

STAFF REPORT

July 26, 2018

TO: Bicycling, Transportation, and Street Safety Commission

FROM: Brian Abbanat, Senior Transportation Planner

SUBJECT: Fourteenth Street / Villanova Drive Improvements Design Concepts

Recommendation

Support “Baseline” and “Enhanced” design concepts.

To view design concepts, please click on or copy and paste the below link into a web browser

<http://cityofdavis.org/city-hall/public-works/transportation/transportation-planning/fourteenth-street-villanova-drive-improvements/-fsiteid-1>

Background and Analysis

In June 2015, the City of Davis submitted an application for funding under the SACOG Regional/Local funding program which provides funding for maintenance and improvements projects. At the time, projects with a road rehabilitation component were required to include a Complete Streets component(s) or upgrade(s). (The stronger the Complete Streets component, the more likely an agency is to receive funding for that project.)

The City was awarded funding for this project on Fourteenth Street from F Street to Oak Avenue and Villanova Drive from Anderson Road to Sycamore Lane. These included are designated “High Priority” safety improvements for North Davis Elementary School from the Walk/Bike Audit Report. While the work was originally scoped for road rehabilitation, buffered bike lanes, intersection curb extensions, pedestrian refuge islands, restriping crosswalks, and green bike lane striping, has further shaped the project.

Project History:

The City’s Walk/Bike Audit Report, completed in 2014, included extensive public outreach at all elementary and junior high schools, including North Davis elementary. This input established baseline improvements to the corridor in the City’s grant application. In February 2015, Staff introduced to the Bicycling, Transportation, and Street Safety Commission (BTSSC) for input the basic project framework for submittal of the grant application to the SACOG Regional/Local funding program. In July 2017, after the project was awarded \$992,000 by SACOG, Staff again sought input from the BTSSC to discuss the baseline improvements.

The BTSSC had the following comments:

1. Due to the high non-motorized activity levels with adjacent institutional uses on Fourteenth Street and because this corridor is part of a primary east-west bicycling connection across the city (including a key segment of the 13-mile Davis bike loop), this project warranted exploration of more substantive improvements than those originally scoped in grant application in June 2015.
2. The interior segment of Villanova Drive between Anderson Road and Oak Avenue should also be considered for inclusion in the project.

Staff agreed with the BTSSC's feedback and developed a Request for Proposals (RFP) that requested two design concepts. The first would reflect a "baseline" project, consisting of improvements closely resembling that defined in the SACOG grant application. The second would reflect more comprehensive complete street enhancements (including potential Class IV protected bike lanes) with less restrictive cost constraints and include the Anderson Road to Oak Avenue segment.

Outreach:

As noted, feedback from the 2014 Walk Bike Audit Report provided a foundation of understanding for school community concerns regarding corridor safety. To supplement this, in late April, staff and consultants held one-hour focus group interviews with key stakeholders to better understand their experiences on the corridor, including:

- DJUSD Administration (DJUSD Facilities, Davis Senior High School, and North Davis Elementary School).
- Bicycle Advocacy and Safety (Bike Davis, The Crossing Guard Companies).
- Neighborhood Residents and School Community solicited via Nextdoor.
- Institutions (Davis Library, St James Church, Davis Veterans Center).
- Davis Senior High School Environmental Science Class

After draft design concepts were completed, an Open House was held on June 24th from 3:30 – 6:00 p.m. at the Davis Library on Fourteenth Street for the entire community to provide input. Outreach for the Open House included:

- Notices sent to all addresses between Sycamore Lane to the west, Eighth Street to the south, California Northern railroad tracks to the east and Covell Blvd to the north.
- Electronic announcements to various e-mail distribution lists, City commission staff liaisons, and the City Facebook and Nextdoor platforms.
- A press release to all Davis news media.
- A-Frame signage along the corridor.

Approximately 40-50 people visited the Open House with varied opinions in reaction to the proposed design concepts. This feedback will be shared in more detail during the meeting presentation.

Design Concepts:

The design concepts presented here attempt to address some of the primary concerns raised during the 2014 WBAR process and Fourteenth/Villanova Improvements focus group interviews. City staff and consultants seek feedback from the BTSSC on the “Baseline” and “Enhanced” design concepts. It is important to note that by design, the two concepts are compatible with each other and treated as separate phases. Cost constraints are always a variable to consider with street design projects so commissioners are asked to keep this in mind. Project consultants will have planning level cost estimates for the BTSSC meeting, but were not available at the time the meeting packet was posted.

