

Virtual Public Open House Summary



Oklahoma Department of Transportation

US-64/US-169 Interchange

Tulsa County, JP 33343(04)

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Executive Summary

This document summarizes the virtual public open house conducted for the US-64/US-169 Interchange project in Tulsa County. The purpose of the public open house was to present the purpose and need for the project, present the proposed design for the interchange, inform the public on the operation and benefits of Diverging Diamond Interchanges (DDI), and obtain public input.

Due to concerns about the spread of COVID-19, ODOT held a virtual public open house. The public open house was held on-line between July 7 and July 28, 2021. Seventy-four (74) people signed in on the website. However, sign-in was not required. According to the website analytics, 3,397 unique users viewed the website over the 21-day period. After the homepage, the “What is Being Built” page (including the interactive map) was the most frequently viewed page, followed by “How Will Access Change” and the “More Information on Diverging Diamonds” page. In total, one hundred thirteen (113) individuals submitted written comments/questions either through the online form, mail, email, voicemail, or on the interactive map. Many people submitted multiple comments on a single form or email. Several people also submitted comments by both mail/email and the interactive map. Comments from three agencies were also received.

Agency comments included the following:

- The National Park Service had no comments at this time.
- The Oklahoma Department of Environmental Quality (ODEQ) determined that no adverse environmental impacts under ODEQ jurisdiction are anticipated. All projects exceeding 1 acre of disturbance must obtain authorization under OKR10. Projects involving water and wastewater utility relocations must obtain a permit from the ODEQ Water Quality Division.
- The Oklahoma Conservation Commission referred to mapped wetlands within the project extents. The Conservation Commission is concerned that riparian areas and connected freshwater emergent wetlands and ponds will be disturbed from siltation. They recommend plans to reduce disturbance and siltation in the creek and surrounding wetland areas, and erosion control plans.

Sixty-two (62) of the 113 individuals (55%) that submitted comments were in favor of the DDI solution. Many of these individuals had used DDIs in other locations and found they worked well and improved efficiency and safety. Fourteen (14) of these had additional suggestions on how the DDI could be improved, including additional lanes in specific locations, or suggestions about signal operations. Nineteen people (17%) that submitted comments were not in favor of the DDI. Many of these comments expressed concern that the design is confusing or overly complicated. Others had experienced DDIs in other locations and had a negative experience. Nine (9) people (8%) submitted comments specifically about the trail and/or pedestrian crossings. Seven (7) people (6%) had concerns

about impacts during construction. The remaining 23 people (20%) had other comments not specifically expressing a like or dislike of the DDI. Comments are tabulated in **Table ES1**.

Table ES1: Major Issues of Concern

Issue	# of Individuals/ Comments
<i>Like the Diverging Diamond</i>	62
works well in Springfield, MO/other locations	15
is efficient and safer	11
project is much needed	11
will require some getting used to but once you do it is great	10
reduced congestion is a great benefit	7
should build one at other locations (general, or specific: I-44/US-75, US-169/71st Street, Creek Turnpike/Yale, US-169/BA Expwy)	7
I like the one in Elk City	1
forward thinking	1
low cost	1
would like to see more DDIs across the state	1
will be safer for bikes/peds	1
start the dual right turn lanes on northbound Memorial to eastbound Turnpike further south (at Ford dealership)	1
no right-of-way means lower cost	1
positives outweigh the negatives	1
<i>Don't Like the Diverging Diamond</i>	19
design is confusing/convoluted/overly complicated	12
these don't work in other locations	5
this will slow traffic down/cause congestion	5
waste of money	4

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will cause accidents	3
too much construction in this area/need to finish other projects	3
is unfamiliar and will cause problems	2
driving on the left is counterintuitive	2
congestion is a result of lack of signal synchronization between state and city	1
this project will tear up the rehab work being done	1
don't trust data from other states	1
this won't increase the speed limit on the Creek Turnpike or US-169 - needs to be 70 or 75	1
just add more lanes on Memorial	1
people will avoid the area and negatively impact businesses	1
suggest a single point urban interchange - allows 2 lanes off in each direction - moves large volumes	1
expand westbound off ramp to 5 lanes, 3 heading south and 2 heading north	1
need 6 lanes on northbound memorial (2 to eastbound turnpike, 2 to westbound turnpike, 2 through)	1
consider a cloverleaf with metered ramps	1
The problem is unsafe drivers	1
Timing of signals won't work to maintain traffic flow	1
A traffic circle would be better	1
existing layout is fine	1
<i>Suggestions for Improving the Diverging Diamond</i>	14
signage/pavement markings need to be clear	4
would be nice if you could make ramps free flowing with no signals	3
Expand the off ramps to 3 lanes - 2 heading south and 1 heading north	3
need to widen Memorial to 3 lanes in each direction north and south of the interchange	2

