



**STATE LOOP 360 at
Courtyard Drive/RM 2222
CSJs 0113-13-168 and 2100-01-065
Travis County, Texas**

SURVEY SUMMARY

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State Loop 360 at Courtyard Drive/RM 2222 Workshop Survey Report

TxDOT utilized an online engagement survey from March 7 to March 22, 2019, to gather public input for the Loop 360 at Courtyard Drive/RM 2222 project. Computers were set up at a public workshop held for the project on March 7 to allow the general public the opportunity to take the survey. Participants also had the option of completing the survey as part of a virtual workshop on the project website within the public commenting period. Workshop attendees were given a flyer advertising the virtual workshop/survey and encouraging them to share the link with others, and an email was sent out on March 13 to publicize the survey opportunity to stakeholders along the Loop 360 corridor. A link to the virtual workshop/survey remained active on the Loop 360 program website throughout the duration of the survey period.

A total of 32 people participated in the online survey, either while at the workshop (6.25%) or from other locations after the workshop (93.75%). Participants were given the opportunity to view a summary of the project, line drawings, engineering drawings, and 3D renderings of the two options for the Courtyard Drive/RM 2222 project. They were then asked to provide comments about what they liked and disliked about the overall project design, the different access points shown in the two options, and the diverging diamond intersection (DDI) proposed for RM 2222.

Next, they were asked to answer some questions about the frequency and ways in which they use Loop 360, Courtyard Drive and RM 2222. Finally, they were given the opportunity to provide their zip code and share how they heard about the Courtyard Drive/RM 2222 workshop. A brief summary of responses for each question is below, followed by an Appendix containing the raw data for each question.

Overall Project - What Participants Liked

Participants stated they were in favor of the overall project and requested that TxDOT move the project forward as quickly as possible. They were in favor of the plan to remove many traffic lights along Loop 360 in order to improve mobility and safety along the corridor. Participants liked the proposed braided entrance and exit ramps. Participants also expressed appreciation for the shared-use path (SUP) and the incorporation of bicycle and pedestrian facilities. Finally, participants shared that they were pleased with TxDOT for including public input in the project process.

Overall Project - What Participants Disliked

Those who participated in the survey indicated concerns that the project would not adequately address traffic congestion to/from both Courtyard Drive and RM 2222. They requested that TxDOT further evaluate lane configurations and the design to ensure that the proposed improvements can best handle traffic. Participants were also concerned about construction impacts to commuters and community members, as well as the time it would take to complete this project. Some participants suggested that the project would negatively impact the natural look and environmental features of the corridor. Survey participants also shared concerns about the shared use path (SUP) not continuing along Loop 360 north of RM 2222.

Comments About Different Access Points for Option 1 and Option 2

Many participants noted that both Options 1 and 2 are easy to navigate; others felt that the options would be difficult to navigate.

Participants liked Option 1 because it would reduce traffic on the RM 2222 exit ramp. They disliked Option 1 because of traffic congestion that would backup onto southbound Loop 360 during peak hours.

Participants liked Option 2 because they felt it would alleviate traffic congestion on southbound 360. They cited concern that this option would be more costly to construct.

Many participants cited their desire to construct the cheaper option, saying that either option would be beneficial.

Diverging Diamond Intersection (DDI) at RM 2222

Respondents liked the diverging diamond intersection (DDI) at RM 2222 because they felt it would improve traffic flow along Loop 360. Suggestions were made to have well-marked bicycle lanes and bike-first signaling. Some participants cited concerns that this type of intersection would increase traffic congestion. Respondents disliked this type of intersection for fear drivers would not diverge correctly and could cause crashes.