Attachments

- 6/26/18 Open House Visitor Comments

14th and Villanova Open House - June 26, 2018 (comment cards)

#	What do you like about the design?	What would you like to see changed?
1	The raised crosswalks and speed bumps will be helpful in slowing traffic.	The enhanced concept envisions a bike lane between sidewalk and parking lane. This would make the existing challenge of backing out of driveways on Villanova even more dangerous. As is, the parking lane provides a safety buffer before you back the car into the bike lane.
2	No answer provided.	Bike lane between Sycamore and Anderson. Keep bike lane adjacent to drive lane. Works great now (baseline).
3	No answer provided.	No speed humps on Villanova. Try other things first. Speed is too high but really not much traffic. Striping/signage/speed monitor <u>first!</u>
4	No answer provided.	Villanova/Sycamore: 1.) Make one large speed zone and signs; 2.) Better lighting; 3.) More structured intersection for bikes and pedestrians at Sycamore bike path.
5	There is overconfidence that some feature of both plans will actually affect bike traffic behavior; e.g. Sycamore and Villanova. They won't do any good if bikes ignore them!	Some greater emphasis on <u>enforcement</u> . See above.
6	Villanova west of Oak already has significant speed reduction features, e.g. curved roadway. 14th east of Oak has only a yellow planter at the elementary school and 3-way stop at B Street. Move money from additional expensive speed reduction between Oak and Anderson to upgrade speed reduction on F Street from F Street to Oak.	See above.
7	Fails to recognize that many children and parents enter and exit the temporary classroom and park in the related parking lot east of the kindergarten classroom. There is very active entry and exits at this point onto 14th.	Add a speed bump at Aspen or, at minimum, a crosswalk at Aspen, but without flasher.
8	Attempt to improve situation at Sycamore and Villanova.	Add some sort of barrier that will <u>prohibit</u> bikes and pedestrians crossing Sycamore here or Villanova from any path other than the one you design; even the enhanced design doesn't do this. Without this, pedestrians and especially bikes will take the most desired route and ignore crosswalks.
9	I like the bike separation from vehicles.	The diagonal crossing at Oak: 1.) Only with scramble or some other means of identifying diagonal movement; 2.) Don't decrease parking in front of NDE; 3.) If entries to DHS parking lot are changed, change parking lot configuration to mesh.
10	I have a home on the southwest corner of Villanova and Carob Place, which is a cul-de-sac. It is dangerous to make a left turn moving onto Villanova because you cannot see cars coming around the curve. I suggest installing a speed table in the westbound lane of the curve to slow drivers down.	No answer provided.
11	I like separating car traffic from bicycle traffic.	Be aware of children crossing 14th Street to go to the daycare facility. Also, pedestrian traffic crossing 14th to go to soccer and softball games between North Davis Elementary and F Street.
12	Safety for bikes, pedestrians and turning cars is great. Heavy users are kids on bikes getting to school.	No median in front of Carob Place. Think about crosswalks at two cul-de-sacs off Villanova--Toyon Place and Carob Place. Those kids go to and from schools: Willet, Chavez, DHS, etc. Redwood and Reed is too far.
13	Flexible yellow bollards on entrance to Carob Place.	Add speed bumps on Villanova before or after Carob Place. Narrowing entrance to Carob Place is unnecessary if median is blocked; no left turns equals no U-turns. I would prefer median not extended in front of Carob Place and speed bumps used instead.
14	Better painted and noticeable crosswalks.	Too many raised crosswalks and a speed bump on one part of Villanova may push traffic down to Colby. Villanova is supposed to be the through street.
15	Wider, more separate bike lanes. Traffic circle on Oak, except do you need it?	Double bike path on north side removed: A.) Too hard to cross going in and out of school and lib driveways; B.) Create even slower traffic in busy periods.
16	No answer provided.	1.) No speed bumps in any form because of noise factor; 2.) Please preserve residential look; 3.) Redirect Unitrans to Covell, then proceed to Oak Avenue to return to University of California Davis; 4.) Please no speed tables--they too are noise making, reduce value of homes and take away the look of residential appearance.
17	I like attempts to make biking safer, especially by slowing traffic along Villanova.	The baseline project is preferable to the enhanced one. Raised crosswalks on Villanova are probably not necessary as not many people cross at those intersections and they take up more room than speed bumps, so decrease parking. See problems with access to parking lots and driveways caused by 2-way bike path.
18	For Villanova between Sycamore and Anderson: I like both design options. I prefer to have car buffered bike lanes; my daughter feels the opposite.	No answer provided.
19	14th Sycamore Anderson: Great crosswalks--the brighter, the better.	Speed bump on Villanova may drive through traffic onto Colby to the south (mine, I admit). When school lets out, at least Colby does not have as much traffic and many kids bike it.
20	1.) Like buffered bike lanes--should be built for both north and south side; 2.) Like bulb outs at active intersections; 3.) Like traffic circle at B Street and 14th; 4.) Like drop-off platform at North Davis Elementary.	1.) Make a bike boulevard with separation from automobiles with landscaped barrier; 2.) Buffered bike lanes on both north and south side of 14th; 3.) Raised speed table only at Pine on Villanova.
21	Sycamore to Anderson: Liked baseline concept bulb outs and raised crosswalks.	I don't favor protected bike lane in enhanced concept because of the difficulty of turning left from the bike lane and the difficulty that cyclists and bikes would have getting around rush hour bike traffic.
22	Oak to F Street: 1.) Liked cycle track; 2.) Either traffic circle or diagonal bike crossing; 3.) Raised crossing.	No answer provided.
23	I love the design, both baseline and enhanced. I live on Villanova between Anderson and Sycamore. I mostly like the raised crosswalks, speed bumps and bulb outs. Traffic is too fast now. Please keep all these features in the plan.	No answer provided.
24	Both designs attempt to reduce traffic roadway width between F Street and B Street.	Some "refuge" space in middle of 14th. Often only way to cross 14th is by getting across one lane at a time and get refuge in the yellow cross-striped median. Some refuge medians would be more useful than overall width of street reduction.

