



**Loop 360 Program
Westlake Drive Update**

January 2020

1

Goals and Objectives

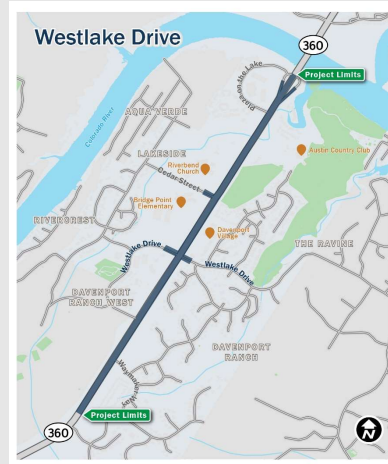
- Program purpose: Upgrade multiple intersections to improve mobility and safety along the Loop 360 corridor
 - Eliminate at-grade crossings
 - Install over/underpasses at major intersections
 - Separate local and through traffic at intersections
 - Increase safe access to/from adjoining neighborhoods
 - Add accommodations for bicyclists and pedestrians

January 2020

2

Project Overview

- The Loop 360 at Westlake Drive project proposes to:
 - Remove the traffic signals from the Loop 360 mainlanes at Westlake Drive and Cedar Street.
 - Construct an underpass (where the Loop 360 mainlanes go under the cross street) at both locations, including non-signalized U-turns at Westlake Drive.
 - Add a shared-use path (SUP) and sidewalks within the project limits to improve bicycle and pedestrian accommodations.



- **All improvements are planned within existing TxDOT right of way.**

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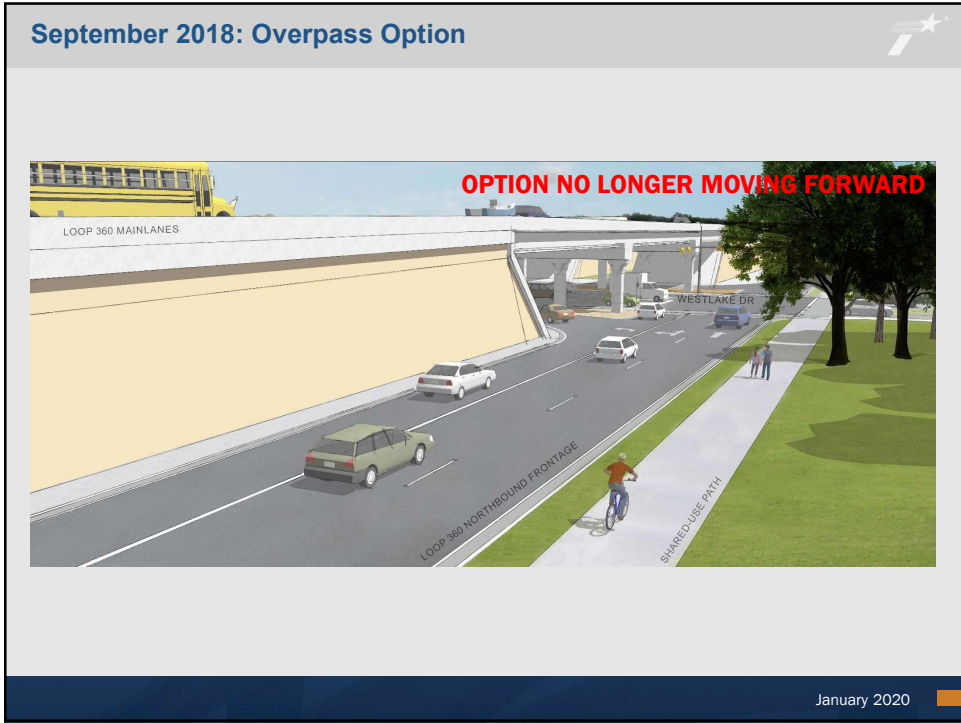
3

Public Feedback

- TxDOT has hosted two public workshops for the project.
- First public workshop – held September 2018
 - TxDOT presented three options:
 - **Overpass** at Westlake Drive, dedicated U-turn at boat ramp to access Cedar Street.
 - **Overpass** at Westlake Drive, elevated U-turn bridge north of Cedar Street.
 - **Underpass** at Westlake Drive, underpass at Cedar Street.

