



MEETING AGENDA

TxDOT Bicycle and Pedestrian Advisory Committee (BPAC) Meeting
July 16, 2021 - 9:30 A.M.

Note: This meeting will be held remotely via Zoom
Teleconference instructions below

1.	Call to Order.
2.	Safety briefing.
3.	Approval of minutes from April 9, 2021 BPAC meeting. (Action)
4.	Report from TxDOT's Public Transportation Division (PTN) Director regarding statewide bicycle and pedestrian matters
5.	Presentation on TxDOT Bicycle Accommodation Design Guidance.
6.	Discussion on Bikeway Design Effort guiding principles. (Action)
7.	Discussion on TxDOT Safety Task Force Pedestrian and Bicycle Subcommittee. (Action)
8.	Presentation on TxDOT Bicycle and Pedestrian Research.
9.	Updates from committee members on local and statewide issues.
10.	Public comment – Due to the virtual format of the meeting, public comments may be submitted by email to BikePed@txdot.gov by July 26, 2021, to be included as part of the meeting record.
11.	Discussion of agenda items for future BAC meetings. (Action)
12.	Adjourn. (Action)

The BPAC meeting will be conducted in English. If you need an interpreter or document translator because English is not your primary language or you have difficulty communicating effectively in English, one will be provided for you. If you have a disability and need assistance, special arrangements can be made to accommodate most needs. If you need interpretation or translation services or you are a person with a disability who requires an accommodation to attend or participate in the BPAC meeting, please contact Noah Heath, PTN, at (361) 876-7184 no later than 4 p.m. CT, July 6, 2021. Please be aware that advance notice is required as some services and accommodations may require time for TxDOT to arrange.



BPAC Members

Karla Weaver, Chair, Dallas/Ft. Worth
Bobby Gonzales, Vice Chair, El Paso
Chelsea Schultz, Waco
Clint McManus, Houston
Eddie Church, Cedar Park
Eva Garcia, Brownsville
Frank Rotnofsky, Laredo
Jeff Pollack, Corpus Christi
Mike Schofield, Austin
Rick Ogan, San Angelo
Trent Brookshire, Tyler

TxDOT Technical Staff

Eric Gleason, Director, Public Transportation Division (PTN)
Donna Roberts, Program Services Section Director, PTN
Bonnie Sherman, Bicycle & Pedestrian Program Manager, PTN
Noah Heath, Bicycle & Pedestrian Planner, PTN
Carl Seifert, Transportation Planner (Contractor), Jacobs

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TxDOT Bicycle and Pedestrian Advisory Committee
July 16, 2021

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>> Weaver: Good morning, everyone. Welcome to the July 16th meeting of the TxDOT Bicycle and Pedestrian Advisory Committee Meeting. I am Karla Weaver, the chair of the committee, and we are now calling the meeting to order.

A couple of housekeeping items that I wanted to remind people of. Please remember that attendees that are watching today's meeting, questions and answers and chat options are closed, and public comments should be submitted by email to -- let me make sure I say it correctly, BikePed@txdot.gov by July 26th. If you're watching today's meeting and you have any questions about the discussion or topics that are presented, please email those to bikeped@txdot.gov by July 26th.

Those will be included as part of the meeting record.

Additionally, we're asking for all panelists to turn on their camera when they speak, assuming you're comfortable doing that.

So with that, I will do a quick roll call of all of our committee members to see who is with us here today. When I call your name, please just say here or present, and turn on your camera really quickly.

First person is Bobby Gonzales, our Vice Chair from the El Paso area.

>> Gonzales: Present.

>> Weaver: Thanks, Bobby.

Next committee member, Chelsea Phlegar from the Waco area.

>> Phlegar: Here. Good morning.

>> Weaver: Morning, Chelsea.

Next we've got Clint McManus from the Houston area.

>> McManus: Here. Good morning.

>> Weaver: Good morning, Clint.

Eddie Church from the Cedar Park area.

>> Church: Hello. Good morning.

>> Weaver: Morning, Eddie.

Eva Garcia from Brownsville.

>> Garcia: Present. Good morning.

>> Weaver: Morning.

Frank Rotnofsky from Laredo.

>> Rotnofsky: Good morning. Present.

>> Weaver: Morning, Frank.

Jeff Pollack from Corpus Christi.

>> Pollack: Hey. Good morning, everyone.

>> Weaver: Morning, Jeff.

Mike Schofield from Austin.

>> Schofield: Hi, good morning.

>> Weaver: Good morning, Mike.

Rick Ogan from San Angelo. I don't think Rick is with us today.

And then finally, Trent Brookshire from Tyler.

>> Brookshire: Good morning, colleagues. Good morning, everyone.

>> Weaver: Hey there, Trent.

So with that, I will turn it over to Bonnie Sherman for our safety briefing.