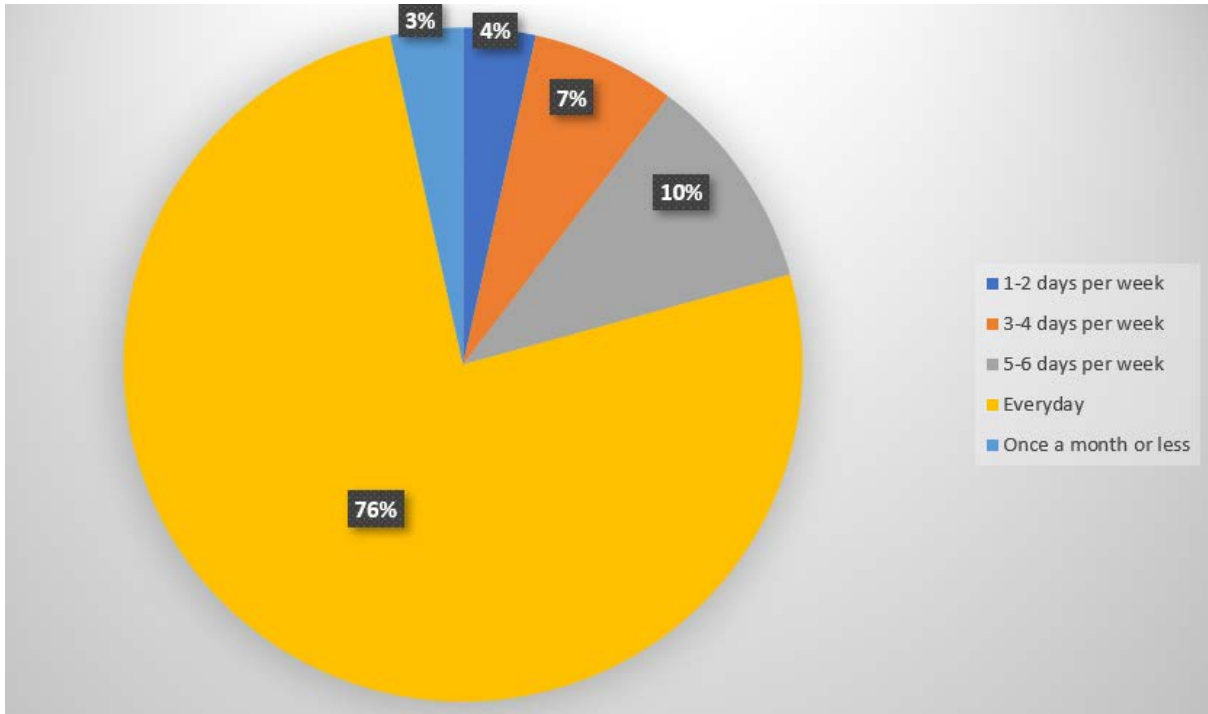
Other Comments about the Courtyard Drive/RM 2222 project

Participants expressed their appreciation for the information that is being shared about the project and the work to improve mobility along the corridor. They expressed support for the shared-use path (SUP) planned along Loop 360, but requested that TxDOT ensure cyclists continue to have the opportunity to ride along Loop 360. They also asked TxDOT to consider a bypass lane going from northbound 360 across RM 2222.

