



Drexel Road Bridge | Midvale Park Road to Calle Santa Cruz

Virtual Public Meeting

December 6, 2023



Good evening, everyone. Thank you for joining us for the Drexel Road Bridge virtual kick-off meeting. This is the second public meeting of the week for this project, with us holding an in-person open house last night.

We'll be sharing the same information tonight, as was available last night but presented in a format that fits the virtual setting.

I want to emphasize that we are just kicking off the project so a lot of what you'll be seeing tonight is still very preliminary and will be refined and revised as the project advances based on what we hear from the community. So please share your comments and questions tonight and throughout the entire process to ensure we are delivering a project that meets everyone's needs.

We appreciate you being here. Let's get started.



Project Location Map



The proposed Drexel Bridge project is located approximately 1-mile north of Valencia Road, 1-mile south of Irvington Road, and ¼-mile west of Interstate 19, where Drexel Road currently terminates at the Santa Cruz River.

Neighborhoods, commercial destinations, and other landmarks in the project area include the Midvale Park Neighborhood to the west, The Sunnyside Neighborhood to the east, Pima Community College Desert Vista Campus and The Tucson Spectrum on the east bank of the Santa Cruz, the Culinary and Commercial destinations on S. 12th Ave, and on the west bank of the Santa Cruz, the Chuck Huckelberry Loop – one of the premier urban recreational trails in the country.

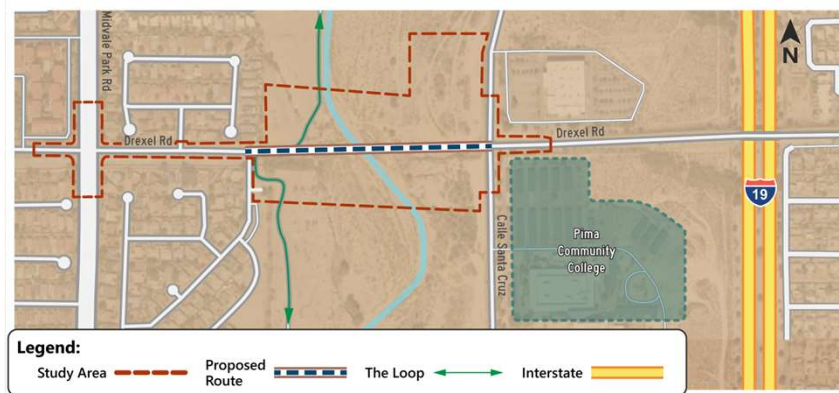
There is currently a two-mile gap between crossings of the Santa Cruz River in this well-developed area of the city, which the Drexel Bridge project would address. When completed, the bridge would provide a crossing of the Santa Cruz at 1-mile intervals between I-10 and Valencia Road, reducing the need for people to travel out of their way to reach important destinations.



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Overview

This City of Tucson project includes the planning, design, and construction of a two-lane bridge over the Santa Cruz River extending Drexel Road from Midvale Park Road to Calle Santa Cruz.



The Drexel Bridge project has been in our regional transportation plan as far back as 2003 and existed as an idea well before that. The City of Tucson is advancing this project now because funding has come available from a set-aside from the general fund of the State of Arizona.

The timing for advancing this project is good due to the increased availability of federal transportation grants for exactly this kind of transportation project, which the City of Tucson will be pursuing.

The proposed project will include a new two-lane bridge, with a potential center-turn lane over the Santa Cruz River. The project will also include improvements to Drexel Road west of the proposed bridge, as well as upgrades to the intersections at Calle Santa Cruz and Midvale Park Road.



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Benefits



Improved connectivity



Sidewalks, bicycle lanes, or other enhanced bicycle facilities



Connections to existing shared use paths



Street lighting, pavement markings and signage



Landscape architecture and public art



Transit connections



Connections to Pima Community College and local school districts



Drainage facilities

When completed, the proposed bridge project will improve connectivity of the transportation system, closing the 2-mile gap on crossings of Santa Cruz. This will provide more direct access and reduced travel times – by all modes – between residents to key destinations in the area as well as increasing the density and redundancy in the road network.