14th and Villanova Open House - June 26, 2018 (comment cards)

#	What do you like about the design?	What would you like to see changed?
25	No answer provided.	Sidewalk along 14th Street, especially south side, are in poor shape and should be replaced as part of the project. Baseline <u>or</u> enhanced.
26	1.) Diagonal bike crossing at Villanova and Sycamore; 2.) Speed bumps as long as they aren't so high as to damage vehicles or make a lot of noise; 3.) Raised crosswalks.	Not currently in favor of bike lanes immediately adjacent to curb. Very dangerous for bikes due to people backing out of <u>many</u> driveways. Imagining explaining to visitors where to park! Do replace bumpy, dangerous sidewalks. One woman fell on Villanova's south side between Pine and Sycamore.
27	No answer provided.	No answer provided.
28	Appreciate efforts to make the street more bike-friendly.	<u>Overall</u> : I prefer the baseline option to the enhanced design. <u>Specific</u> : 1.) I own a home at Villanova and Willow. I would likely lose the parking in front of my house under the proposed design, which I <u>oppose</u> . Please consider replacing the crosswalk at Villanova and Willow with a speed hump at another location. (A crosswalk at this location is not necessary because there are very low crossing volumes at this location.); 2.) I strongly oppose the cycle track. I think this will make 14th Street almost impossible near pickup and drop-off times because cars will block the through lanes when turning into the school parking lots. Also, people coming out of the parking lots will not be used to crossing cycle tracks and may miss (not see) cyclists going in the direction they are not expecting.
29	No answer provided.	I want to keep the residential look of the neighborhood and respect the serenity. I don't want more cement poured. We already have very wide sidewalks and a median in front of our house. I don't like the white bollards either. They are not appropriate for a residential neighborhood. I don't want any speed bumps. They cause more traffic noise and most of our bedrooms are in the front of the house. I wish Unitrans would not use this street (Villanova with a curve). I think the current median in front of our house is slowing down traffic on Villanova but it is hard for oversized trucks to maneuver around the curve.
30	Anderson to Sycamore: 1.) Street parking adjacent to curb with bike lanes between parking and car lanes (baseline plan). Most, if not all homeowners back out of their driveways; with parking lane next to sidewalk, it provides a buffer. If bike lanes are adjacent to sidewalks (enhanced), then cars pull first into bike lane. This is <u>very</u> dangerous, especially where view is obstructed; 2.) I like the speed humps. People drive very fast on this stretch of Villanova, so any measures to slow traffic are good. Including installing the flashing speed signs like the ones on Anderson north of Covell; 3.) Consider painting crosswalks at Pine. (Only concern is that it may give kids a false sense of security.); 4.) Consider adding the Pine Lane bulb out (north side of Villanova) to the baseline plan; 5.) Don't like the non-parking zone on south side of Villanova at Willow.	No answer provided.
31	Anderson and Oak: Like baseline concept so bikes can more easily pass each other.	I would like to see 10' lanes, which is the new street standard I believe. In general I don't favor the buffered lanes with cross hatching. The street standards call for 12" wide painted line. The cross hatching adds a lot of cost to the maintenance. We've already had trouble over painting lines because of the cost, so keep it simple. Also, in some places a wide stripe would allow the bike riders to more easily clear the zone.

