



Contra Costa County
Public Works
Department

Annual Road Report

2022 and 2023

June 2024



Contra Costa County Public Works Department

255 Glacier Drive, Martinez, CA 94553

www.contracosta.ca.gov/227/Public-Works

Phone 925-313-2000

Email admin@pw.cccounty.us

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EXECUTIVE SUMMARY

The Contra Costa County Public Works Department (PWD) is pleased to present this Annual Road Report, which showcases its commitment to safety, reliability, efficiency, multi-modal mobility, equity/environmental justice, and sustainability. Over the past two years, PWD staff have worked towards achieving the goals and objectives in these critical areas, recognizing the impact they have on the well-being of our communities and the environment. Through innovative strategies, collaborative partnerships, and diligent planning, PWD has made progress to enhance and improve the road infrastructure, foster equitable access, and promote sustainable practices. In this report, the accomplishments, challenges, and upcoming initiatives are discussed to demonstrate that PWD will continue the pursuit for a safer, more efficient, and sustainable transportation network for all.

County Road Network Asset Inventory

PWD currently maintains hundreds of facilities necessary for the safe and efficient transportation of its residents, businesses, and visitors from outside the County. The following list is a summary of the infrastructure that the PWD maintains as of the end of 2023:

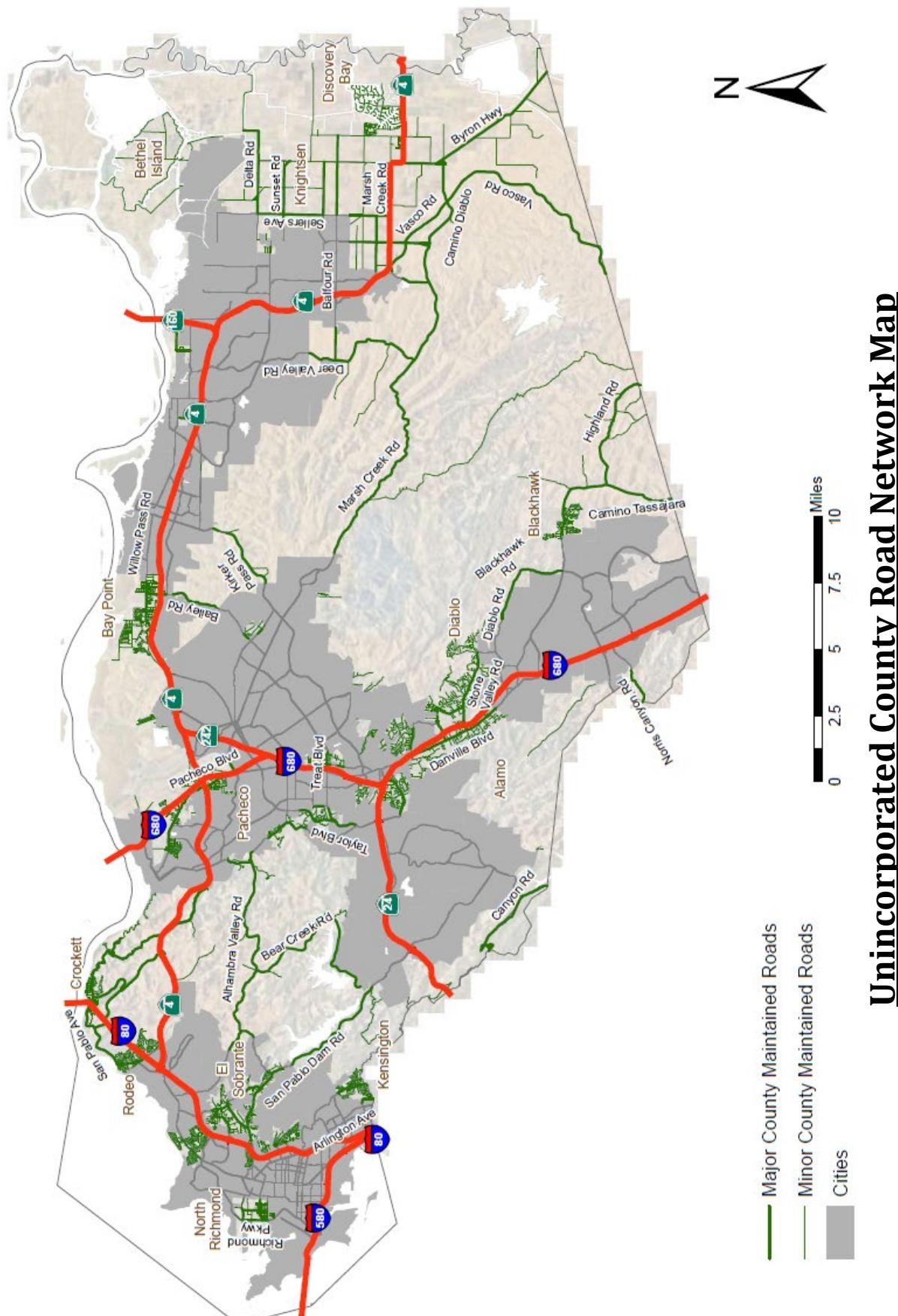
- 657 miles of roads
- 86 vehicle bridges with a greater than 20-foot span
- 13 vehicle bridges with a less than 20-foot span
- 9 pedestrian bridges
- 105 traffic signalized intersections
- 1,075 crosswalks
- 25.1 miles of Class I Bike Paths
- 54.0 miles of Class II Bike Lanes (per side of street)
- 2.4 miles of Class III Bike Routes (per roadway lane)
- 0 miles of Class IV Bikeways, (3.0 miles in the planning stage)
- 441 miles of Sidewalks (per side of street)