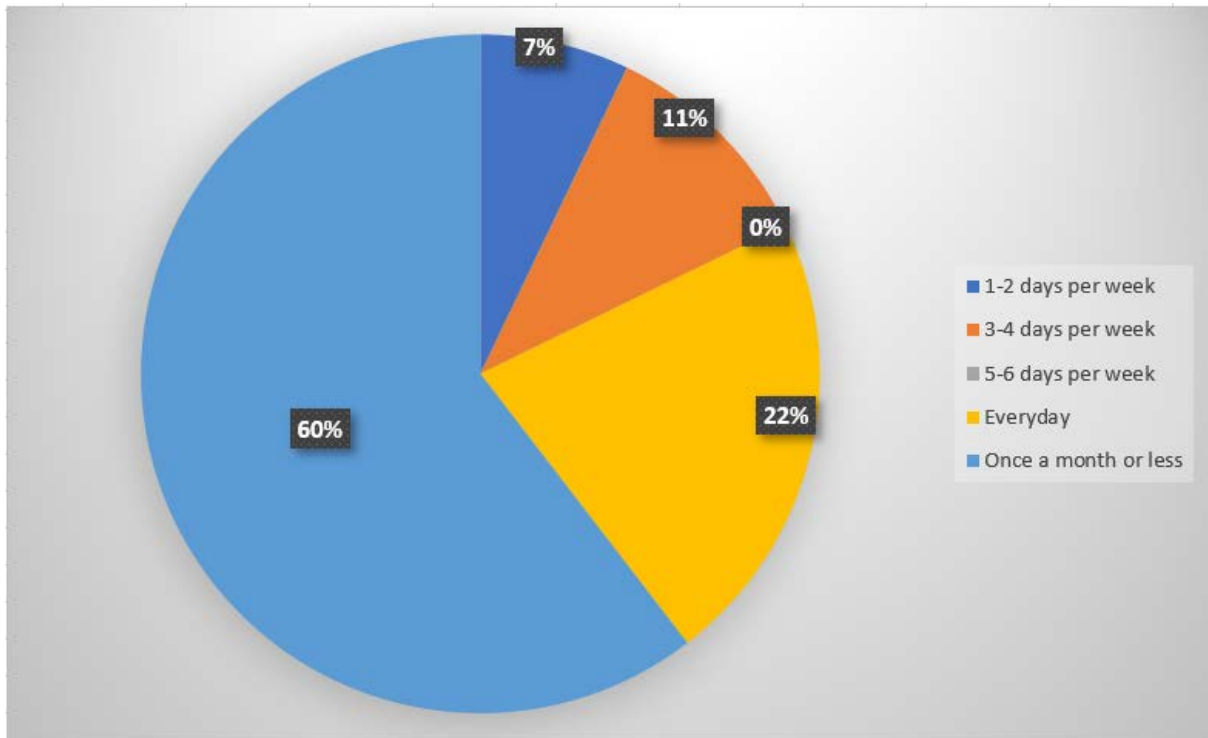
Loop 360, Courtyard Drive and RM 2222 Usage and Demographic Information

In the final section of the survey, participants were asked to indicate how often they use Loop 360. The majority (76%) of participants said that they use Loop 360 every day, with an additional 10% using the corridor 5-6 times per week. Not as many survey participants indicated that they use Courtyard Drive on a daily basis – only 22% do so. However, many people (41%) use RM 2222 daily, with an additional 7% using it 5-6 days per week. In addition, a combined 45% of participants live in zip codes 78731, 78730 and 78750, which are all adjacent to the project area. Overall, survey participants tend to be frequent users of Loop 360 and RM 2222, and/or are area residents.