14th and Villanova Open House - June 26, 2018 (board sticky notes)

Location	Comment
Board 1 - Sycamore Ln to Anderson Rd	
Villanova Dr/Sycamore Ln	Problematic intersection because of Brown Drive. Bikes and cars go straight from Villanova to Brown to use Brown greenbelt access, but others at intersection don't expect vehicles to go to Brown.
Villanova Dr/Sycamore Ln	Use green paint from Sycamore bike lane across Sycamore to 2-way cycle track and park bikeway.
Villanova Dr near Pine Ln	Please don't keep bike lanes between car lanes and parked cards. Bikes should have proximity to street.
Villanova Dr/Pine Ln	No speed bumps please. Speed bumps on Dale already drive traffic to Redwood to avoid them.
Villanova Dr/Pine Ln	Too many speed bumps may push traffic onto Colby to the south.
Villanova Dr near Pine Ln	Too many speed bumps. Not really as necessary here as near Carob.
Villanova Dr/Pine Ln	I like painted bike buffers, not car buffers.
Villanova Dr/Pine Ln	If you have speed hump put it at Pine lane, add crosswalks, and speed feedback signs
Villanova Dr/Pine Ln	Add crosswalk here at Pine. Not useful at Willow.
Villanova Dr/Willow Ln	Speed cushion at Willow. No need for raised crossing. (For Both alternatives.)
Villanova Dr/Willow Ln	I love the raised crosswalks and bulbouts along Villanova. Keep all raised crossing and speed humps
Villanova Dr/Orange Ln	Add crosswalks at Orange
Villanova Dr/Orange Ln	Don't put raised crosswalks, use rumble strips
Board 2 - Anderson Rd to Oak Ave	
Villanova Dr/Anderson Rd	Add constructed median at intersection approach to Anderson
Villanova Dr/Anderson Rd	Please don't take the left turn sign away. Use striping.
Villanova Dr/Anderson Rd	Speed of cars southbound Anderson to Eastbound Villanova.
Villanova Dr/Anderson Rd-Oak	Variant from Anderson to Oak - From median, 11' traffic lane, 3-4' buffer, bike lane 7', trees/grass and sidewalk (no parking)
Villanova Dr/Reed Dr	Speed table at Villanova and Reed intersection.
Villanova Dr/Reed Dr	No speed bump please.
Villanova Dr/Reed Dr	I don't think that having a cement buffer would keep bikes safer. Just give more room.
Villanova Dr/Reed Dr	Cement median buffer is a good idea. Roundabout a good idea.
Villanova Dr/Reed Dr	Lighted crosswalk at Reed. Do not add speed bump please.
Villanova Dr near Reed Dr	On Villanova curve eliminate parking on south side. Provide a buffered bike lane.
Villanova Dr/Reed Dr	Use striping to promote the Tamarack Lane path entrance.
Villanova Dr near Reed Dr	Where do the containers go on garbage pickup day?
Villanova Dr near Reed Dr	Green yard waste pick up?
Villanova Dr/Carob Pl	Speed bump here westbound approaching Carob
Villanova Dr/Carob Pl	Agree. Speed bump before curve.
Villanova Dr near Carob Pl	Tamarack Lane enhancement great!
Villanova Dr/Carob Pl	With bollards at entrance, no need for bollards in median, painted or no U-turn signs okay.
Villanova Dr/Carob Pl	Narrowed entry unnecessary if median extended because no U-turns.
Villanova Dr/Carob Pl	Definitely a speed bump here - north side approaching Carob
Villanova Dr/Carob Pl	Yellow Median Bollards - great idea!
Villanova Dr/Toyon Pl	Speed table (north side approaching Carob)? Traffic calming? No speed bumps.
Villanova Dr/Redwood Ln	Don't know why crosswalks are needed here.
Villanova Dr/Oak Ln	Very awkward intersection design.
Villanova Dr/Oak Ln	Do not add a stop light or circle
Board 3 - Oak Ave to F Street	
14th St/Oak Ave	How does this work without a light? How to signal a diagonal cross?
14th St/Oak Ave	Diagonal bike crossing is great

14th St/Oak Ave	Design for an AM closure of 14th, cars approach SB and turn WB or approach NB and u turn
14th St/Oak Ave	No light, no circle
14th Street/Beech Ln-Eureka Ave	Dangerous and slow to cross. All those cars in and out of driveways.
14th St near Eureka Ave	A bus that blocks traffic is bad. Start with "baseline" striping and only go concrete if needed.
14th St near Eureka Ave (enhanced)	No cement buffer.
14th St near B St (enhanced)	Good solution to make parking lot 2-way entry and exit with actuated light.
14th St near B St (enhanced)	No thank you. Bus will stop all traffic.
14th St /B St (enhanced)	Concrete seems unnecessary, striping more than sufficient
Enhanced version	Variant - lane 10', buffer 1-4', parking 7', bike lane 7'
Enhanced version	Use buffers on south side bike lanes
Crossing at Cedar	Good solution for kids safety to have drop off platform with fencing
14th St/F Street	Left turning bikes from bike lane conflict with right turning cars.
14th St/F Street	Design idea: continue two-way cycletrack to SB F street on east side and go to H Street through parking lot of housing
14th St/F Street	Support moving bus stop to F Street.
Enhanced Concept Section: Two-Way Cycletrack with Median	Design bike lane next to sidewalk parking next to auto travel lane.