A major function of the road program is to procure funding for capital expenditures. Over the last two years, PWD has applied for funding from the following grant programs:

- Federal programs:
 - Rebuilding American Infrastructure with Sustainability and Equity (RAISE) grant from the Infrastructure and Jobs Act (IIJA) passed by congress in 2021.
 - Safe Roads for All (SS4A) grant from IIJA.
 - Community Project Funding / Congressionally Directed Spending. (CPFCDS) from IIJA.
- State programs:
 - Active Transportation Program (ATP) grant.
 - Highway Safety Improvement Program (HSIP) grant.
- Local programs:
 - Transportation Development Act (TDA), Article 3 grant.
 - One Bay Area Grant (OBAG) grant.

The unincorporated county is all the territory within the County boundary that is not within an incorporated city. The County maintains all roads in unincorporated areas that are considered public and are not owned by a private interest such as a homeowners' association or a group of neighbors. Many of the roads, such as San Pablo Dam Road and Marsh Creek Road, link major population centers of the County. In addition, there are a large number of local roads within named communities such as Bay Point, Alamo, and North Richmond. The map on the next page shows the County-maintained road network in green. In order to demonstrate continuity of this road network within the County, the map also shows connecting roads located within cities as well as the freeway system that is maintained by the California Department of Transportation (Caltrans).



PROGRAM GOALS

PWD has achieved many successes with its Road Program over the last two years and has made progress in all six of its customer-focused goals. These goals, as noted in the figure below, include safety, reliability, efficiency, multi-modal mobility, equity/environmental justice, and sustainability. To achieve these goals, PWD reviews its internal processes, manages its finances, and ensures that its workforce is prepared to deliver on these goals. PWD's accomplishments and initiatives are discussed on the upcoming pages.

Goals



Safety



Reliability



Efficiency



Multi-Modal Mobility



**Equity/
Environmental
Justice**



Sustainability

Safety



Total Collisions

- 2022 452 Collisions
- 2023 442 Collisions



Fatal/Major Injury

- 2022 6 fatal, 64 Major Injury
- 2023 15 fatal, 49 Major Injury



Pedestrian-Involved Collisions

- 2022 19 Collisions
- 2023 18 Collisions



Bicycle-Involved Collisions

- 2022 23 Collisions
- 2023 22 Collisions



37.4% of vehicles exceed posted speed limit by 10 mph⁽¹⁾
6.9% by 20 mph
31.4% obey speed limit



Vision Zero Projects Status

Vision Zero Projects

Tier 0 | Tier 1 | Tier 2⁽²⁾

	Total	5	10	20
	Planning	0	6	0
	Design	2	0	0
	Construction	0	0	0
	Complete	3	0	0

PWD's engineers have been working on improving the roadway cross section to improve safety for all road users. This includes improvements that visibly narrow the traveled lane to slow down vehicles, and to provide a separation between motorists, bicyclists and pedestrians. PWD has also been installing rumble strips that warn motorists if they are departing their travel lane.

¹ A survey using a speed measuring device was placed on twenty major corridors throughout the County. The results were tabulated for each corridor and compared with the posted speed limit.

² Vision Zero projects were divided into three tiers at the time the Vision Zero Action Plan was adopted: Tier 0 were already underway; Tier 1 were considered a higher priority and were scoped out in the Vision Zero Final Report, and Tier 2 were other locations that were on the high injury network.

Accomplishments

Safety was a major consideration for PWD as it reviewed its plans, constructed capital improvements, and performed routine maintenance operations.