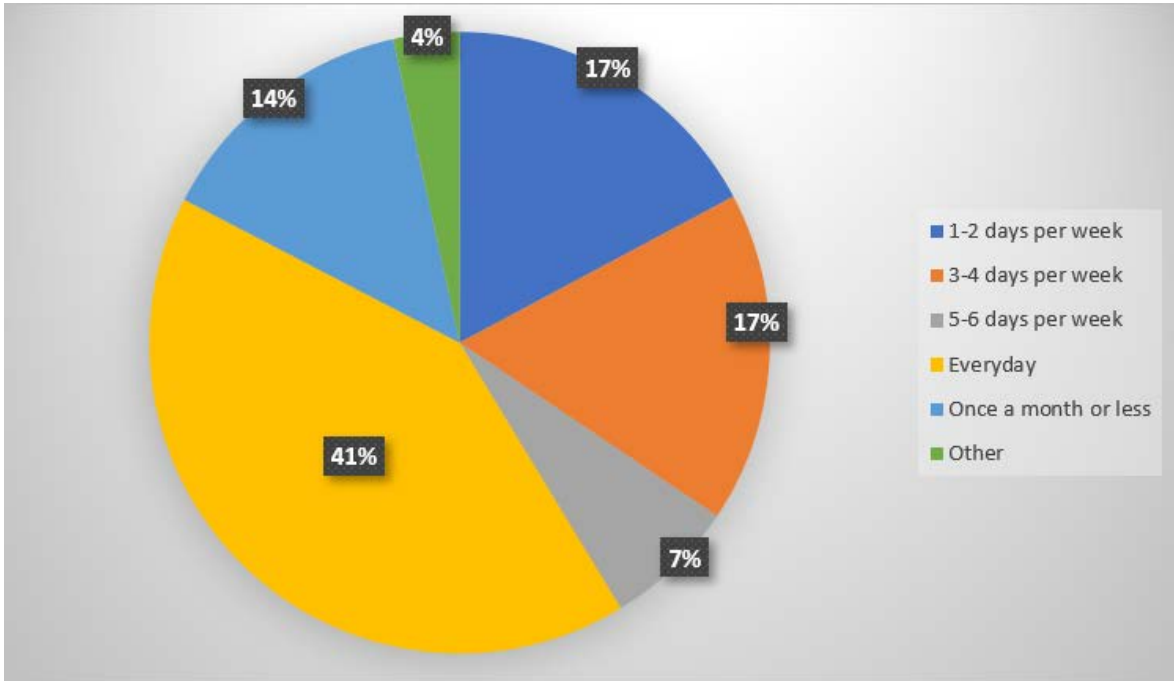
How often do you use Loop 360?



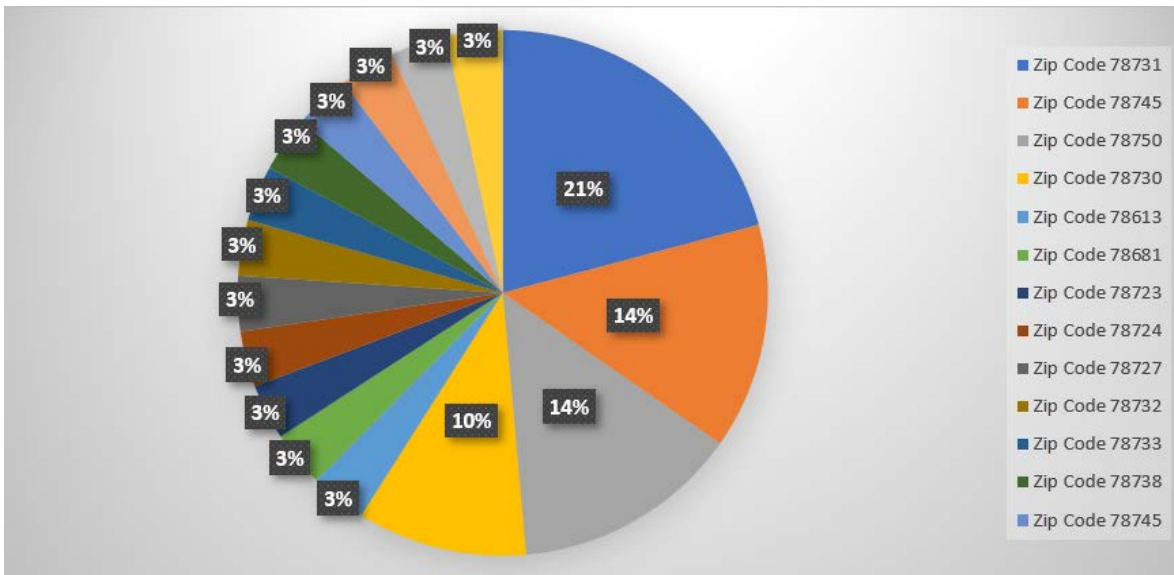
How often do you use Courtyard Drive?



How often do you use RM 2222?



What is your zip code?



Appendix: Raw Data for Responses

What do you like about the proposed improvements?