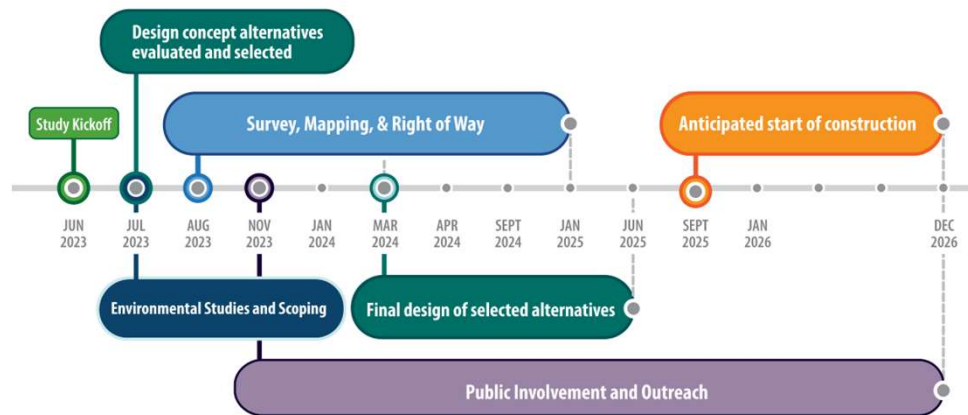
The proposed bridge will provide:

- Continuous pedestrian connections across the Santa Cruz and enhanced bike lanes
- A lower-stress connection to the Loop
- We'll be providing new streetlighting and evaluating new traffic signals at major intersection approaches
- The project will incorporate public art and new landscaping
- It will support more direct transit connections
- Better access to educational and commercial destinations, such as Pima Community College
- And will incorporate drainage
- The bridge can also improve response times for emergency vehicles



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Project Schedule



We initiated project design in June of 2023, with data collection, evaluation of design concepts, survey work, and environmental scoping.

This meeting marks the beginning of our public involvement process, which will be continuous throughout the duration of the design of the proposed bridge.

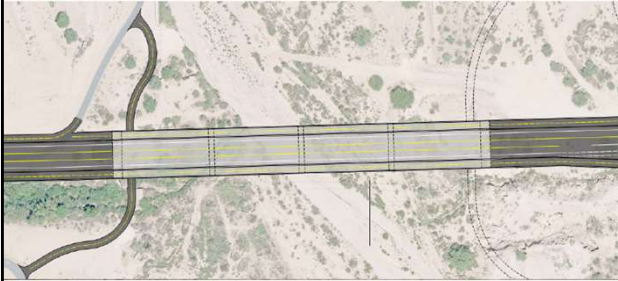
As of right now, we are targeting 2026 for construction start, however, this will be fully contingent upon the availability of project funding. We are estimating that we still need to close an approximately \$10M shortfall, so as we progress with the design, we will be pursuing multiple funding opportunities, including regional funds and federal competitive grants, which Tucson has had great success in securing recently.

That stated, I want to re-emphasize that we are still very early in the development of the project, and we want to hear from the community to refine and revise the design concepts we are presenting tonight. Nothing that you see this evening is final, and all of it will be adjusted based on what we hear from the community, so please share your comments, both tonight, and on an on-going basis through the input options we will be discussing at the end of the presentation.