Plans

PWD initiated the following plans:

- In 2022 the County adopted the Vision Zero Action Plan which views road safety from the lens of a Safe Systems Approach, and which includes collaboration between engineers, public health providers, and legislators to reduce roadway injuries and fatalities. The Safe Systems Approach of the Vision Zero Plan involves the paradigm shift in roadway design and incorporates the concept that user error is not the primary cause of deaths on roads. It allows engineers, planners, legislators, and law enforcement to take a holistic approach to traffic safety with the understanding that the real problem is the transfer of kinetic energy into the human body during a vehicle collision. Pedestrians and bicyclists are particularly vulnerable to vehicle collisions, which is why there is a focus on separating these users from vehicles. Vision Zero involves encouraging users to obey speed limits with the knowledge that crash survivability for the most vulnerable users decreases dramatically with higher speeds. It also means placing less focus on vehicle convenience in terms of congestion and more focus on the transportation system taken as a whole. In 2023, the County became a Vision Zero Agency by adopting a resolution that affirms it will follow the tenants of the Vision Zero Action Plan.
- In 2022, the County adopted the Active Transportation Plan which includes a prioritized list of projects that are targeted to improve safety and accessibility for all modes of transportation (pedestrian, bicycle, and transit). As with Vision Zero, this plan reduces the focus on vehicle convenience and instead emphasizes the safety and mobility of all transportation users. This is another paradigm shift that supports the concept that if people are provided other safe alternatives to the automobile, then that action may reduce the number of vehicles on the roads, improving the network for everybody.

Capital Improvements

- The County funded and implemented the following safety projects in 2022 and 2023:
 - Appian Way at Fran Way Pedestrian Crosswalk Enhancements
 - Byron Highway Safety Improvements
 - Countywide Guardrail Upgrades – Phase 2
 - Deer Valley Road Safety Improvements
 - Vasco Road Safety Improvements
 - Walnut Boulevard Bike Safety Improvements
 - PWD began construction on the County's first roundabout located on Danville Boulevard at Orchard Court in Alamo. The project improved safety by reducing speeds and channelizing traffic into more predictable driving patterns. The project was completed in 2024.

- PWD completed or has underway the following safety projects:
 - San Pablo Dam Road and Bailey Road Signal Hardware Upgrade (2023)
 - Alves Lane Trail Crossing (2022)
 - Byron Highway/Byer Road Intersection Improvements (2022)
 - Crockett Area Guardrail Upgrade (2022)
 - Franklin Canyon Road Safety Improvements (2023)
 - Iron Horse Trail Crossings (2023)
 - Westminster and Kenyon Avenue Accessibility Project (2023)



Operations

PWD's Traffic Section implemented the following activities that support road safety:

- Conducted and updated traffic surveys to set enforceable speed limits.
- Deployed the radar speed feedback mobile trailer around the County for traffic calming purposes.
- Deployed mobile speed feedback signs on permanent posts. This initiative rotates speed feedback signs to the various posts in different areas of the County to encourage driver awareness of speeds. Speed reduction is a critical countermeasure in the Vision Zero Program.
- Conducted measurements in the field to set curve warning speeds for rural roads.
- Partnered with the California Highway Patrol (CHP) for enhanced enforcement of traffic laws. The PWD safety officer worked with the CHP to inform them of locations that might be worth enforcing. PWD also worked with CHP on a potential project to add pull-out areas to Marsh Creek Road so that traffic enforcement could be made possible on that narrow, winding road.
- Reviewed and adjusted signal timing at intersections. Signal timing was adjusted for the following reasons: to allow adequate time for vehicle movements such as left turn and through movements, to adjust the amount of time the light can be red for particular phases in order for the signal to clear the volume of traffic, and to adjust the timing for pedestrians during the walk cycle.
- Deployed and operated temporary traffic signals at various one-way roads due to slides and pavement failures.
- Conducted post fatal/major injury collision reviews to look for trends and focus on countermeasures.
- Reviewed traffic control plans and road closure permits.
- Proactively evaluated condition and placement of signs, striping, and traffic control devices.
- Maintenance Supervisors performed routine inspections on road conditions and safety issues.
- Conducted testing of traffic sign reflectivity to ensure signs are visible and in good condition.



- Installed speed humps on Loftus Road in Bay Point. The Bay Point community went through the Neighborhood Traffic Management Program process to arrive at this solution to speeding. It was decided to reduce speeds and cut-through traffic by installing the speed humps.
- Attended various meetings, such as the County's Block Party held in Concord, and various Municipal Advisory Council (MAC) meetings, to connect with the communities over road safety concerns.
- Responded to resident concerns about traffic safety, speeding, and their requests for stop signs.
- Highlighted safety campaigns through social media channels such as Facebook, X, and Nextdoor.