>> Sherman: Good morning, everyone. For this month's safety briefing, we are looking at crash data for the first six months of 2021, because 2020 was so unusual travel-wise, we are also including 2019 monthly totals on these charts as well.

The first six months of 2021 has documented more fatal and serious injury crashes compared to the same time period in 2019 and 2020.

However, the total number of crashes involving pedestrians has declined. This means a greater portion of pedestrian crashes in the first six months of 2021 resulted in fatalities or serious injuries as compared to 2019 or 2020.

For bicyclists, the crash trend appears promising, but marginally so. During the first six months of 2021, the number of fatalities or serious injuries resulting from crashes involving bicyclists held fairly steady compared to the same time period in 2020. So far this year, crashes resulting in bicyclist injuries has declined by 11% from 2020, and 24% from 2019.

This underscores the importance of the BPAC's work, and all of the items on today's agenda from the new design guidance that you'll hear about, the BPAC's role in a new pedestrian and bicycle subcommittee.

So thank you for your contributions and let's have a good meeting.

>> Weaver: Thank you, Bonnie.

So the next item on our agenda is approval of the minutes from our April 9th meeting. Are there any comments on the minutes? They are provided in your packet. Any corrections or modifications that are needed? All right. Hearing none, I am asking for a motion to approve.

>> Rotnofsky: This is Frank. I motion to approve the minutes from last meeting.

>> Weaver: Thank you. Do I have a second?

>> Gonzales: Second. That was Bobby.

>> Weaver: Thank you, Bobby. All in favor, please say aye.

[Ayes]

>> Weaver: Opposed likewise. Hearing no opposed, the motion passes. Thank you, everyone.

Next on our agenda is a report from TxDOT's public transportation division, our PTN director, regarding statewide bicycle and pedestrian matters. Mr. Gleason, take it away.

>> Gleason: Thanks, Karla. So part of today's agenda is a significant milestone for this committee. It's the culmination of work that actually began three years ago now with the review and anticipated, hoped for adoption of some guidelines for bikeway design.

I think it's important to remember that this effort actually had two phases. The first phase was one where the committee worked with TxDOT staff to do a deep dive into the department's project development process. In doing that, was able to identify over a dozen areas of concurrence where changes or improvements or enhancements to that development process could occur that would increase the visibility and likelihood that bikeway project would be more completely integrated into the department's project development process.

Following that, we completed in July of 2019. Since then, the committee has been working closely with another set of TxDOT staff on specific bikeway design guidelines, and those will be before you today for final -- for your consideration for final adoption.

And this is just I think probably unprecedented effort within the department working with an advisory committee, to reach agreement -- to collaborate and reach agreement on specific elements that can be included into the department's design guidance and other manuals.

So I think the committee really has been doing some monumental work here, unprecedented setting kind of work, which is coming to a culmination today -- at today's meeting.

Anticipating a good conversation on that later in the agenda. I do want to congratulate the committee on a sustained effort over almost three years coming to a close today.

We're also going to turn the page and begin talking about what to focus on next. I think in our minds, obviously we've got to revisit some of the basic strategies guiding our efforts with the committee to make sure that we've incorporated the pedestrian scope, the new pedestrian scope into those.

And so we will begin turning the page and turning our attention to that. I also want to recognize that every year as we approach August, there are -- of the 11 appointments to the committee, that three or four of those appointments come up for reappointment or new appointments. And in

August, we have three current members whose term is ending. Trent Brookshire, Frank Rotnofsky, and Bobby Gonzales.

Frank has indicated he is interested in serving another term, and we have forwarded his name along with two other individuals as our recommendations for their consideration for appointment to the committee.

Trent has decided to move on in a different direction. Trent, I want to thank you for your service, your two years on the committee, for your time and your participation. It's been a lot of work done while you were here, and I hope that you have felt that it's been a valuable experience for you.

And then finally, Bobby -- wow, eight years. And then I've also learned recently that you had an earlier term on the committee back in the late 1990s that I wasn't aware of. I'm hoping you can see perhaps a difference between work accomplished in that first time in the 1990s and what you've been a part of for the last eight years, because I think you really have been along for the ride.

The last eight years, this committee has really come into its own, and I want to thank you for your leadership and your participation in helping to make that happen. Your feedback and your knowledge will be sorely missed, but we do appreciate your service.

Now, I don't know if either Trent or Bobby, if y'all want to say a few words at this point?

>> Gonzales: Yeah, Eric, this is Bobby. First of all, I want to thank -- yeah, there's no question we've made some significant strides since I was here, or since I was on the committee back in the late '90s. I'm obviously happy on what we have accomplished as a group.

You know, while I've served on this committee this past go-around, this past eight years, and where we're headed, too, so I'm happy all the way around. I'm going to miss the committee. I'm going to miss the group. But I'm still going to continue to work to make our state safer for cyclists and pedestrians.