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Roadway Design

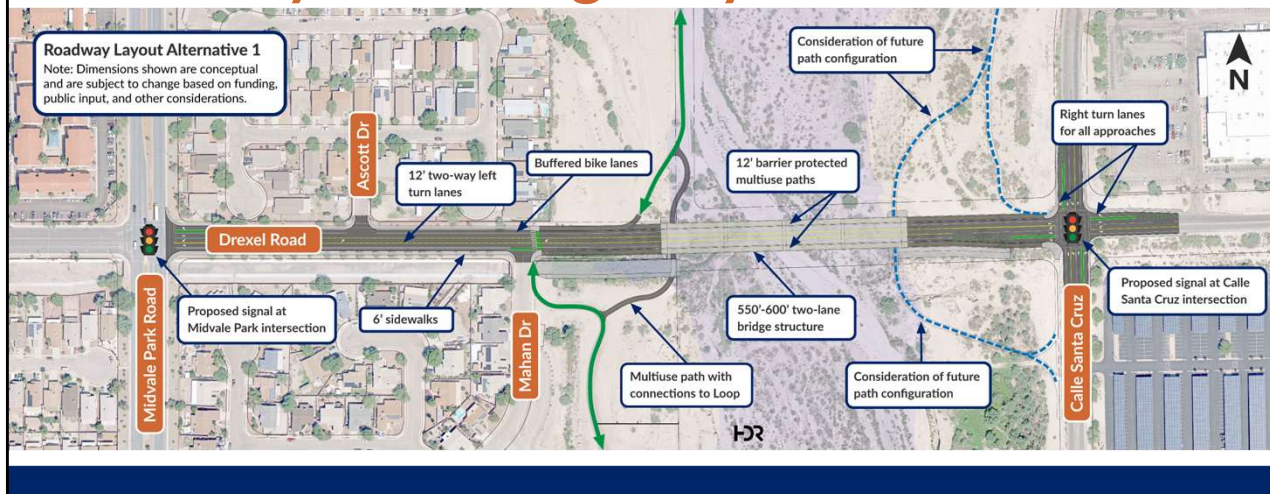


As we've described, this project begins at Midvale Park Road and ends at Calle Santa Cruz. The key element to the project is the bridge over the Santa Cruz River. This slide shows a plan view, that is, an overhead view of the bridge on the left, as well as a rendering of what the bridge may look like in the image on the right. This image on the right is a view looking to the northwest, with the Midvale Park subdivision on the left or west side of the Santa Cruz River.



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Roadway and Bridge Layout



This next slide shows a conceptual layout of the entire project. Moving from left to right, we see the following:

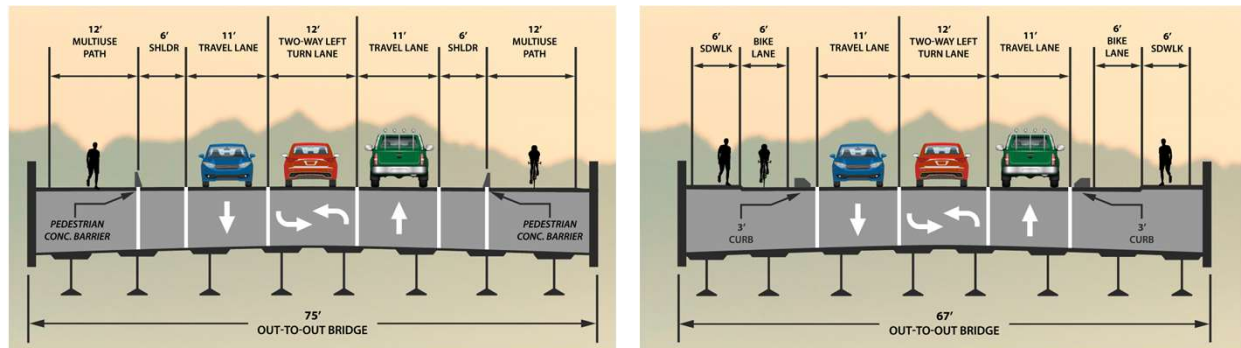
- The Midvale Park Road intersection with Drexel Road is currently a 4-way stop. In addition to a right turn lane from westbound Drexel Road to northbound Midvale Park Road, we anticipate that a traffic signal will be constructed at this intersection.
- We don't anticipate significant changes in the roadway between Midvale Park Road and Mahan Drive, but we do anticipate minor widening to accommodate the following improvements: A two-way left turn lane in the center of the roadway, one travel lane in each direction and 6-foot shoulders/bike lanes that are separated from the travel lane with a two-foot wide buffer. The buffer would likely include two painted stripes with a curb, flexible vertical post, or other type of visible separation between the travel lane and bike lane. The drainage channel along the south side of Drexel Road would remain as it is today. Six-foot sidewalks, similar to what is in place today will also be constructed behind the curb.
- From Mahan Drive to the Santa Cruz River, we anticipate a similar roadway section as to the west of Mahan, but we are evaluating having 12-foot wide multi-use paths approaching and crossing the bridge or having 6-foot wide raised sidewalks adjacent to a buffer protected 6-foot wide bike lane adjacent to the travel lanes. We would like to hear your preferences on these two alternatives, both opportunities and concerns. The concrete lined drainage channel south of Drexel Road is expected to be extended to outlet into the Santa Cruz River. We are also conceptually showing connections to the existing "Loop" path.

- The new bridge is expected to be between 550 and 600 feet long and include 4 or 5 spans. The bridge will be designed as an all-weather crossing and is intended to pass the flow associated with the 100-year storm event in the Santa Cruz River underneath the bridge. More on the bridge in the next slide.
- From the east side of the bridge to Calle Santa Cruz River, the new roadway will match the cross section on the bridge but will transition to accommodate a left turn lane onto Calle Santa Cruz.
- The existing three-way stop at Calle Santa Cruz will be replaced with a signalized intersection that is expected to include dedicated right turn lanes at all four corners of the intersection.



