



OAK HILL PARKWAY

OHAN Resolution Fulfillment

Updated: June 2016

NOISE MITIGATION – Utilize noise reduction technologies including low noise surfaces.

A noise analysis study, in accordance with the National Environmental Policy Act of 1969 (NEPA) and 23 CFR 772 Procedures for Abatement of Highway Traffic Noise and Construction Noise, will be conducted as part of the Environmental Impact Statement (EIS) to compare the proposed alternative(s) with a baseline (the no-build alternative) to determine whether traffic noise impacts would occur from the proposed Oak Hill Parkway project. The noise analysis study results would be provided in the EIS and at the Public Hearing in 2017. If warranted, noise reduction strategies, including sound walls or other approved noise reduction technologies would be considered.

UPDATE: The noise study is currently underway and preliminary results are anticipated this fall. The study will reveal if and where sound walls may be needed, as well as the appropriate heights and lengths of the walls. Although Permeable Friction Course (PFC) pavement is not considered a sound mitigation tool, and therefore would not be a part of the analysis, it does have noise dampening qualities and is being considered for implementation as part of the project.

The information below further outlines the noise analysis considerations and process:

- **Noise analysis considerations**

When determining where sound walls are reasonable and feasible, the noise analysis considers the following:

- Type of land use activity impacted by traffic noise (residential homes, schools, businesses, etc.)
- Existing noise levels
- Prediction of future noise levels under each reasonable Build alternative and the No Build (do nothing) Alternative
- Consideration and evaluation of abatement measures to reduce noise impacts (wall heights and lengths)
- Consideration of cost and constructability of sound walls or other approved noise reduction technologies.

To determine reasonableness, a combination of social, economic and environmental factors are evaluated, including noise reduction levels, view impacts and cost effectiveness.

To determine feasibility, topography, access requirements, drainage, utilities, maintenance and noise reduction levels are evaluated.

- **Sound wall workshop process**

- At the end of the environmental study, if a record of decision is issued declaring that a build alternative can move forward, and if the noise study performed during the study determines that sound walls are reasonable and feasible, sound wall workshop(s) would be held. Following is an overview of the sound wall workshop process:
 - Adjacent property owners associated with each potential sound wall segment location would be contacted via certified letter.
 - Sound Wall Workshop(s) would be held with adjacent property owners to review the study results in detail, discuss the placement and height of walls, obtain their feedback, and outline the voting process that would determine which walls would be constructed.

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- If the majority of adjacent property owners support construction of the wall, the wall would be constructed as part of the project.
- **OHAN inquiry about Permeable Friction Course (PFC) pavement for use as noise mitigation technology**
PFC pavement is a roadway surface composed of a compacted permeable mixture of aggregate, and asphalt binder. Its primary purpose is to facilitate faster water drainage off of road surfaces. PFC would be considered for use on the Oak Hill Parkway for roadway safety benefits. Although PFC generally results in lower traffic noise levels than standard pavement, it is not an FHWA-approved noise abatement measure and is not part of the noise analysis.

ELEVATION – Eliminate or minimize elevation using modern technology and creative design

As of October 2015, the project team reduced the levels and heights of elevated structures from previously proposed project designs. For example, designs now include only one elevated level at the intersection of US 290 and SH 71 instead of two levels above ground (as was proposed in 2007). Elevated structures are proposed for both Alternatives A and C for multiple reasons including:

- **grade-separated bridges would help remove through-traffic from at-grade intersections**
- **to avoid impacts to Williamson Creek and the Williamson Creek floodplain**
- **to avoid the road from being impassable during flood events**
- **to avoid impacts to large trees (oaks and other species) near William Cannon Drive**

UPDATE: Elevations have been minimized to the maximum extent possible using creative designs, including upstream detention ponds to lower downstream water elevations near William Cannon Drive. Eliminating elevation at William Cannon Drive, would require the acquisition and removal of the business park at William Cannon Drive and US 290 and homes at the top of the bluff. It would also require removal of additional large trees in Beckett Grove, as well as reduced neighborhood access at Hill Oaks Drive. This information was presented to the OHAN subcommittee in October 2015. These combined consequences would be considered significant environmental impacts and would likely not be allowed by the Texas Department of Transportation (TxDOT) or the Federal Highway Administration (FHWA), in light of the fact that less impactful alternatives exist. Neither Alternatives A or C would require taking commercial businesses or homes at this location, nor would they reduce existing neighborhood access.

