

Pedestrian facilities - curb ramps

Bike lanes

Traffic signals & loops



EXPENDITURES

Striping & Signage

Pedestrian & Bicycle
Facilities

Traffic Signal &
Street Lighting

Installation,
Operation,
Maintenance, Repair
& Replacement

Design,
Environmental
Documentation &
Permits

Inspection & Testing

Project & Grant
Management

Transportation Funding

SOURCES - \$3.2 million

General Fund

Gas Tax

SB1

Measure D

Grants



Road Maintenance by City Crews

Patch potholes

Road Repair

Striping & Signage

Projects within Current Budget

- Freedom Blvd Reconstruction from Alta Vista to Green Valley (in progress)
- Arthur Rd Water Line Replacement & Repaving from Freedom to Mariposa (in progress)
- Citywide Digout Project to repair potholes (NEW)
- Green Valley Rd Reconstruction from Freedom to City Limits (2024)
- Harkins Slough Rd Pedestrian Bridge (2024)
- Bridge St Reconstruction from Blackburn to Beck (2024)
- Union St Waterline Replacement & Repaving from Riverside to East Beach (2024)

Projects Proposed in Upcoming Budget

- Citywide Road Maintenance Project – 3 miles of roadway (2024)
- Lee Rd Trail Phase 1 from PVHS to Land Trust Driveway (2024)
- Industrial Rd Repair from Riverside to West Beach – Design 2024, Construct 2025
- Freedom Blvd Digouts from Green Valley to City Limits – Design FY2025, Construct 2026

Plan for future years

- Allocation of new funding
- Staff or Consultants to support design, construction and inspections.
- Condition of the streets as informed by PMI system
- Equity approach – entire city should benefit from investment, all areas and neighborhoods should be evaluated once PMI assessment data is available
- Design and feasibility of projects based on peripheral factors



Future – With additional funding & Design work

Year 1 – Chip seal projects (5 Miles) FY 23-24

Year 2 – Digouts FY 24-25 (Up to 3 Miles)

Year 3 – Chip seal projects (5 Miles) FY 25-26

Year 4 – Digouts FY 26-27 (Up to 3 Miles)

Summary

With Existing Funding, projects in through 2024 include:


- City crews repave portion of Arthur Rd and Union St
- Citywide Digout Project later this year
- Reconstruction projects on Freedom Blvd, Green Valley Rd, Bridge St
- Citywide Road Maintenance Project

Additional \$2.5M funding annually restore road PMI to 60 with:

- Biannual Maintenance Projects on up to 5 miles of roads
- Biannual Road Reconstruction projects up to 3 miles

Striping





Road Maintenance Projects Include Striping

Freedom Blvd Reconstruction (Alta Vista Ave to Green Valley Rd) - 2023

Arthur Rd Waterline Replacement & Repaving (Freedom Blvd to Mariposa St) – 2023Citywide