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Bridge Section Alternatives



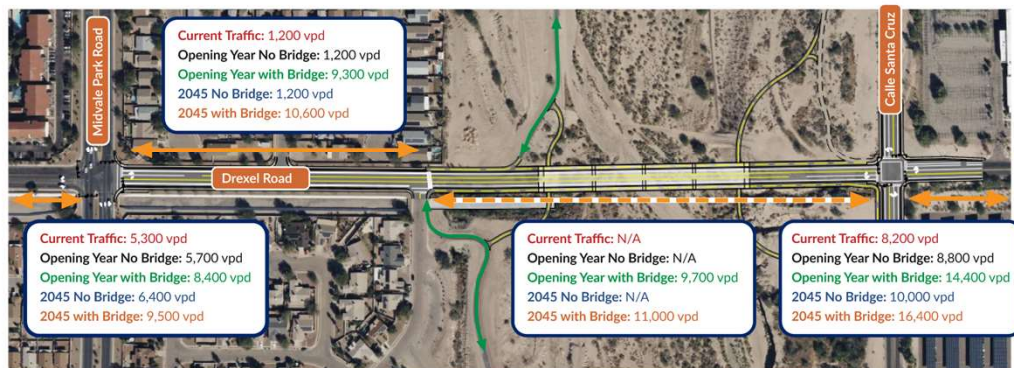
This slide shows the two bridge alternatives that we are currently considering and we want your input on tonight.

- Bridge section Alternative 1 includes one 11-foot-wide travel lane in each direction, a 12-foot-wide two-way center left turn lane, 6-foot wide bike lanes, and 12-foot-wide multi-use paths on each side of the bridge for an approximate bridge width of 75 feet.
- Bridge section Alternative 2 includes one 11-foot-wide travel lane in each direction, a 12-foot-wide two-way center left turn lane, a 3-foot buffer with a curb or other device between the travel lanes and bike lanes, a 6-foot wide bike lane, and a 6-foot raised sidewalk on the bridge for an approximate bridge width of 67 feet.
- We would like feedback on each alternative, both opportunities and concerns.



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Traffic Analysis (Projected Volumes)



Streets with traffic volumes around 10,000 vpd:

- Mountain Avenue (Grant Rd to Speedway Blvd) ~9,850 vpd
- Tucson Boulevard (Speedway Blvd to 6th St) ~11,500 vpd
- Drexel Road (6th Ave to Nogales Hwy) ~11,000 vpd
- Cardinal Avenue (Drexel Road to Valencia Rd) ~10,800 vpd

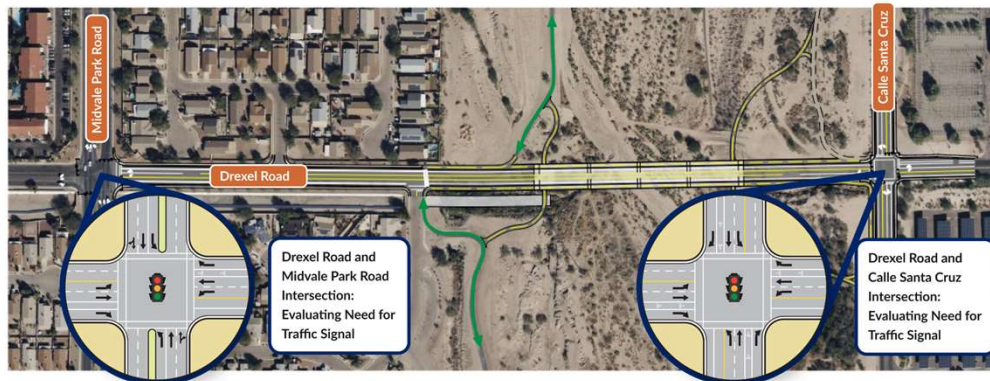
The traffic engineering analysis for the project includes the evaluation of existing and future conditions to provide recommendations to accommodate the anticipated traffic demand.

To evaluate traffic conditions, we collected existing volumes on Drexel Road, the volumes are shown as “Current Traffic” in the graphic. As seen in the graphic, existing traffic volumes on Drexel Road are approximately 5,300 vehicles per day (vod) west of Midvale Park Road and 8,200 east of Calle Santa Cruz. We used the regional travel demand model to calculate future volumes. The volumes on Drexel Road are expected to increase to 8,400 vpd when the bridge opens in 5 – 7 years and to 9,500 vpd by the year 2045. Without the bridge, volumes are expected to increase to 6,400 by 2045 in the segment west of Midvale Park. The segment of Drexel Road between Midvale Park Road and Calle Santa Cruz is expected to have 11,000 vpd in 2045. To illustrate the anticipated traffic demand, we have a list of streets with current traffic volumes around 11,000 vpd which includes Drexel Road (6th Avenue to Nogales Highway) with 11,000 vpd; Cardinal Avenue (Drexel Road to Valencia Road) with 10,800 vpd.