The information below further outlines elevation considerations:

- **Bridges (elevated structures) are needed at intersections to separate mainlane through-traffic from local traffic making turning movements.**
 - A fully signalized at-grade option could not meet the projected US 290 traffic demand (estimated at 152,000 vehicles per day in 2040). Innovative signalized at-grade intersections (like those recently installed on US 290 at William Cannon Drive and SH 71) are typically not long term mobility solutions when traffic volumes are as high as those on US 290 and SH 71. Intersecting roadways would suffer severe congestion without grade-separated bridges.
 - Both Alternatives A and C propose a one-lane direct connector, or flyover, in each direction at the interchange of US 290 and SH 71 in order to sufficiently handle the turning movements between the two major highways without going through a signal. The elevated direct connection from US 290 to SH 71 would keep commuter traffic off local roads, easing up access for local businesses and neighborhoods. Each flyover would be less than 40' wide, up to 34' above existing ground, and an average height of 25' above existing

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- ground (about the height of a two-story house and similar to the height of the US 290 overpass at Old Fredericksburg Road).
- Grade-separating the mainlanes of US 290 from the access road turning lanes at the major intersections like SH 71 and William Cannon Drive would allow the mainlanes to flow freely without signals. Alternative A proposes depressing the US 290 mainlanes under the SH 71 access road turning lanes, while Alternative C would elevate the US 290 mainlanes over the SH 71 access road turning lanes.
 - **Elevation is needed to avoid impacts to Williamson Creek and the Williamson Creek floodplain**
Both Alternatives A and C propose to elevate the US 290 mainlanes over William Cannon Drive to avoid potential impacts to the Williamson Creek floodplain. Because the Oak Hill Parkway study area lies within the 100-year flood zone, the US 290 mainlanes must be designed above the flood zone to avoid an increase in the 100-year floodplain and subsequent increased risks of flooding to abutting properties.
 - **Elevation avoids impacts to large trees near William Cannon Drive**
Alternatives A and C would elevate the US 290 mainlanes over William Cannon Drive to avoid impacts to large trees (oaks and other species) in the vicinity of the creek and William Cannon Drive. By elevating the roadway, impacts to critical root zones would be minimized.

WATER QUALITY – Proposed water quality and flood control infrastructure should be sufficient for regional use, including improvements for existing commercial properties. TxDOT’s newly installed flood control infrastructure as part of the interim intersection improvements should mitigate downstream flooding.

UPDATE: The environmental study is evaluating upstream detention and water quality features. The study should be completed in early 2017. The project team continues to work with the City of Austin to determine if they want to collaborate on water quality efforts. TxDOT funding cannot be used for the benefit of private commercial properties.

When US 290 and SH 71 were originally constructed, water quality measures were minimal or non-existent. The Oak Hill Parkway project would incorporate water quality protection measures for US 290 and SH 71 to ensure the highway would meet required regulations to provide treatment of stormwater runoff from the project before discharging into Williamson Creek and its tributaries. The project would also add two upstream detention facilities to offset the increase in impervious cover, reduce downstream flooding, and eliminate additional roadway elevation. Upstream detention facilities would provide a regional benefit and reduce flood flows between the ponds and the project right-of-way; however, all detention capacity would be needed by the Oak Hill Parkway project. Ponds would be constructed to maximize community benefit (in addition to serving the project purpose), but would not remove responsibility from private developers to mitigate flooding and treat stormwater runoff from their own commercial properties. The existing trees and vegetation on the properties that would be used by the Oak Hill Parkway project for detention would not be removed during construction and could limit some recreational activities such as sports fields.