1.	Getting rid of the stop lights so traffic can flow
2.	TXDOT is finally doing their job! These plans actually look good for improving the existing lanes.
3.	The braided entrance/exit ramps are a great idea. Overall, it looks like a good plan
4.	Getting rid of lights is good.
5.	It should drastically help traffic flow in this area which is absolutely horrible right now.
6.	That it seems to address the main issue which is the impossibility of drivers coming from 2222 to be able to get on 360 in the morning
7.	someone thought about cyclists and walkers at all?
8.	The separation of the SL360 mainlane through traffic from the W. Courtyard Dr. local traffic.
9.	easy access to the highway from courtyard
10.	Should help with traffic congestion and safety issues in the area.
11.	Removal of the light at Courtyard Dr
12.	That it's an improvement!
13.	I'm happy that the stop light on Courtyard is being eliminated as it leads to a fair amount of congestion. I also love that a shared use path is being added. Cyclists currently must ride on the shoulder which is unsafe for everyone. It's also a really scenic area, so a walkway will be nice for pedestrians as well.
14.	No stop for mainline lanes at courtyard
15.	Yes! This is much needed. The light at Courtyard Drive causes a lot of unnecessary and sometimes dangerous backups.
16.	Nothing.
17.	Removal of Light at Courtyard
18.	Nothing
19.	I like the improvements
20.	Anything that will improve my commute, I'm in favor of.
21.	Excellent communication of the problem, constraints, and planning process.
22.	Shared use bicycle paths. Focus on optimizing through-traffic on 360. (traffic to/from courtyard having to u-turn at 2222 is fine)
23.	I like that 360 goes under courtyard dr.
24.	removal of light will give extended life to the iconic bridge. Removal of the dangerous overlook will make it safer for those along Loop 360 and preserve the destruction by observers.
25.	Diverging diamond at 2222 & 360 looks excellent. It looks like the merge from 2222 onto 360 will be much easier as well.
26.	It is the best we can do with the available space

27.	Removing traffic lights and braided ramps.
28.	As currently designed these improvement appear well designed and do appear to serve motors traveling through this area well
29.	greatly improved (unimpeded) n/s mainflow on 360 over courtyard. recognition that lots of the traffic flow from both directions of 2222 turns on to 360.
30.	nothing at all. I am very upset about it.

What do you dislike about the proposed improvements?

31.	Disruption of traffic while everything is being constructed. Realize we can't have our cake and eat it too. This can't happen fast enough!!
32.	Does not allow for increased traffic capacity along a major (only!) route through an area projected to double in population in 20 years. Also, the center lane that is shared between turning left (into the DD) and right (away from the DD) will back up and limit throughput to only one lane. Traffic in the center lane cannot turn right when the left light is red and vice versa. You can even see this in the video.
33.	A dedicated U-turn for northbound 360 to southbound 360 would offset the loss of access to/from Courtyard. There may not be room under the bridge
34.	There needs to be connectors/overpasses that eliminate the lights on 2222. That's where the big backup occurs during rush hour.
35.	I'm a little concerned about the DDI at the 2222/360 intersection
36.	Actually not much This actually fixes things without making it worse (like the turn lanes from 620 to 2222 from Steiner..made traffic worse)
37. 38.	The shared use path does not appear to allow the same cycling/training abilities. Cement / Sidewalk shared use paths are 1) slower (surface wise - spacers in concrete portion do not offer a smooth ride), 2) slower (often not as straight as the roads, with awkward turns that limit cycling speeds to well below training speeds), 3) bidirectional MUPs are usually not wide enough to allow cyclists to pass safely at speed or to ride side by side. We should have asphalt, protected cycling lanes that follow the same grades (or sometimes lower) and straightness of the roads, with adequate room to pass and capable of supporting training speeds for athletes.
39.	W. Courtyard Dr. bridge going over SL 360 mainlanes impedes the view of the Pennybacker Bridge resulting in questionable aesthetic results and increased noise.
40.	No direct bike lane or shoulder on 360 in render to allow bikers to stay on 360 from north of 2222.
41.	Does not appear you are designing this with the flexibility to accommodate future expansion of the main lanes, should that be desired.
42.	Th overpass which blocks the view of the bridge going southbound
43.	That they weren't build 10 years ago.