Initiatives

In the next three years PWD will be implementing the following safety initiatives:

- Plan, design, and construct Vision Zero and Active Transportation Plan identified projects.
- Continue on-going traffic operations efforts to collect data to aid in making informed decisions regarding safety.
- Continue reactive collision investigations and make every attempt to perform proactive investigations to determine common causes and elements of collisions.
- Review traffic surveys that need updating in order to set enforceable speed limits on County roads.
- Maintain a subscription to the location-based data service called StreetLight for analysis of the road network related to speed, turning movements, travel time, vehicle miles traveled, origin-destination, vehicle counts, bike counts, and pedestrian counts.
- Study and possibly construct pullouts on the narrow Marsh Creek Road to help with traffic enforcement.



Reliability



Bridge Condition (86 Bridges)

8% | 41% | 51%
 Poor | Fair | Good
 Goal
 < 5% in Poor Condition



Pavement Condition Index (PCI)

	Arterials	Collectors	Residential
2022	76	69	66
2023	75	73	72
Goal	80	80	75



Mobile Citizen App Road Related Inquiries
 57% Illegal Dumping
 10% Pavement and Potholes
 8% Drainage
 8% Traffic Operations
 6% Trees and Vegetation
 11% Other



Culvert Condition

	Good	Fair	Poor	Not Rated
2022	59%	29%	7%	5%
2023	59%	29%	7%	5%

Road facilities must be maintained efficiently and effectively in order to be reliable. Often the funds for maintaining a road compete with funding for capital projects that improves a road to meet other goals. This section identifies accomplishments and initiatives that the County plans to follow in order to increase the reliability of the existing road network.

Accomplishments

Reliability was strongly considered by PWD during the last two years as shown by the results of its capital improvements and routine operations.

Capital Improvements

- In 2022, PWD completed the Marsh Drive Bridge Replacement Project. The existing bridge was seismically, structurally, and geometrically deficient. The new replacement bridge meets all current standards and includes bicycle and pedestrian facilities that connect it to the Iron Horse Trail. The project not only achieved PWD's goal of providing a reliable system, but also added safe, multi-modal accessibility.
- In 2022, PWD initiated design of the Wildcat Canyon Road Slide Repair which was a result of winter storm damage.
- In 2022, the County advertised for construction projects on Marsh Creek Road that will replace two existing bridges whose piers and foundations have been affected by fast-moving storm water in Marsh Creek.
- In 2023, PWD applied for Emergency Relief (ER) Funds for 47 road projects for road damage that occurred during the winter 2022/23 storms. These ER funds are funds from the Federal Highway Administration dedicated to returning roads to their pre-disaster condition as quickly as possible. The following are significant ER projects that were implemented:
 - San Pablo Dam Road Settlement Repair
 - Norris Canyon Road Slide Repair and Safety Improvements
 - Wildcat Canyon Road Erosion Repair
 - Morgan Territory Road Bridge Work and Repairs
 - Alhambra Valley Road Erosion Repair -- 1 mile east of Castro Ranch Road
 - San Pablo Dam Road Erosion Repair -- 200 feet east of La Honda Road
 - Piper Road Sinkhole Repair
 - Highland Road Erosion Repair at Collier Canyon Road
 - Canyon Road Sinkhole Repair
 - Bethel Island Road Sinkhole Repair
 - Port Chicago Highway Sinkhole Repair

Operations

PWD's Maintenance Division performs routine maintenance throughout the year to keep roads in suitable condition for travel. Work over the last two years included:

- Responding to numerous slides, flooding, and downed trees during the 2022/23 storm events and quickly reopening roadways.
- Further developing the asset management module in Maintstar, which is a work planning program, and integrated the system with a geographical information system (GIS) technology in order to better track asset conditions, inventory, and the planning of capital replacement work.
- Implementing the 2023 Surface Treatment Program in the communities of Bay Point, Pacheco, and Contra Costa Centre, and on Kirker Pass Road.
- Implementing the 2023 Base Failure Repair project in advance of Surface Treatment project.

The following table tabulates the amount of work that the Maintenance division did throughout the course of each year:

Maintenance Item	2022	2023
Chip Seal	320,000 square yards Pacheco, El Sobrante, Canyon, unincorporated Orinda	450,000 square yards East County rural roads, Briones, Tassajara
Asphalt Rubber Cape Seal	5000 square yards Unincorporated Moraga	0 square yards
Signs Replaced	756 signs	510 signs
Sign Posts Replaced	188 posts	1,995 posts
Road Restriping	325 lane miles	472 lane miles
Culverts Cleaned/Flushed	711 culverts	490 culverts
Culverts Replaced	1,812 linear feet	1,392 linear feet
Catch Basins Inspected	2,699 catch basins	1,777 catch basins
Catch Basins Cleaned/Flushed	229 catch basins	350 catch basins
Ditch Cleaning	12,858 linear feet	28,523 linear feet
Shoulder Repair	1,407 tons of gravel and hot mix asphalt (HMA)	1,105 tons of gravel and HMA
Pavement Patching	284,500 square feet	301,200 square feet
Potholes Filled	2,149 potholes	2,825 potholes
Crack Sealing	541,900 linear feet	516,200 linear feet
Guardrails Replaced	191 sections	144 sections
Hydraugers Maintained	103 hydraugers	122 hydraugers
Graffiti Removal	23,935 square feet	7,002 square feet
Debris Pickup	3,271 cubic yards	1,641 cubic yards