January 2020

4



5



6

Public Feedback

- **TxDOT heard overwhelming support for the underpass option and recommended moving forward with the underpass.**

January 2020

7

April 2019 Proposed Design

NEEDLES DR

18' WALL TO ROW

10' SHARED-USE PATH

455+00

460+00

April 2019

January 2020

8

Public Feedback

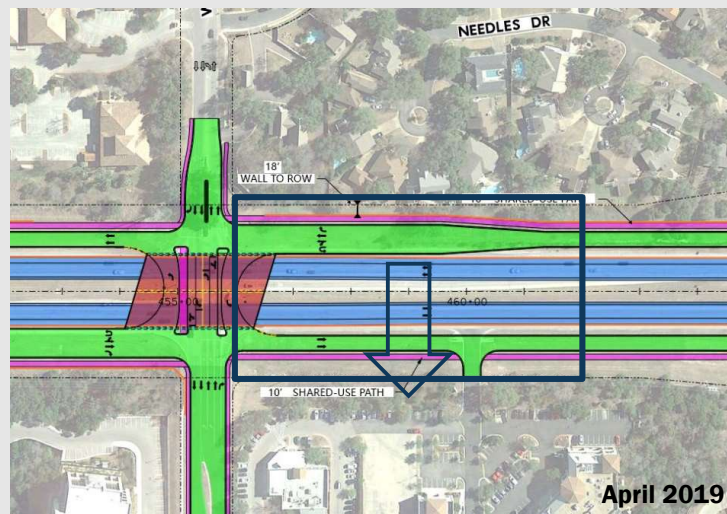
- Second public workshop – held April 2019
 - TxDOT heard concerns about cliff cuts on the east side of Loop 360, south of Westlake Drive.
- **TxDOT reviewed multiple options to address concerns.** The evaluations are discussed on the following slides.

January 2020

9

Evaluation: Shift Roadway to West

- TxDOT evaluated shifting the entire roadway to the west.



January 2020

10

Evaluation: Shift Roadway to West

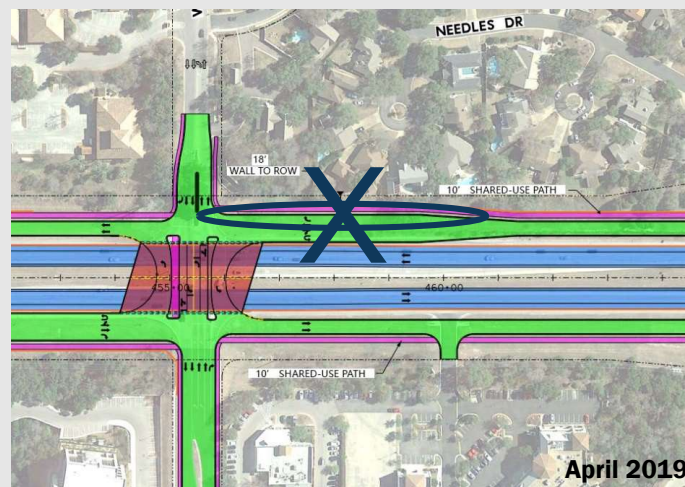
- TxDOT evaluated shifting the entire roadway to the west. Analyses showed:
 - Four lanes are needed on the connector roads approaching Westlake Drive (both northbound and southbound).
 - TxDOT must accommodate utilities. Most utilities are located on the west side of the road. Shifting the roadway to the west would leave no space for utilities.
 - TxDOT would have to buy easements on the west side of the road to relocate utilities and to build the retaining wall to support the underpass.
 - This would add cost and time to the project.
 - It could also impact Bridge Point Elementary School, Riverbend Church and local businesses.
 - Shifting the road to the west would also introduce a curved approach to the Westlake Drive intersection, which could impact safety.

January 2020

11

Evaluation: Remove Right-Turn Lane

- TxDOT evaluated removing the right-turn lane on the northbound Loop 360 connector road.



January 2020

12

Evaluation: Remove Right-Turn Lane

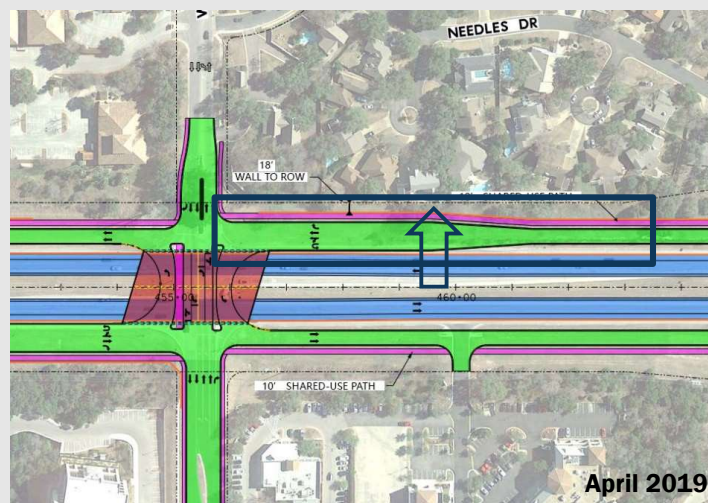
- TxDOT evaluated the removing the right-turn lane on the northbound Loop 360 connector road.
 - The current project proposes 4 lanes on the northbound connector road south of Westlake Drive.
 - The right-turn lane was added to the design based on public feedback after the September 2018 workshop.
 - Analyses show that the right-turn lane is required to maintain efficient traffic operations.