44.	One qualm is that heading northbound to 360 from the Courtyard will now require two left turns instead of one, but this is acceptable given the decrease in traffic at other times.
45.	Cutting the rock walls wider and placing a bridge over the mainlines. Both of these take away from the effect of driving onto the pennybacker bridge. Views of the bridge will be occluded by the courtyard bridge over the mainlines.
46.	I'm a little sad that it will obstruct the view of the lake and bridge a bit but oh well. I'd rather have a safer traffic pattern. I can always enjoy the view while on the bridge.
47.	Everything. The character of 360 is destroyed.
48.	ONE right turn lane from 2222 to southbound 360 is a huge mistake. PLUS NO right turn lane from courtyard to southbound 360 also sucks. IF you are going to do this you must create an actual U-turn at the DDI. DDI's suck without them.
49.	The cliff cuts seem excessive, there has to be a way to shrink the overall width significantly, while still keeping all the braided ramps. Additionally, there is no median between 360 on the bridge, so why not shrink it from 2222 to the bridge, so you can squeeze the whole thing into the narrow space of the current cliff cuts.
50.	I don't like that we have to do it at all. I would much rather see train transport in Austin first.
51.	<p>1) Little information on quantitative changes in traffic delays. Would be good to see the impacts during peak times (morning and evening commutes). Would also like to see this information projected over the next 20-30 years.</p> <p>2) There should be some additional information on how these improvements fit into the long-term master plan for Loop 360. For example, how will these improvements support the eventual expansion of 360 to 6 total lanes? If they don't, it should be documented. Also, how does this fit into the CAMPO 2040 plan?</p> <p>3) Little information on costs and funding sources.</p>
52.	Time frame
53.	No southbound access from Courtyard. Doesn't matter to me but I'm sure some will object. Is it possible to provide a dedicated u-Turn lane under 360 at 2222 to make the extra distance one must drive from Courtyard more tolerable?
54.	Too long for environmental/prelim work
55.	I understand the physical requirements that prevent access to/from 360 on the south side of Courtyard Dr., but the 2222/360 intersection cannot handle the additional traffic of 360 N, U-turn at 2222, and then right on Courtyard as well as left from Courtyard to 360, U-turn at 2222, and enter 360S. Even with the DDI, there needs to be additional lanes or dedicated U-turn lanes.
56.	TxDOT should consider moving people, not just cars. VERY disappointed to see that so far, in this Virtual workshop, bicycles and pedestrians have only been mentioned once. This sounds like something the local news media would be

	ready to jump on! People really do walk and bike, even on Loop 360, like it or not!
57.	<p>The complexity, the size, the visual impact, and most likely the environmental impact. Also, the 360/2222 proposal appears to require more people to sit at traffic lights than currently do! It looks dangerous to me.</p> <p>If you can't put a modest change into the space we currently have, then do nothing. Put the money into mass transit instead and let the traffic get worse until people finally start to use it.</p>

What comments do you have about the different access points shown in the two options (Option 1 and Option 2)?

1.	Both are good and interesting solutions
2.	None
3.	I prefer Option 2 as the Courtyard connector lane with access just north of 2222 would help prevent backup onto southbound 360 that Option 1 could create during busy times of the day.
4.	The Option 2 exit for Courtyard doesn't seem to have any advantages over Option 1 and makes the directions more complicated (getting off before expecting it).
5.	Don't let the idiots in the neighborhoods run this entire discussion. I realize they are the vocal minority but traffic flow has to increase for the people using Loop 360 everyday, plenty of which don't live in the neighborhoods immediately adjacent to 360. The Michigan Left was defeated by neighborhood associations who think the world revolves around them. Don't let them dictate everything about this project. The needs of the many outweigh the needs of the few.
6.	Option 1 is best
7.	crossing on and off ramps is more dangerous for cyclists than stop lights, because drivers do not slow down or look.
8.	There is no proposed improvement of the existing Courtyard Dr. connection that is approximately 500 feet away from the intersection of the proposed SL360 NB frontage road with RM2222. The conflict between traffic coming out from Courtyard Dr. and traffic coming from the SL360 NB exit ramp appears to be more prominent since the ramp gore with the frontage road has been moved closer to Courtyard Dr. and additional weaving has been introduced.
9.	I think option 1 is better the only reason people currently drive down the access road and go straight thru the light is to avoid congestion. If the lights are removed and traffic follows well a bypass to courtyard is unnecessary.
10.	Prefer option 1 with the southbound exit after the 2222 exit. Believe this will be simpler to sign and easier for drivers to navigate. It will reduce volumes and friction on the RM 2222 off-ramp
11.	The bypass lane will help in option 2
12.	No comment.