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Traffic Analysis (Preliminary Intersection Recommendations)



We utilized the 2045 projected volumes to prepare preliminary recommendations for the intersections at Drexel Road and Calle Santa Cruz and Drexel Road and Midvale Park Road. Based on the analysis, both intersections are anticipated to have a traffic light (signal). In addition, the intersection of Drexel Road and Calle Santa Cruz would have additional left turn and right turn lanes as shown on the graphic. Preliminary recommendations also include a continuous 3-lane section connecting the two intersections from Midvale Park Road to Calle Santa Cruz.



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Environmental Efforts

Technical Studies and Reports

- » Cultural Report
- » Biological Report
- » Aquatic Resources Report/Delineation
- » Visual Resources Analysis
- » Air Quality Analysis
- » Noise Analysis
- » Hazardous Materials Assessment



» **Technical reports will inform the Environmental Assessment.**

The environmental efforts of this project includes a number of technical studies and reports that will be completed. You'll see in the image to the right that our environmental study area is larger than the immediate area around the proposed bridge location and that's so that we can capture the direct and indirect impacts to the surrounding environment in our analysis.

The reports that we'll be completing include a cultural report, a biological report, aquatic resources report and delineation, a visual resources analysis, air quality analysis, noise analysis, and hazardous materials assessment. These technical reports will allow us to document the existing conditions as well as the impacts from the bridge and help determine if mitigation is needed.

Lastly, these technical reports will inform the Environmental Assessment, or EA, that will be completed for the project. The EA is a document that is required as part of the environmental requirements for federally funded projects.



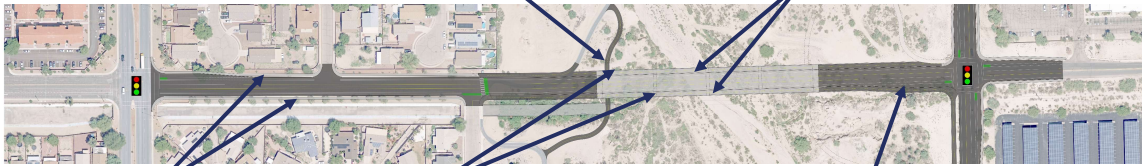
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Multimodal Access

Improved loop connectivity



More direct pedestrian access across the Santa Cruz River



Enhanced protected bike lanes in both directions



Sun Tran: More direct transit service

Our aim with this project is to provide the highest level of accommodation for people who are walking/rolling, biking, or taking transit across the Santa Cruz. This is particularly important given the intersection of the project with the Loop.

The specific type of bicycle and pedestrian facilities on the bridge have yet to be determined, so we are looking to hear from the community on which option you prefer.

Between Midvale Park Rd and the proposed bridge, the project will be providing continuous sidewalks, enhanced or protected bike lanes, and connections to the Loop (including passing the Loop under the new bridge).

On the bridge itself, we are evaluating two alternatives.

Alternative 1, would provide 12' shared-use paths on each side of the bridge, fully separated from automobile traffic by a concrete barrier. This alternative would allow bikes to travel in both directions over the bridge, which would optimize connections and crossovers to the Loop, while also maximizing comfort and safety.

Alternative 2, would provide separate 6' protected bike lanes and 6' sidewalks. This alternative would still provide physical separation between people walking and biking and motor vehicles, but it

would also separate bicyclists from pedestrians. However, this would only provide 1 direction of travel on each side of the bridge for people riding bikes.

The bridge itself will also have much lower traffic volume than the current closest river crossings at Irvington and Valencia, so will provide a much more comfortable, lower-stress option for people who walk or bike (or wish to) to destinations across the river.

Finally, the bridge will allow for the opportunity to reroute Sun Tran bus service in the area, eliminating a major route deviation, providing shorter transit trips and saving the bus system money.



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Your Input Matters

Share your thoughts using any of the options below:

- » Visit our website: www.drexelroadbridge.com
- » Email us at: connect@drexelroadbridge.com
- » Call us at: 520.207.8978

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