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13

Evaluation: Connector Road Placement

- TxDOT evaluated placing the connector road and shared-use path (SUP) on top of existing cliffs.



January 2020

14

Evaluation: Connector Road Placement

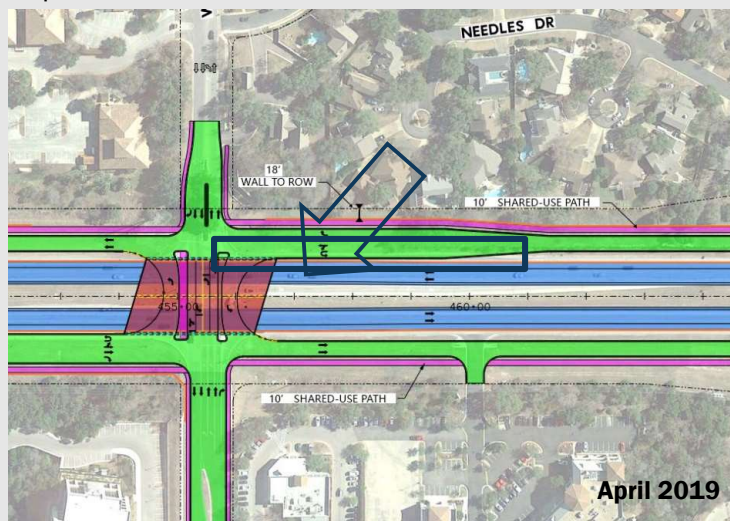
- TxDOT evaluated placing the connector road and SUP on top of existing cliffs. Analyses showed:
 - Placing the connector road and SUP on top of the cliffs requires a steep grade for drivers traveling on the northbound connector road toward Westlake Drive.
 - Doing so introduces safety concerns and traffic operational concerns.

January 2020

15

Evaluation: Cantilever the U-turn lane over the Loop 360 mainlanes

- TxDOT evaluated cantilevering the north-to-southbound U-turn lane over the Loop 360 mainlanes.



April 2019

January 2020

16

Evaluation: Cantilever the U-turn lane over the Loop 360 mainlanes

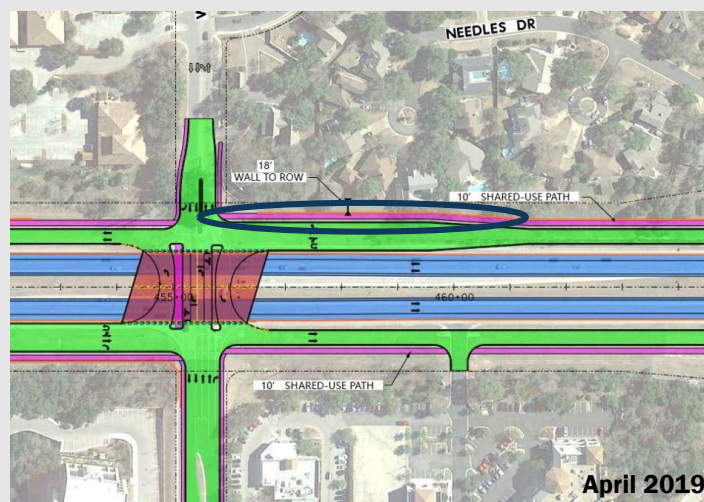
- TxDOT evaluated cantilevering the north-to-southbound U-turn lane over the Loop 360 mainlanes.
 - This would shift the lanes to the west approx. 8-10', and would still require cliff cuts on the east side of Loop 360.
 - It would introduce potential safety and operational concerns and would significantly increase the cost of the project.
 - It would require additional excavation and additional improvements to the mainlanes to meet minimum overhead clearance requirements for the cantilever structure.
 - It would require shifting the northbound exit to Westlake Drive approximately 500' to the south, potentially introducing an unsafe condition for vehicles turning out of Waymaker Way.
 - It would add curves on the northbound connector road on both sides of Westlake Drive, creating potential operational and safety concerns.
 - Doing so would require the entire U-turn to shift to the west, resulting in a wider bridge deck at Westlake Drive to accommodate large vehicles.