The information below further outlines water quality considerations:

- **Proposed upstream detention facility locations:**
 - Old Bee Caves Road near Sunset Ridge
 - Maximum available storage is approximately 100 acre-feet or 32 million gallons
 - Pond surface area is approximately 13 acres
 - SH 71 near Covered Bridge Drive
 - Maximum available storage is approximately 45 acre-feet or 15 million gallons

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- Pond surface area is approximately 12 acres

- **Water quality protection regulations applicable to US 290 and SH 71:**
 - Texas Commission on Environmental Quality (TCEQ) Edwards Aquifer Protection Program
 - US Army Corps of Engineers Section 404 of the Clean Water Act
 - TCEQ Section 401 Water Quality Certification
 - TCEQ Texas Pollution Discharge Elimination System Stormwater permit
- **Water quality protection measures being considered on the project:**
 - Vegetative filter strips, grassy swales
 - Sedimentation/sand filtration basins
 - Bio-retention ponds
 - Extended detention basins
 - Regional water quality

ACCESS – Incorporate efficient and convenient entrances and exits for all existing Oak Hill neighborhoods and businesses so they can reach destinations within and outside of Oak Hill.

Local traffic access will become more efficient and travel time through the corridor will be reduced. The information below further outlines access considerations:

- Every street that has access to US 290 or SH 71 today will continue to have access with Alternatives A and C. Alternative C would change access at two locations. The driveway at the McDonalds on SH 71 would no longer have a signal light. Traffic leaving McDonalds would go right and take the Texas U-turn at Scenic Brook Drive and head east on SH 71 to get over to the Jim's Restaurant. The second access change proposed by Alternative C applies to traffic from Old Bee Caves Road desiring to travel east on US 290. That traffic would head west on the SH 71 access roads, use the Texas U-turns at Scenic Brook Drive, and then return to US 290 eastbound, instead of turning left onto US 290 at an unprotected intersection when they can find a gap in traffic (as they do today).
- Both Alternatives A and C include the same number (or fewer) of traffic lights on the frontage roads that exist today. Several additional traffic lights will most likely be installed in the next year on US 290 due to additional development and limited grid streets in the area. Those lights would likely not be needed if the Oak Hill Parkway is built due to the proposed Texas U-turns that would allow drivers to right turn-in and right-turn out of driveways and smaller streets. Fewer stop-lights would improve traffic flow.
- All major intersections, with the exception of US 290 and Circle Drive, will have Texas U-turns, so traffic wanting to make left-hand turns will not have to sit through traffic lights, an improvement over what is available today.
- Both Alternatives A and C include a new, additional non-tolled lane on the access roads in both directions throughout most of the project limits. The additional lanes will improve traffic flow.
- In addition to the extra access road lanes, both Alternatives A and C will add two to three additional mainlanes with no traffic lights. This will more than double the roadway capacity that exists today.
- At the intersection of US 290 and SH 71, both Alternatives A and C propose an innovative intersection that reduces the amount of cycles drivers sit through at the signal. This intersection design means vehicles headed east on US 290 would not have to stop at a signal at the 'Y', ever. The reduction in signal cycles will allow for better traffic flow than what exists today.
- Joe Tanner Lane would no longer serve as a Williamson Creek dry weather crossing for local traffic; McCarty Lane would be used instead.
- Shared Use Paths, sidewalks and striped bicycle lanes on cross streets throughout the corridor, as well as along the corridor, would provide safe connectivity and access to local neighborhoods and businesses for bicyclists and pedestrians.

NEIGHBORHOOD IMPACT – Eliminate or reduce non-local neighborhood cut-through traffic by using progressive design and technology.