Digout Project – 2024

Green Valley Rd Reconstruction – 2024

Bridge St Reconstruction – 2024

Citywide Road Maintenance Project – 2024

Schedule

Striping seasonal, needs fair weather, lasts 6 months

City crews do minor streets

Contractor do major streets



City Crews

Recently did work in District 7

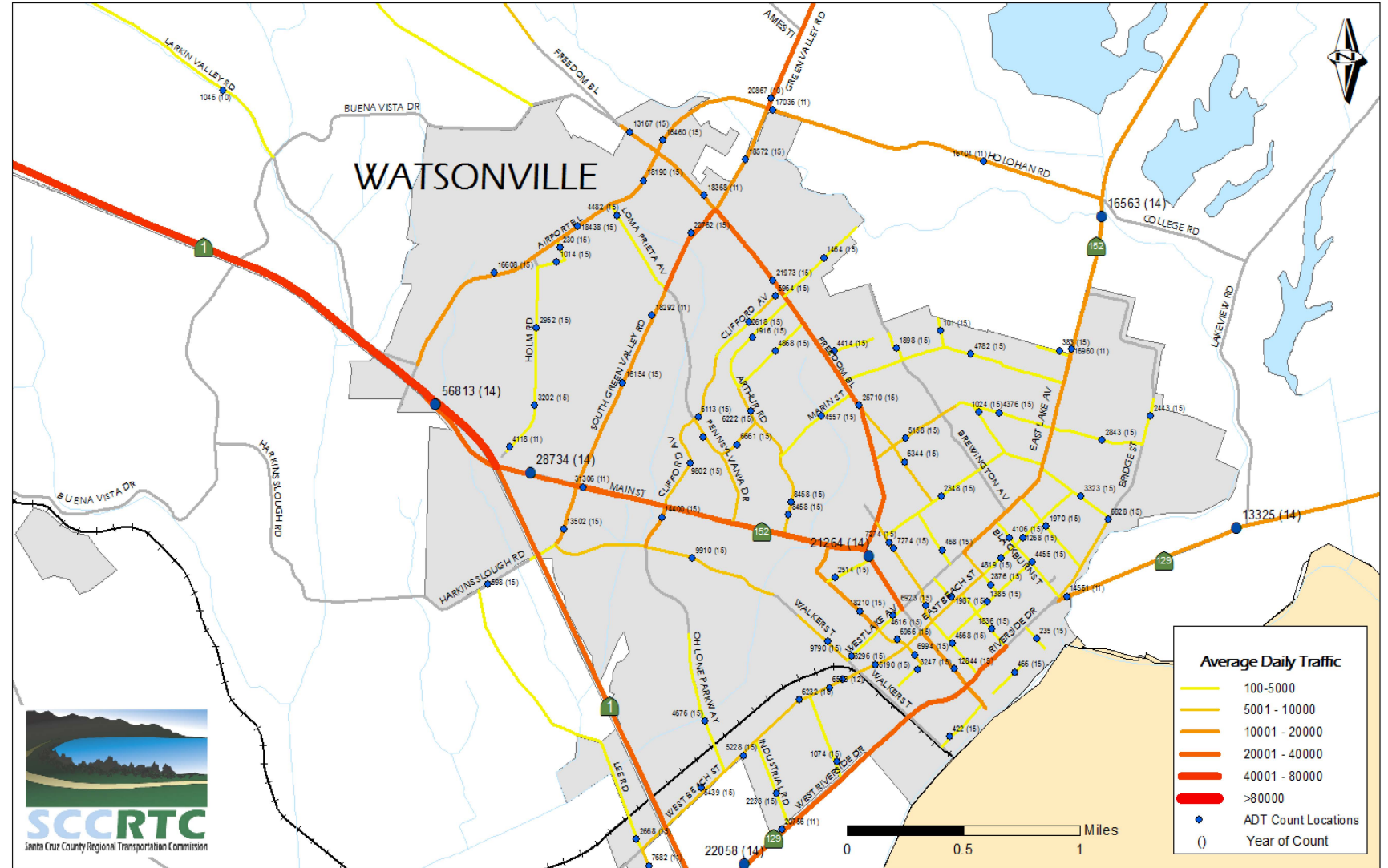
Work way through remaining Districts

Striping, crosswalks, signage, markings, red curbs

Balance with other duties



Traffic count data is from a number of sources but primarily from Caltrans. Highway counts from Caltrans may include projections based on earlier counts.



Average Daily Traffic
Watsonville Map

High Traffic Routes

- State Route 152/Main St
- State Route 129/Riverside Dr
- Green Valley Rd
- Freedom Blvd
- Airport Blvd
- Main St (Beach St to City Limits)
- Ohlone Pkwy (Main St to Harkins Slough Rd)

Current Projects

State Route 152/Main St – Caltrans & Downtown Specific Plan

State Route 129/Riverside Dr – Caltrans paving project FY25/26

Green Valley Rd – FY23/24 as discussed earlier

Freedom Blvd from Alta Vista Ave to Green Valley Rd - with Reconstruction project

Freedom Blvd from Green Valley Rd to City Limits - with Digout project

FY23/24 Striping Project

FY23/24 Budget Allocates

\$350k for Striping Project

Design 2023, Build 2024

Complete as many of following as funding allows

Freedom Blvd – Main St to Alta Vista Ave

With additional funding:

Airport Blvd - State Route 1 to City Limits

Main St - Beach St to City Limits

Ohlone Pkwy - Main St to Harkins Slough Rd