January 2020

17

Evaluation: Reconfigure SUP

- TxDOT evaluating removing or reducing the size of the SUP near Westlake Drive.



January 2020

18

Evaluation: Reconfigure SUP



- TxDOT evaluating removing or reducing the size of the SUP near Westlake Drive.
 - Removing the SUP does not meet Federal Highway Association (FHWA) guidelines, which TxDOT is required to adhere to.
 - Reducing the SUP to a sidewalk (less than 8'):
 - Also conflicts with FHWA requirements for bicycle access.
 - Would require addition of a shoulder on the connector road for bicycles, which would take approximately the same amount of space as the SUP.

January 2020

19

Recommendation



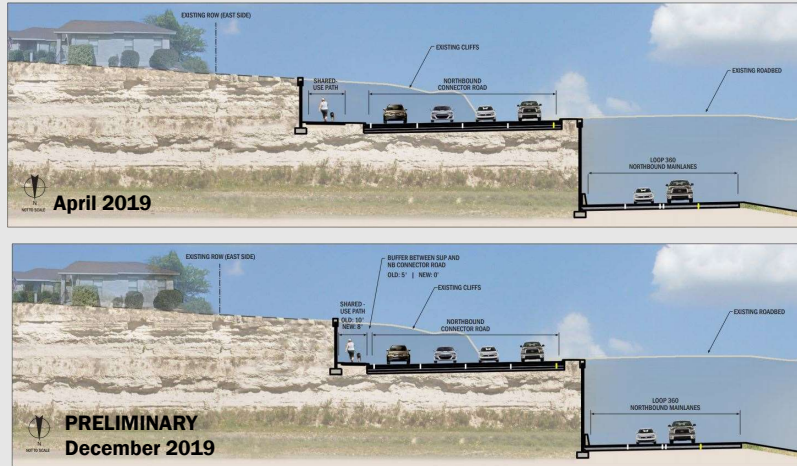
- **After evaluations, TxDOT is recommending:**
 - **Reducing the SUP from 10' to 8'.**
 - **Removing the 5' buffer between the SUP and the connector road, and placing the SUP adjacent to the curb of the connector road.**
- Reduces the cliff cut by 7' and meets geological experts' recommendation of a minimum 25' between the edge of property and the edge of the retaining wall.
- **The exhibits on the following slides illustrate TxDOT's recommendation.**

January 2020

20

Recommendation

Renderings showing cross section near Loop 360 at Westlake Drive. The top rendering shows the April 2019 design, and the bottom rendering shows the new proposed design with the reduced cliff cut.

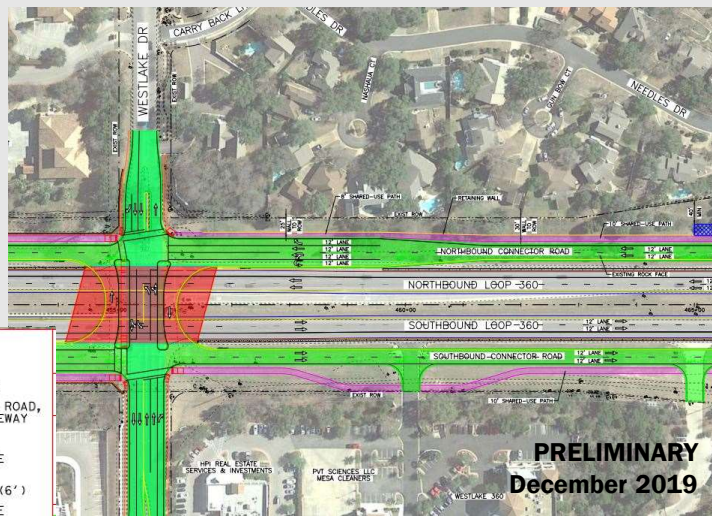


January 2020

21

Recommendation

Updated geometrical exhibit showing the proposed design at Westlake Drive. Note the 25' from the edge of the right of way to the edge of the retaining wall.



January 2020

22

Next Steps



- TxDOT will continue the environmental process and initial design phase for the project.
- After the environmental process is complete, the project will move to utility relocation. Relocating utilities is anticipated to take approximately 1 year.
- The project will then move to construction, which is currently anticipated to begin in early 2022.
- You can stay up-to-date with the Westlake Drive project by visiting Loop360Project.com or by emailing info@Loop360Project.com.

January 2020