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the turnaround lane (westbound to eastbound US-169) will rarely be used, but needs to be provided	1
both off ramps to southbound Memorial should have 3 left turn lanes	1
extend both off ramps as far as possible to prevent back-ups on the turnpike	1
make "no right turn on red" standard	1
should give as much green time as possible to northbound Memorial to eastbound Creek Tpk. Should not stop except for trail	1
why split the lanes? Why not add a lane between them?	1
<i>Pedestrian/Bicycle/Trail Comments</i>	9
consider a tunnel	4
may need flashing lights for trail crossings (like on Peoria) - traffic does not stop	1
what is proposed for bikes (using sidewalks on Memorial) is contrary to city code	1
bike detour is not great but a small price to pay for this improvement	1
consider a permanent trail detour in SW quadrant behind the apartments, cross Memorial at 96th, then south to existing trail. Will help traffic through interchange	1
the intersection is dangerous for bikes/peds	1
need to provide clearly marked trail detour during construction - may require temp bridges, trails, RW acquisition	1
I don't see any way foy bicycles to navigate the DDI	1
don't put bicycles on sidewalks	1
how will the signals work for trail users?	1
will this project add the missing sidewalks on Memorial - make one 10-12 ft wide to connect library to trail	1
please make medians mountable	1
how will bike/peds cross other than the trail?	1
Need to have signs or delineators showing crosswalks	1
Elevate the crosswalks so they don't interfere with traffic – but don't do switchbacks	1

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move trail 100' south and build a bridge	1
Construction Impacts	7
construction impacts will be extreme for surrounding roads	2
how will construction affect the neighborhood at 93rd? Will we be able to turn left? I'm currently blocked from turning left due to construction	1
pick a competent contractor	1
postpone the project to let businesses recover before starting construction again	1
how will traffic be handled during construction?	1
will traffic use side streets during construction like they are currently (during rehab job)	1
Other	16
Questions/concerns about striping – e.g. what is the striped divider?	4
offer on-line training prior to opening/on-site personnel to direct traffic/lots of warning prior to opening	4
Include aesthetics – corridor-wide theme, lighting, trees, plants (less concrete)	3
need to clarify if Memorial will go over or under turnpike	3
need to get homeless off the streets (including panhandlers at interchange)	2
Will this fit in the same space as the old lanes?	2
how will dealership traffic make left turns? Sounds inconvenient. Do dealerships get left turns and others don't?	2
will the sound wall on the south side of the turnpike be extended west?	2
Won't improve westbound Creek merge	1
open house did not explain traffic flow very clearly	1
need to start building traffic circles and move away from 4-way stop/traffic lights	1
ODOT is doing well at publicizing this and inform the public	1
is OTA contributing funding to this project?	1
how does this help the traffic exiting the Creek turnpike?	1

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make it truck friendly with a good shoulder and curb	1
there is a blue line through a pond on the W side of Memorial - what are the blue lines?	1
please provide a senior friendly design- current interchange requires me to turn my neck further than I can	1
don't want to have to spend more money in 5 years to fix it again when traffic is worse	1
we need to focus on urgent needs - this is not urgent	1
what change will be made to the bridge height? Lowering it would affect transportation/manufacturing industry	1
what about traffic wanting to avoid the turnpike and use Memorial to turn around to exit at Mingo?	1
are you proposing stop signs and traffic lights?	1
when will construction start and be completed?	1
please keep me updated on progress	1
will this project affect the light at 98th/Memorial? It is critical to the neighborhood	1
10 signals seems like a lot especially during power outages	1
it could work	1
<i>Comments Unrelated to the Project</i>	8
removing ramps at Mingo was a big mistake	1
crack down on phone use so people pay attention	1
Need stricter requirements for driver's license	1
stricter traffic violation penalties	1
give money to low-income housing for vets and job skills	1
will Memorial be overlaid with asphalt once patching is done?	1
current contractor on Memorial not doing a good job - need two shifts - taking too long. Site is dirty	1
how long will you wait to turn left at 169 and 91st?	1