Neighborhood cut through traffic caused by drivers wanting to avoid congestion at the Y would be reduced because the proposed Oak Hill Parkway would more than double the existing capacity and would move through-traffic from local streets onto the mainlanes. Circle Drive, Scenic Brook Drive, Thomas Springs Road, and other roads, should see a reduction of cut-through traffic if the project is constructed.

UPDATE: The project team is researching sources for obtaining accurate data regarding cut-through traffic, including the WAZE navigation application. Anecdotally, Dripping Springs and Bee Caves stakeholders have shared that they use the following routes through neighborhoods to avoid the 'Y'.

- Old Bee Caves Road to SH 71 at Thomas Springs Road to Hamilton Pool Road
- Convict Hill Road to Slaughter Lane or William Cannon Drive
- Scenic Brook Drive to SH 71 to Old Bee Caves Road
- Nutty Brown Road to RM 1826 to SH 45
- RM 150 to Darden Hill Road to RM 1826 to SH 45 to Loop 1
- RM 1826 to Slaughter Lane
- Southwest Parkway
- Circle Drive to Thomas Springs Road to Old Bee Caves Road to Barton Creek Boulevard to Lost Creek Boulevard
- Southwest Parkway to New Boston and then a turnaround on US 290
- Old Bee Caves Road

CONNECTIVITY – Employ a design which makes traveling on local streets convenient and efficient for Oak Hill residents. Separate local traffic from high-speed traffic.

The proposed Oak Hill Parkway project would create a controlled access highway with access roads, separating local traffic from high-speed through-traffic and improving local circulation. Connectivity would be enhanced for Oak Hill residents on local streets by adding two to three lanes to local access roads, adding Texas U-turns, and improving driveway access along access roads. Connectivity would also be enhanced by adding bicycle and pedestrian facilities along the entire project, including a 10 to 12' wide Shared Use Path from Circle Drive to MoPac and six foot-wide sidewalks. Connections to the city of Austin YBC Trails are also being incorporated. These enhancements would bring safe connectivity for non-vehicle traffic where, in most cases, there are no existing facilities in the corridor. This also creates opportunities for Oak Hill residents to choose an alternative mode of travel.

UPDATE: Traffic counts on US 290 Toll (Manor Expressway) reflected a 36% reduction in traffic on the non-tolled existing local route (access roads) upon opening. On average, 44,000 vehicles per day were using US 290 East prior to the completion of the tolled facility. Upon opening, approximately 28,000 vehicles per day were using the existing non-tolled access roads. The same trend can be seen on the US 183A toll road. The non-tolled US 183 experienced a 25% reduction in traffic when the 183A Toll facility opened to traffic. Drivers on US 183 also experienced a 17-minute reduction in travel times during peak periods after 183A opened. Parmer Lane (which parallels 183A) also experienced on average an 11% reduction in traffic. Given the results of other local toll projects, neighborhood connectivity, efficiency, convenience and travel times should improve for local traffic in Oak Hill.

FLOW – Incorporate innovative technology and design to create efficient intersections that promote traffic flow.

The proposed Oak Hill Parkway includes an innovative Single Point Urban Intersection at US 290 and SH 71. The westbound US 290 access road would intersect with the turning movements to/from SH 71. The eastbound US 290 access road would not have to stop at a signal. This type of interchange reduces queue times at the signal.

Additionally, the approach to all cross streets would include deceleration/turning lanes and designated left-turn lanes that would be designed to also reduce queues at the signals. All cross streets, except Circle Drive, that are grade-separated from the mainlanes would include Texas U-turns that would enable traffic to avoid waiting at signals. The ramp locations are located far enough away from the intersections to prevent traffic from backing onto the mainlanes. These improvements would result in efficient improvements that promote traffic flow.

CONTEXT SENSITIVITY – A project design that protects, reclaims, preserves and restores the natural beauty, wildscapes, history and culture of Oak Hill. Preserve existing and historic trees, groves, bluffs, native vegetation, historic sites and buildings.

