



# **Vallejo Safe Routes to School Infrastructure Improvements**

For the Air Quality Conformity Task Force

Presented by

Gary Cullen

Public Works – Engineering Division

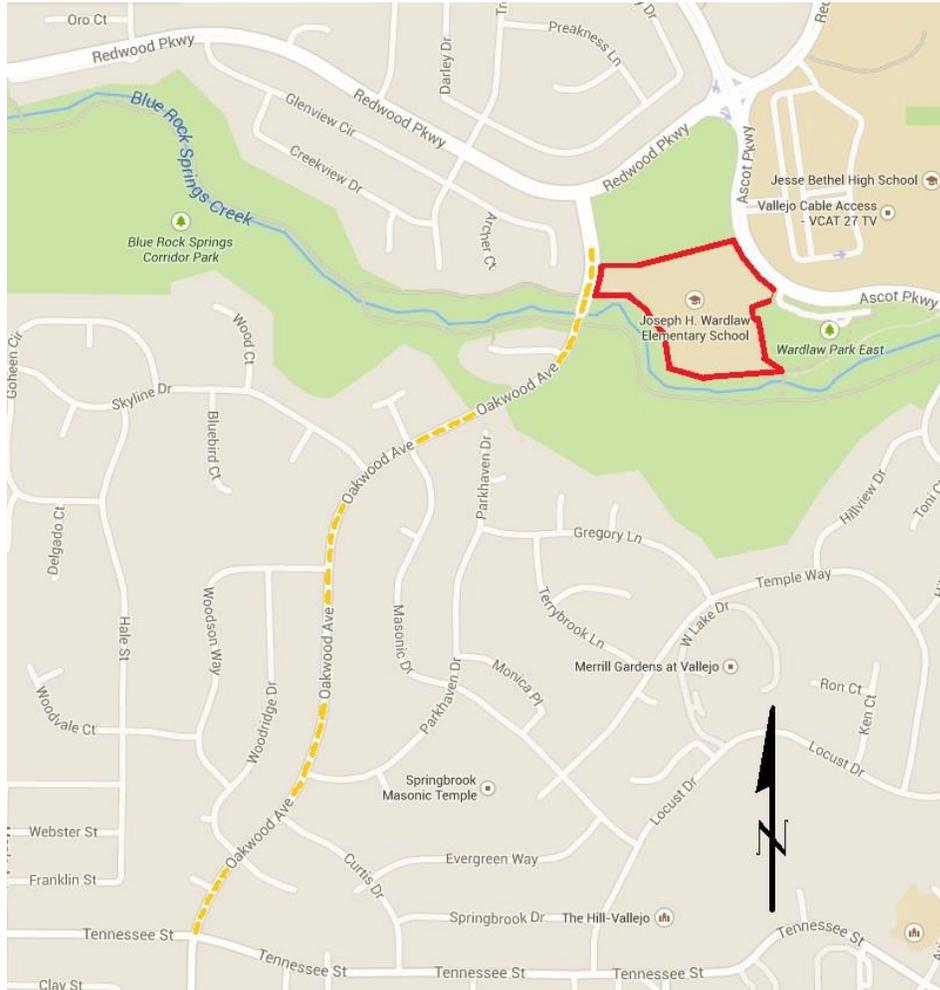
# Project Description

- Install safety improvements on Oakwood Drive at the intersection/entrance to Wardlaw School:
  - flashing beacons and crosswalk with solar power
  - upgraded ADA ramps
  - minor modifications to median and sidewalk, curb and gutter
  - additional signing and striping modifications
  
- Install a Road diet and bike lanes between the school entrance and Tennessee Street:
  - reduce the travelled lanes from 4 lanes to 2 lanes  
(from two thru-lanes in each direction to one thru-lane in each direction)
  - add a parking lane and class II bicycle lane in each direction
  - Install a free-left-turn lane in the center of the roadway