13.	I prefer option 2 as it feels a little less confusing.
14.	Option 2 may be confusing for some people exiting southbound 360 at 2222. Probably not a huge issue though. Both options seem to provide direct access to courtyard where previously people had to wait at the light. Why is this necessary.
15.	I like Option 3: 3 lanes each way, coordinated timing of the traffic lights, and removing lights at Spicewood Westbound, Pascal Lane, Apple Way and Las Cimas.
16.	Please add dedicated U-turns at 2222 with this intersection.
17.	I think they both work and would elect to do the cheaper one
18.	I like Option 2 because the exit is further from the bridge.
19.	Either option should work. Option 1 would appear to be lower cost. Can you associate costs with these options to help with the decision?
20.	Slightly prefer Option 1 because having to exit so far in advance (option 2) can sometimes be confusing.
21.	Both are acceptable. Hesitate on option 2 because traffic already is backing up on 360 exit ramp to take a right on 2222. Adding the courtyard intersection will further congest the exit ramp because it is planned to remain a single lane.
22.	They look pretty much the same to me.
23.	Either is fine
24.	I don't see much of a difference. The longer ramp of the bypass connector provides for more room for backups to not affect the mainlanes, but the backup for left turns at 2222 could block ready access to the bypass connector.
25.	In my opinion, the extra bypass lane and additional bridge over fm 2222 within option 2 is nice but not necessary.
26.	option 2 looks a lot more expensive to construct with an extra bridge just for unimpeded southbound left turn access to eastbound courtyard; I'm not sure why option 2 is better than a southbound exit from 360 south of 2222.

What comments do you have about the diverging diamond intersection (DDI) at RM 2222?

1.	I like this idea. It will take a little getting used to, but seems like definitely away to keep traffic flowing on 360 and allow quicker access to these inter sections.
2.	the center lane that is shared between turning left (into the DD) and right (away from the DD) will back up and limit throughput to only one lane. Traffic in the center lane cannot turn right when the left light is red and vice versa. You can even see this in the video.
3.	My only concern would be access to Bull Creek Market and/or any future development at the 2222/360 intersection by traffic that would exit from north/south 360 to 2222. There's no 'thru' lane to continue north or south that I can see. How would one access Bull Creek Market if one was traveling on 360?