Initiatives

In the next three years, the PWD will be implementing the following work and projects related to operational reliability:

- Design and construct the 2022/23 storm damage projects identified above.
- Design and implement a rehabilitation project for the Pleasant Hill Road Bridge #154.

Efficiency



Travel Time/Delay Arterials⁽³⁾

7.3 min per 15 miles travel

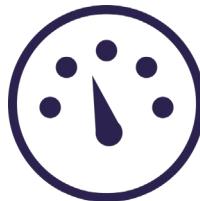
6.3 min - AM peak

8.1 min - PM peak



Area of Benefit (AOB) Projects

Planning	1
Design	5
Construction	0
Complete	3



Vehicle Miles Traveled (VMT)⁽⁵⁾

24.8 home-based trips

17.9 work-based trips

Traffic congestion is a measurement of the delay a motorist experiences while a roadway operates with a number of vehicles greater than its capacity to smoothly transport them. This is a concern primarily for commuters. Efficiency projects are based on the mindset to make improvements that directly reduce travel times and vehicle congestion along corridors by adding lanes or making certain intersection improvements

³ The travel time delay was calculated using data collected from Streetlight. Streetlight processes data from cell phones in order to gain a composite of traffic volume and vehicle speeds within corridors. Twenty corridors on County roads were evaluated for weekdays during the peak hours over the two year period of 2022 and 2023 in order to determine how much delay was expected by a motorist that travels fifteen miles on county roads. Note that this value does not include travel on roads in cities or on the freeways. The results were split between the morning peak hour that typically occurs around 7:00 AM and the evening peak hour that typically occurs around 5:00 PM but varies from road to road.

such as adding or increasing the length of turn lanes. Efficiency projects are often in conflict with other goals of boosting safety and multi-modal access and with the desire to reduce the total Vehicles Miles Traveled (VMT) on the transportation network.

Accomplishments

PWD accomplished the following during 2022 and 2023.

- In compliance with State law, PWD added VMT as a metric to measure the transportation impacts caused by new projects and developments within the unincorporated areas of the County. VMT is a measurement of the total number of miles traveled by all vehicles on all unincorporated roads in the County.
- In compliance with State law, the PWD stopped using Level of Service (LOS) as a standard by which to measure new projects and development under the California Environmental Quality Act (CEQA). LOS is a measure of how efficiently the vehicle lanes and intersections operate and how much delay a road user can expect.
- Performed travel time/delay measurements and analyses on major arterials such as Treat Boulevard, San Pablo Dam Road, San Pablo Avenue, and Willow Pass Road.
- Utilized a new traffic data and analysis tool called StreetLight to gather data that previously required field measurements. See the footnote above for a discussion of what StreetLight is.
- Adjusted signal timing on a select number of traffic signals as it became necessary to improve efficiency of turning and through traffic and for pedestrians.

Initiatives

In the next three years, PWD will implement the following initiatives related to efficiency:

- Develop options to improve efficiency of intersections throughout the County.
- Continue to implement Active Transportation Projects to reduce VMT.

Multi-Modal Mobility



Inventory Change

Sidewalk -- 11,200 linear feet
Bike Lanes -- 3,400 linear feet
Curb Ramp -- 278 Ramps

Active Transportation Projects

Planning	2
Design	1
Construction	0
Complete	5

PWD's goal regarding multi-modal mobility is to improve the road network so that other modes of transportation such as bicycles, pedestrians, and transit take priority over motor vehicles. The current thinking is that investment in multi-modal facilities will give people other choices that will in turn reduce the total number of cars using a given corridor, which could help accomplish other goals such as safety, efficiency, and reducing VMT.

Accomplishments

In an effort to increase mobility in a variety of modes, PWD accomplished the following.

- Implemented the Complete Streets Policy by developing and using a checklist that fully incorporates verification into the project development process for road projects.
- Coordinated with Department of Conservation and Development (DCD) and Contra Costa Health Services (CC Health) to promote livability and health goals associated with active transportation facilities.