Throughout the Oak Hill Parkway project planning process, the project team is incorporating a comprehensive approach to design development known as Context Sensitive Solutions (CSS). CSS is a collaborative, interdisciplinary approach involving stakeholders to develop transportation design and engineering solutions appropriate for the setting.

UPDATE: The project team is currently focusing on landscaping, hardscaping and trail heads. An Environmental Workshop will be held on June 23, 2016 at Oak Hill United Methodist Church to gather additional feedback from the community. There will also be an online survey following the workshop.

The information below further outlines context sensitivity considerations:

- **The Oak Hill Parkway CSS Vision Statement**

Through effective stakeholder involvement and careful planning and design, the Oak Hill Parkway is envisioned to be a safe and attractive transportation corridor that addresses growth in Central Texas by improving traffic flow and capacity, and by providing new mobility options for pedestrians, cyclists, and drivers without sacrificing quality of life in Oak Hill.

- **Corridor Improvements** would preserve, to the highest degree possible, Oak Hill's highly valued natural character through careful stewardship of its unique environmental, historic, and cultural resources, with particular focus on Williamson Creek and the area's cherished trees.
- **Aesthetic improvements** are intended to be cognizant and respectful of Oak Hill's existing context and enhance the quality of life for residents and visitors by enriching the visual qualities of the roadway and right-of-way, improving public safety, and utilizing natural materials and sustainable technologies.

Note: As we move forward through the CSS process, the project team will continue to refine the Oak Hill Parkway CSS Vision Statement as a result of community input and technical analysis.

FUNDING OPTION – Designs that consider all non-tolled funding opportunities available.

In the Capital Area Metropolitan Planning Organization's (CAMPO) 2040 plan, as well as previous versions of the long-range transportation plan, the Oak Hill Parkway project is designated as a toll

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road. However, if other funding sources become available to fund construction and maintenance, and the region prioritizes spending that money on the Oak Hill Parkway, it would not need to be tolled. It is important to note that the proposed design would be similar even as a non-tolled project, with a few exceptions: no electronic toll gantries; no toll-related signing; and two ramps (one entrance and one exit) at each end of the project, could be one lane instead of two.

Tolling is a creative financing mechanism that allows communities to bond transportation improvements and pay back the bonds and ongoing highway maintenance with user fees, or tolls. Tolling is similar to other fees for public uses such as parks and other recreational facilities. If the project is approved as a toll facility, at least the same number of taxpayer funded, non-tolled travel lanes that are available today would remain so in the future in accordance with state law.

Drivers would have a choice whether or not to use the Oak Hill Parkway tolled or non-tolled travel lanes. In addition, users of the facility would also have the choice to ride a Capital Metro bus or registered van pool. Capital Metro buses and registered van pools would not be charged tolls to use the toll facility, but would receive the benefit of reliable travel times as a result.

UPDATE: If the project were to be a non-tolled facility, there would be a less than 1% decrease in the overall amount of concrete pavement required by Alternatives A and C. To change the project to a non-tolled facility, one entrance ramp and one exit ramp near McCarty Lane, and one entrance ramp and one exit ramp near Scenic Brook Drive would be reduced from 2 lanes to 1 lane. The rest of the project would remain as proposed. Contact information for experts regarding Transportation Reinvestment Zones (TRZ) has been provided to OHAN's president. Funding for the project will not be sought unless/until the project is environmentally cleared.

FUTURE TRANSPORTATION OPTIONS – Allow future additions of park-and-ride facilities, convenient and increased access to bus, car and van pooling and other public transportation options.

The Oak Hill Parkway design alternatives account for future mobility needs such as rapid bus, light rail or added lanes, which is consistent with regional planning efforts. Coordination is also currently underway with Capital Metro for possible access improvements for park-and-ride facilities and bus turn-out locations. If the project is approved as a toll facility, Capital Metro buses and registered van pools would receive the benefit of reliable travel times and use of the toll facility without paying a toll.