4.	Why are there no turn on reds? Particularly for the right turns.
5.	There needs to be connectors/overpasses that eliminate the lights on 2222. That's where the big backup occurs during rush hour.
6.	I'm very concerned about safety given I travel this intersection daily and 3-4 times a week at night. I have seen people fail to diverge correctly in broad daylight in the other DDI in town. This intersection is not well lit. Please keep that in mind when designing it. People will need to be able to see at night where they are supposed to be going. It's going to need lighting and reflective signage that makes it absolutely clear.
7.	Should work!
8.	diverging diamonds are fine, as long as there are well marked bike lanes with adequate bike-first signaling.
9.	DDI at the intersection with RM2222 does not allow for an easy addition of 3rd through lane for each RM2222 direction. Though traffic on RM2222 appears to be impacted negatively by proposed DDI. SUPs are abruptly terminated at the intersection of the SL360 frontage roads with RM2222 that does not appear to be the reasonable terminus for the SUPs. It is not shown how the pedestrian traffic will be accommodated through the DII intersection (especially reaching the current businesses at the SE quadrant).
10.	I like the idea, especially making it easier to turn left.
11.	Should be a big improvement. Given access to southbound Loop 360 will not be provided from Courtyard, why was a dedicated north to south u-turn not provided at RM 2222. Are you assuming the diverging diamond will operate efficiently enough that a u-turn isn't warranted.
12.	More lanes, especially turning left from northbound 360 to westbound 2222. Always gets backed up. Or a bypass lane.
13.	My DDI experiences at Slaughter and in Round Rock have been positive.
14.	N/A
15.	Looks great.
16.	Confusing.
17.	I hate it and the one at 1431 and I-35 is a nightmare.
18.	good plan
19.	Great idea
20.	The DDI is fine. Just don't eliminate the right turn exit from eastbound 2222 to southbound 360 as noted in question #5.
21.	Willing to try something new, but curious how bikes are intended to navigate it.
22.	The current intersection has failed
23.	Looks excellent – but I'm a fan of traffic circles. it will be confusing to some people, so hopefully they'll learn sooner rather than later.
24.	It works for that intersection - lots of West to North and East to South turners
25.	They are dangerous, but efficient. People are still confused at 1431/I35.
26.	Based on the renders, as currently designed the northbound 360 frontage at fm 2222(DDI) looks like a choke point. Is it possible to dedicate two lanes for

	turning left and right onto fm 2222? If it's economically feasible, a flyover from northbound 360 to a braided on ramp for westbound fm 2222 would be a more efficient design.
27.	Fun!

What other comments or feedback do you have about the proposed improvements?

58.	Very nicely done presentation! Appreciate the effort and thought that has gone into this.
59.	I bike on the shoulders – please preserve that access.
60.	Hurry up. These improvements are needed yesterday.
61.	Please do this. This is my commute and I have zero public transit options (i.work just on the other side of the Pennybacker)
62.	This is a beautiful stretch of our community that should prioritize people's experiences and environment over cars.
63.	Improvements need to take into consideration future mobility needs on RM2222 and not only on SL360. Pedestrian traffic is not being accommodated by the current DDI layouts.
64.	To ensure that bike riders continue to have the ability to ride along 360.
65.	Ignore anyone who complains that their individual trip will be negatively impacted. This project is for the greater good of all motorists.
66.	Add a bypass lane going from north 360 through 2222
67.	Build it now.
68.	Great job!
69.	Please reconsider. This is going to be a NIGHTMARE for those of us who live along 360 and use it every day. The construction years alone makes me seriously think of moving.
70.	Please reconsider the options because this project looks a lot worse than the other Loop 360 projects
71.	I would much rather see train transport in Austin first.
72.	Shouldn't we dissuade bicyclists from riding on 360. It is a busy highway after all.
73.	Removal of the right turn exit lane from eastbound 2222 to southbound 360 is disappointing. Forcing this traffic into the intersection with no right on red will back up eastbound 2222 traffic in the morning. It appears that the "SB entrance ramp" entry location is a factor in this change. Couple of options: 1) Can that be shifted to the south? 2) Can the right turn exit lane be shortened?
74.	please close off public access to cliffs on 360 easment. It is dangerous and the observers are defacing and destroying the natural beauty
75.	I like the shared use paths. Any chance of getting those extended down 2222 to Jester Blvd where I live? Right now there is no way to walk down 2222 to get to any of the businesses in that area like the County Line or Waterloo Ice

	House without risking one's life.
76.	Thanks
77.	Anything is better than nothing.
78.	I wish there were more details about the pedestrian and bicycle accessibility through these intersections. Will it be feasible for cyclists to navigate the 2222 or 360 mainlanes at all? Where do the shared-use and sidewalks go?
79.	Thank you for giving us the opportunity to comment. Please keep me informed.