- Reviewed Surface Treatment Projects for 2022 and 2023 to find opportunities to restripe the roads to add bike facilities and other safety improvements. Blum Road and Imhoff Drive in unincorporated Martinez were selected for this change. This review was coordinated with the bicycle advocacy group Bike East Bay.
- Applied for and received ATP and Transportation Development Act, Article 3, Subregional Transportation Mitigation Program (TDA) funding for the following projects:
 - San Pablo Avenue Complete Streets/Bay Trail Gap Closure (ATP)
 - Pacifica Avenue Safe Routes to School Project (ATP)
 - San Miguel Drive Pedestrian Path (TDA)
 - Appian Way at Fran Way Pedestrian Crossing Enhancements (TDA)
 - Livorna Road Shoulder Widening (TDA)
 - Driftwood Drive and Mariners Cove Drive Pedestrian Improvements (TDA)
- Constructed the following capital bicycle/pedestrian improvement projects:
 - 2022 Countywide Curb Ramp Project (2022)
 - Alves Lane Trail Crossing (2022)
 - Byron Highway/Byer Road Safety Improvements (2022)
 - Danville Boulevard / Orchard Court Complete Streets Improvements (2023)
 - Fred Jackson Way First Mile/Last Mile Connection (2022)
 - Iron Horse Trail Crossing Enhancements (2023)
 - Mayhew Way and Cherry Lane Trail Crossing Enhancements (2022)
 - Westminster and Kenyon Avenue Accessibility Project (2023)
- Constructed fourteen curb ramps on Westminster and Kenyon Avenue and installed a double-sided RRFB system at the intersection of Kenyon Avenue and Trinity Avenue in Kensington.
- In 2022, the Board of Supervisors adopted the Active Transportation Plan including identifying the following seven priority projects:
 - North Richmond Neighborhood Network
 - Port Chicago Highway Complete Corridor (Bay Point)
 - Willow Pass Road Complete Streets Corridor (Bay Point)
 - San Pablo Avenue Complete Streets (Crockett to Rodeo)
 - San Pablo Avenue Gap Closure (Tara Hills)
 - Pacifica Avenue Safe Routes to School (Pay Point)
 - Parr Boulevard Complete Streets (North Richmond)



Initiatives

In the next three years, the following initiatives will be implemented related to multi-modal mobility:

- In 2024 PWD will construct the Hills Curb Ramps on Shawn Drive in Tara Hills.
- In 2024 PWD will construct the Bixler Road and Regatta Drive Intersection Improvements.
- PWD will complete the project to upgraded traffic signal hardware, installed advanced dilemma detection zone systems, and improved pedestrian crossing signal hardware at eleven intersections on San Pablo Dam Road and Bailey Road.
- PWD will develop Local Access Score and/or Latent Demand for all County roads to provide data that could be used to prioritize projects for multi-modal accessibility.
- In 2026 PWD will construct a two-way bicycle track and improve intersections on Bailey Road between Highway 4 and Willow Pass Road using ATP funding awarded in 2021.
- In 2026 PWD will construct Class IV bike lanes and intersection improvements along Treat Boulevard between North Main Street and Jones Road using State Improvement Program (STIP) funding that was awarded in 2020.
- In 2027 PWD will construct a two-way bicycle track and intersection improvements on Pacifica Avenue between Port Chicago Highway and Driftwood Drive in Bay Point to serve Riverview Middle School and Shore Acres Elementary School.



Equity/Environmental Justice



Percent of total Capital Projects in Disadvantaged Communities
27%



Condition of pavement (PCI) in disadvantaged communities

Very Good	73%
Good	21%
Poor	5%
Very Poor	1%



Title VI Complaints
0



Staff Title VI Training
Complete

PWD's goal is to strengthen and expand equity, access and inclusion for all county residents and communities, especially those most impacted by racial and socioeconomic disparities. Many of the grant funding sources pursued by PWD, like ATP and SS4A, now require that investments be prioritized for impacted communities that have historically been neglected and/or adversely affected by past practices. The County's General Plan contains goals to reduce fossil fuel use by reducing VMT as discussed above. The corresponding reduction in pollution and greenhouse gas emissions would benefit the population as a whole, but especially benefits impacted communities.

Accomplishments

In an effort to improve equity and environmental justice, PWD completed or had significantly underway the following:

- Conducted Title VI training for PWD staff.
- Executed a new County contract for language interpretation and translation services.
- Executed a new County service contract for hearing-impaired interpreters.
- Evaluated the distribution of past construction projects in impacted and non-impacted



communities within the unincorporated areas to help measure where future infrastructure investment should go.

- Evaluated road condition assessment values in impacted and non-impacted communities.
- Evaluated Environmental Justice impacts during the environmental impact analysis for County road projects.