Responses to Comments

Responses to Questions and Comments

There were several questions received as part of the public comment period. Clarification of these questions are below:

- Will Memorial Drive go under or over the turnpike? *RESPONSE: Memorial Drive will remain under the turnpike. The proposed DDI will be constructed within the same footprint as the existing interchange.*
- How will bikes and peds cross other than the trail? *RESPONSE: Bicycles and pedestrians will be directed to cross Memorial Drive at the Creek Turnpike Trail crossing so that a safe crossing can be made. Sidewalks are provided on both sides of Memorial Drive for crossing under US-169/Creek Turnpike.*
- How will the signals work for trail users? *RESPONSE: The trail signals will be activated by the user.*
- Why does the striping split the lanes? Why not add a lane between? *RESPONSE: The current striping is designed to accommodate future widening of Memorial Drive. However, until that widening occurs only two through northbound lanes can be accommodated. The splitting of the lanes on the ramps is done to allow dual turning movements with more separation and a greater degree of safety, particularly for larger vehicles like trucks and buses as these vehicles require a larger turning offset.*
- Is the Oklahoma Turnpike Authority (OTA) contributing funding to the project? *RESPONSE: No, this project is being funded entirely by ODOT.*
- How does this help traffic exiting the Creek Turnpike? *RESPONSE: The DDI will process more traffic more efficiently and will reduce congestion on the US-169/Creek Turnpike off-ramps. Traffic will be able to move through the interchange more quickly and more safely.*
- What are the blue lines on the map? *RESPONSE: The blue lines show the boundaries of ODOT's existing right-of-way.*
- What change will be made to the existing bridge height? *RESPONSE: No change. The existing bridge will remain in place and the existing vertical clearance will be maintained.*
- Are you proposing stop signs and traffic lights? *RESPONSE? No, there will be no stop signs within the interchange. The interchange will be controlled by traffic signals.*
- Will the sound wall on the south side of the Turnpike be extended west? *RESPONSE: No changes to the existing walls are proposed.*
- When will construction start and when will it be completed? *RESPONSE: Construction is currently scheduled to begin in late 2022. Construction is anticipated to take 18-24 months.*
- Will the project affect the traffic light at 98th Street? *RESPONSE: No. This signal will not be affected.*
- Do dealerships get a left turn lane and others don't? *RESPONSE: Left turns will be allowed into businesses from Memorial Drive and will be maintained as currently configured. Left turns out of businesses onto Memorial Drive will be restricted at the driveways closest to the interchange to*

minimize blockages and conflicts in the medians. This includes Bill Knight Ford, Spirit Bank, and Jackie Cooper Imports. The dealerships have alternate driveways that provide access to side streets allowing left turns onto Memorial at 93rd Street and 98th Street. Customers exiting Spirit Bank will be required to turn right (south) and use 98th Street to turn and head north.

- What about traffic wanting to exit and return to Mingo Road to avoid the turnpike? *RESPONSE: The proposed interchange design allows for traffic to exit US-169 at Memorial Drive and turn around to head back east to Mingo Road. Traffic wanting to make this maneuver will have to travel through both signalized intersections on either side of the US-169/Creek Turnpike.*

Positive Feedback on the DDI

Thank you for your comments.

Suggestions to Improve the DDI

The design of the DDI at the US-64/US-169 interchange was developed to provide as much benefit to traffic as possible while still fitting within the footprint of the existing interchange. Therefore, suggestions for flyover ramps, or major widening within the interchange or on certain ramps are not feasible within the scope of this project. These types of improvements would require either reconfiguration of the bridge over Memorial Drive or acquisition of adjacent properties, which would significantly increase costs and impacts. Widening Memorial Drive to six lanes north of the interchange is within the jurisdiction of the City of Tulsa and is part of the Tulsa area (Indian Nations Council of Governments, or INCOG) *Connected 2045 Long Range Transportation Plan*. The striped area along Memorial Drive within the proposed DDI is meant to accommodate this additional lane in the future. ODOT will include clear signing and striping and use channelizing islands within the DDI to direct traffic to the correct lanes. Several people suggested that the off-ramps include two turning lanes to southbound Memorial Drive. This is included in the design. Right turns on red will not be permitted. Wait time at the signals will be reduced due to shorted signal cycle lengths in the DDI.