# Purpose and Need

- The project will improve safety for students and parents at the Wardlaw Elementary School
- Students need a high visibility safe crosswalk and route along Oakwood Drive to bike and walk to school.
- Safer student pick-up and drop-off is a major goal
- The Oakwood roadway diet will provide enhanced safety for Bike-to-School programs as well as the general cycling public

# Project Location/Context



- The project lies in a built-out Residential area with front-on residential on Oakwood Avenue.
- Nearby is Wardlaw Elementary School and a high school.
- Traffic generated in this area is predominantly passenger vehicles, and basic service vehicles such as delivery service, waste disposal, and fire response that serve all residential neighborhoods. Truck counts show less than 1% truck traffic.
- Land uses are residential, school, and open space (neighborhood park) which has little effect on diesel traffic.
- There are no foreseeable changes to land use that would affect diesel traffic percentages in the future on this route.

# Wardlaw School Entrance

- New highly visible crosswalk with flashing beacons
- Right-in/right-out travel into school entrance to reduce conflicts
- Added signing and road legends for school safety



# Oakwood Road Diet



- The Road diet will install bike lanes between the school entrance and Tennessee Street by reducing the travelled lanes from 4 lanes (two in each direction) to 2 lanes (one in each direction) with a parking lane and class II bicycle lane in each direction, and free-left-turn lane in the center.
- This work includes bicycle signing and no changes to the curb lines along the road diet portion of the project.

# Oakwood Road Diet-Benefits

- Eliminates the speed differential due to having only one lane in each direction, which improves safety for those trying to access Oakwood Avenue from the side streets.
- Left turns from Oakwood Avenue would not be made from the through lane, which would improve safety by reducing the potential for rear end collisions on Oakwood Avenue.
- Pedestrian crossing distances would be decreased and reducing the number of lanes to cross improves pedestrian safety.
- Adding bike lanes on Oakwood Avenue promotes use and improves safety by providing a dedicated lane for cyclists.

# Status

- PES forms and documents have been approved, and the remaining item is air quality conformity determination.
- No comments received on air quality thus far
- Design of the plans and specifications are anticipated to be complete in Summer 2015.
- Construction is scheduled for 2015/16

# Traffic

Oakwood Avenue-2% volume growth per year				
year	volume	LOS	Truck Traffic*	
2014	8200	B	9	
2015	8364		9	
2016	8531		9	
2017	8702		10	
2018	8876		10	
2019	9053		10	
2020	9235	C	10	
2021	9419		10	
2022	9608		11	
2023	9800		11	
2024	9996		11	
2025	10196		11	
2026	10400	D	11	
2027	10608		12	
2028	10820		12	
2029	11036		12	
2030	11257	E	12	
2031	11482		13	
2032	11712		13	
2033	11946		13	
2034	12185		13	
2035	12428		14	

\*-From classification count of outside lanes, assumed same truck volumes in inside lanes

- The table to the left reflects the current ADT and projects it into the future.
- The changes in the future LOS is shown. Intersections at LOS D, E, or F improve, and delays decrease (2035).
- A more recent traffic Count on May 6, 2015 yielded a lower ADT than is shown for 2014 and provided truck traffic counts.

ADT = 7,187

Trucks = 9 total

# Truck Traffic

- Traffic counts on May 6, 2015 showed an ADT of 7,187
- Truck traffic was less than 0.6%.
- AM Peak occurred at 7:15 AM with 759 vehicles
- PM Peak occurred at 12:45 PM with 752 vehicles
- School traffic at Warlaw Elementary has been identified as the biggest contributor to congestion on this portion of Oakwood Drive.

# Not a Project of Air Quality Concern

- This Project will promote bicycling with new bicycle lanes
- The Project will also enhance ADA access by improving curb ramps at the intersection/entrance to Wardlaw School
- The Vallejo SR2S Infrastructure Project has no direct impact on traffic volumes or truck traffic
- No added idle or cold start times will be affected