Initiatives

In the next three years, PWD will implement the following initiatives related to equity and environmental justice:

- Continue providing Title VI training for all PWD staff.
- Develop GIS mapping to analyze and evaluate the asset conditions in impacted and non-impacted communities.
- Develop GIS mapping to analyze and prioritize projects that are located in impacted areas.
- Develop staff training on how to obtain meaningful public involvement in transportation decision making.
- Evaluate census information within County unincorporated areas to determine where people do not speak English well and where their primary language is something other than English.



Sustainability



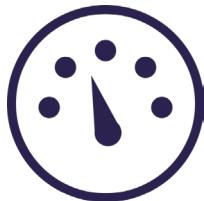
Complete Streets Facilities

Sidewalk	11,200 linear feet
Bike Lanes	3,400 linear feet
Curb Ramp	278 Ramps



Green Infrastructure Built

2 bio-retention facilities



Vehicle Miles Traveled (VMT)
24.8 home-based trips
17.9 work-based trips



Street Trees Planted
Program under development

Today there is a greater focus on the longevity of projects than was previously considered. This is especially true in the face of climate change and the problems it has caused. An example of a sustainability project is one that may address sea level rise by increasing the elevation of a facility or otherwise protecting a facility from inundation during tidal events and storm flooding events that are exacerbated by higher tides. Another example of a sustainability project is one that reduces greenhouse gas (GHG) emissions. GHGs are atmospheric gases that are released by industry and cars that are linked to climate change. The active transportation program projects discussed with the multi-modal mobility goal are envisioned to replace vehicle use by pedestrian and bicycle use, which will have an effect on the quantity of GHGs generated on County roads.

Accomplishments

In an effort to improve sustainability, PWD did the following:

- Completed construction of the Tara Hills Trash Capture Installation project where a trash capture device was installed.
- County Watershed group created GIS mapping tool of green infrastructure facilities in the unincorporated County for asset management and performance evaluation.
- Added VMT metric as a key performance indicator for unincorporated County using location-based data.
- Planted 38 street trees along Fred Jackson Way as part of the Fred Jackson Way First Mile/Last Mile project.



Initiatives

In the next three years, PWD will implement the following initiatives related to sustainability:

- Continue to implement the Municipal Regional Permit (MRP) 3.0 per State law and analyze the impact to project budgets.
- Continue the street sweeping program for curbed streets to help in the removal of trash and heavy metals discharged by vehicles.
- Begin planning for 2024 Trash Capture Device Installation Project by coordinating with the Watershed Group.
- Participate in an evaluation/pilot project on the use of low-carbon concrete for County projects.



ROAD PROGRAM HIGHLIGHTS

In addition to the six goals discussed in the previous sections, PWD has worked within the areas of finance and internal processes. The following sections highlight what PWD has accomplished in the last two years and what it plans to accomplish in the coming years with respect to the Road Program.

Financial

In order to accomplish all of the transportation goals mentioned above, revenue and expenses must be carefully accounted for by PWD. Budget management, revenue generation, and financial compliance are important components of managing PWDs' finances.

Budget Management

Budgets are managed in a variety of ways. A list of accomplishments follows:

- Continued to develop the financial database tool known as the "TM1 database budget tool" that is being used to plan and track expenditures.
 - Used the TM1 budget tool to evaluate various funding level scenarios that analyzed the potential reduction in revenues, increased project costs due to inflation, and higher project load (i.e. local matches) from grant funding opportunities.
 - Used the TM1 budget tool to determine the cash flow needed for the County Administrator's Office (CAO) to potentially fund the local match requirement for grant funds. Evaluated multi-year budgets to determine the funding capacity for local grant matches, which are often on the order of five to twenty percent of project cost.
- Made a presentation to the BOS regarding budget challenges and on the potential impacts to the road budget resulting from applying for federal IIJA and other grant funding.
- Revamped the Capital Road Improvement and Preservation Program (CRIPP) document to make it more user-friendly.



Revenue Generation

PWD revenue for roads is generated from a variety of sources. A short list of accomplishments follows:

- Secured \$21 million in grant funding to address safety and multi-modal mobility goals.
- Continued to collect impact fees from developers to pay for the traffic impacts caused by development. The major way that PWD collects impact fees is through the Area of Benefit (AOB) program. The County has sixteen AOBs, each of which consist of a finite geographical area and a certain number of transportation projects such as traffic signals or road. These projects are intended to mitigate for the traffic impact caused by development and can be installed by a developer in lieu of paying their fees or by a capital road project that PWD initiates using the pooled



developer impact fees. This program generated approximately \$1,500,000 in funding per year for future AOB projects.

- Solicited Congressionally Directed Spending Requests.