Negative Feedback on the DDI

The need for improvement at the US-64/US-169 interchange is clear from the congestion that currently occurs, especially during peak hour, and the collision history. These conditions are only anticipated to worsen in the future if no improvements are made. The proposed DDI will not eliminate congestion entirely, especially on Memorial Drive. However, the ability of the DDI to move more traffic more efficiently is expected to significantly improve congestion, in particular back-ups on to the US-169 and Creek Turnpike mainlines and reduce the potential for severe collisions. Because the signal will no longer need to include a left-turn phase, the interchange will provide more green time to through traffic. The retrofit design of this DDI will avoid any bridge work or property acquisition, which makes this solution not only safe and efficient for traffic, but also cost effective. Solutions such as a cloverleaf interchange, single-point urban interchange (SPUI), or roundabout would not provide the same level of safety improvement, pedestrian access, or congestion relief, and would be more expensive and cause impacts to adjacent properties.

Many of the concerns with the proposed DDI were related to its unfamiliarity and potentially confusing design. The interchange may be initially confusing to drivers; however, the interchange will include signage and clear pavement markings to direct traffic to the appropriate lanes. Signals will control all directions of traffic and the potential for a wrong-way movement will be very low. ODOT encourages drivers to slow down and remain alert while driving through the DDI the first time. Based on the implementation of these designs in Elk City and in other states, drivers will quickly become accustomed to the configuration and confusion will not be a long-term issue.

Pedestrian/Bicycle/Trail Comments

The new crossing of the Creek Turnpike Trail across Memorial drive will be controlled by three separate signals; one on each ramp and one in the middle (crossover). Pedestrians and cyclists will no longer conflict with vehicles making right turns that do not stop or yield at the existing crosswalk. The trail crossing will be striped on the roadway and refuge islands are provided between the signals. This will increase safety for trail users. The signal phases for trail users will only engage when activated by a trail user, so traffic will not be stopped unnecessarily. While a grade separated trail crossing (tunnel or bridge) would remove potential conflicts all together, it would be a significant expense and would be difficult to construct without affecting adjacent properties. Bicycle traffic on Memorial Drive will use the DDI like a vehicle, unless they choose to use the sidewalks.

Construction Impacts

The current construction on Memorial Drive is anticipated to be complete before construction of the DDI will begin. Construction, as with any major roadway project, will cause temporary delays and inconvenience to drivers and adjacent businesses. Access to all properties will be provided during construction. The project is not anticipated to affect existing adjacent signals at 98th Street or 93rd Street.

The temporary trail closure during construction is necessary to maintain safety of trail users. The proposed detour on Memorial Drive is suggested and will be at the discretion of the individual user. Sidewalks are provided. The temporary closure is anticipated to last approximately 18-24 months.

Other Comments

- Consider aesthetics (brick pattern, landscaping) for the interchange/Memorial Drive corridor. *RESPONSE: ODOT will work with the City of Tulsa to determine if aesthetics will be included in the project.*
- Offer on-line training or have people directing traffic when this opens, give us lots of warning. Keep us posted. *RESPONSE: If a name and address was provided you have been added to the mailing list to receive future project updates.*
- Need to get homeless/panhandlers off the street. *RESPONSE: ODOT's jurisdiction is limited to transportation facility maintenance and improvements.*

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- Make it truck friendly. *RESPONSE: The DDI has been designed to accommodate large vehicles, including semi-trucks.*
- Make it senior friendly (good sight distance at intersections). *RESPONSE: The sight distance at the signals will be improved over the existing configuration and left turn movements crossing through traffic will be eliminated.*
- This is not urgent – focus on more urgent needs. *RESPONSE: Current congestion and collision rates indicate there is a need for improvements. These conditions will likely worsen in the future if nothing is done. It is preferable to address the need before it becomes urgent.*
- The open house did not explain traffic flow very well. *RESPONSE: Signage, signals, and pavement markings will direct traffic to the appropriate lanes through the interchange. Videos of traffic simulations through the DDI can be viewed at the project site on ODOT’s Public Meetings page, www.odot.org/publicmeetings.*
- Ten signals seems like a lot – especially if there is a power outage. *RESPONSE: Vehicles using the DDI will only go through two signals in any given direction, similar to today. Battery back-up can be provided at the signals to maintain power during temporary outages.*
- ODOT is doing well publicizing this/informing the public. *RESPONSE: Thank you for your comment.*

Other comments not specifically related to the US-64/US-169 interchange project are not addressed here.