Financial Compliance

PWD accomplished the following related to financial compliance:

- Received unanimous approval of the road program budget by the BOS during the annual County budget process.
- Prepared and submitted the Road Maintenance and Rehabilitation Account (RMRA) project delivery plan and actual expenditures to the State as required by Senate Bill 1 (SB1).
- Participated in one financial audit between 2022 and 2023. No corrective action items were identified.
- Participated in an audit of the Title VI program by Caltrans which is required by agencies that receive federal financial assistance. No corrective actions were identified as a result of the audit.



Financial Initiatives

In the next three years, PWD will engage in the following activities:

- Seek federal reimbursement for 2022/23 storm damage projects.
- Continue to update the AOB Development Impact Fee programs to secure funding to address development traffic impacts on the existing transportation network.
- Continue seeking funding such as grants for the portion beyond the development's fair share contribution.

Internal Processes

PWD has worked on standardizing procedures and collaborating and coordinating with various partner entities.

Standardizing Procedures

PWD has taken the following actions to standardize procedures:

- PWD has been accredited by the American Public Works Association since 2003. Accreditation is a process that occurs every four years that facilitates PWD's continuous improvement of its standards and procedures based on the concerns and policies of the present day. The fact that PWD has been accredited since the inception of the accreditation program demonstrates that PWD is a leader in the industry and holds itself to a high standard with regard to its practices.

Collaboration/Coordination

PWD has collaborated and coordinated with the following entities:

- Individual County Supervisors during monthly Supervisor Meetings.
- DCD and CC Health in a bimonthly coordination meeting to discuss transportation issues as they relate to public health.
- The advocacy group Bike East Bay in quarterly meetings.
- The Countywide Bicycle Advisory Committee (CBAC) during an annual meeting.
- Various Municipal Advisory Council (MAC) meetings in the many communities within the County.
- Active Transportation Outreach Campaign with the cities and various agencies.
- California Highway Patrol (CHP) related to traffic safety and Vision Zero on an as-needed basis.
- The Vision Zero Technical Advisory Committee (TAC) during an annual meeting.
- The Sheriff's office on an as-needed basis to deal with issues such as illegal dumping and homelessness.
- The City County Engineers Advisory Committee (CCEAC).
- The Technical Coordinating Committee of the Contra Costa Transportation Authority (CCTA) during.
- County Engineers Association of California (CEAC).
- The Local Streets and Roads Committee of the Metropolitan Transportation Committee (MTC).
- The various utility companies during a design coordination meeting.

LOOKING AHEAD

With the COVID19 pandemic now basically over, PWD is looking forward to a generally positive outlook over the next seven-year period for transportation in the County. However, inflation and competing priorities for the fixed amount of local funding the County annually receives will remain a large challenge. Also, hiring qualified staff remains a challenge.

As noted throughout this report, PWD has been successful at receiving grant funds and will be administering these projects for the next several years. However, grant funds come with a challenge because they must include a local match, and historically the main source for these local match funds has been the gas tax. The good news is that the road program received a welcome boost when the BOS voted to provide additional funds out of the general fund revenue to fund large infrastructure projects that could not be built if these were not provided.

Another significant challenge for the next several years is the repair of infrastructure from damage caused by the winter storms that occurred during the winter of 2022/23. Many projects have been generated by requesting Emergency Relief Federal Funds. Federal funds do not cover the entire cost of these projects, which causes yet another significant challenge for deciding how to allocate gas tax and other local funds.

A major goal over the next seven years is to continue to increase the amount of available funding for the pavement surface treatment program and the routine maintenance of County roadway. Investing in maintenance of roads is wise because if a road deteriorates further than a surface treatment can fix, it will require a much more expensive pavement replacement. A major challenge for maintenance is that the funding source per year is fixed and grants are not available to fund the increases.

A new challenge for PWD is funding multi-modal and green street maintenance. These facilities require specialized equipment and training, which substantially increases the cost per mile of roadway when compared with similar roadways that were designed primarily for the efficient throughput of automobiles. This means that unless new funding sources are found, it is likely that the overall level of maintenance will decrease, which will lead to an even greater share of the funds needing to go to reactive maintenance such as pothole filling and base failure repairs. This may ultimately cut into the capital improvement budget, which would make highly-needed projects unfundable.

CONCLUSION

This annual road report highlights PWD's commitment to the community-focused goals of safety, reliability, efficiency, multi-modal mobility, equity and environmental justice, and sustainability. Through our employees' efforts and collaborative partnerships, we have strived to enhance the lives of our residents by prioritizing their well-being, accessibility, and environmental stewardship. As we reflect on the achievements of the past years, the PWD recognizes that the journey towards a more resilient and inclusive transportation system is ongoing. With collective determination and support of our vibrant community, PWD is confident that the road ahead will lead to a safer, more equitable, and sustainable Contra Costa County for generations to come.