Obviously, I want to thank you, Eric, Bonnie, Noah, Donna, Carl, and the rest of the TxDOT staff along with the committee members for your commitment, dedication, and hard work while I've served on this committee. So, thank you all once again, and bike on and walk on, I guess, right? Thank you all very much.

>> Gleason: Thank you, Bobby, I appreciate it. And I will look for you in the national cycling statistics.

>> Gonzales: Well, I will be there in August.

>> Gleason: Okay. All right. Trent, any closing comments or remarks?

>> Brookshire: Thanks, Eric. Just to echo what Bobby said. It's been great to meet everybody on the committee. There's tremendous work being done. Huge thanks to the folks who make it happen. Bonnie, Noah, the rest of you.

But my work is going to be kind of more concentrated locally and I work in city government, because that's really where I think the initiative has to start for us in East Texas, kind of helping to highlight and create the vision for a safer place to bike and also to walk in this beautiful part of the country that we live in.

So I'm going to be focused and we'll be trying to send other

representatives to join the committee. I don't know if our guy was selected or not, Eric, or will be, but the guy that I kind of said hey, you need to go do this, he is very dynamic, he's really involved. He runs the bike community in Tyler. He's the best guy that could have been for the job.

That being said, I've been impressed with everyone on the committee and certainly appreciate the work that's been done, and it's unprecedented times considering the use of cell phones and cars and the task that we're up against as a team. So looking forward to the work that this team will accomplish in the future.

>> Gleason: Thank you, Trent, I would agree. There's a lot going on in Tyler right now. Got the Bike Strike project, which is finally coming into reality, which is a really big deal for Tyler I know. So I appreciate your time. Tyler certainly is an area with a lot of expertise and passion, so I'm sure we'll be involving Tyler in the future.

So, all right. Frank, appreciate your willingness to continue on and your contributions to the committee. So, we are -- right now, the commission is scheduled to consider these appointments at its September meeting. Typically, it's done in August, but the chairman did a lot on the agenda for August, and we have three other advisory committees with appointments, and so the chairman has asked that we move all of those to their September meeting.

But I do want everyone to know that in the event that, for whatever reason, if the commission is not able to take action on these appointments in September, that current members can continue to serve until a replacement has been appointed.

So, Bobby and Frank, if for some reason the committee doesn't take action in September, you are still a member of this committee and able to participate in our October meet, should you wish to do that.

So that's it on new membership. It looks like -- so as we move -- as we come out of the pandemic and into more routine operations, we are looking towards the October meeting as being one where we will include an in-person option.

We're watching the current situation closely. There is an uptick in COVID infections. And so that may change. But at this point, we're looking at back to an in-person option in October and then after October, we would go back to our sort of regular format where you could either attend a meeting in person or virtually.

So, stay tuned for that. We'll let you know as October gets closer what the options might be for that meeting.

And then really quickly, 2021 called for projects, making our way through that process. We now have in hand 139 detailed project applications from around the state in areas of under 200,000 in population, asking for about \$203 million. We have -- I think it's somewhere around 45 million to allocate these projects at this point in time.

Now, of those 139, 60 are non-urban or in areas -- communities of less than 5,000. And the total request, or the total project costs of those 60 is about \$80 million. And then we have 79 small urban project applications, and those would be for areas of 5,000 to 200,000. Totalling about \$123 million.

So we're going into our department evaluation process. The

evaluations began on June 24th. We'll finish that up on August 4th. And then we are targeting requesting consideration of funding awards at their October meeting. So that's the schedule that lies ahead for the current projects.

Question on that?

>> Garcia: Yeah, I just had one quick question. You said there were \$203 million request for projects statewide. Is that normal with other previous calls?

>> Mora: I think Eric froze up.

>> Sherman: I believe so. So I will answer that question.

That is probably fairly typical given the transportation alternatives funds that are up for -- that are subject to this call for projects.

We have more competition this year in the non-urban category compared with previous years, and that, I believe, is due to the rule changes that we instituted in December.

>> Garcia: Thank you so much, Bonnie, appreciate that.

>> Weaver: Well it looks like Eric may have dropped off. He may try to rejoin us. If he does, I'll ask if he has any final words. Otherwise, we will just keep moving on our agenda today.

>> Gleason: Okay, I think I'm back.

>> Weaver: You made it back.

>> Gleason: I made it back successfully. Sorry about that.

>> Weaver: That's okay.

>> Gleason: Just wrapping up, we continue to make progress on all the projects that have been approved to date. We've had four -- the commission has taken four actions on project rewards, 2015, 2017, and other --

>> Heath: Eric, I don't know if you can hear us, but it sounds like you're dropping off.

>> Sherman: So I can wrap that up. On the past calls for projects, we have awarded 132 transportation alternatives funded projects and safe routes to school comprised a dozen of those.

We have awarded a total of \$145 million for funds for locally sponsored bicycle and pedestrian projects, and we have at least 34 complete and 52 under construction.

>> Weaver: Great. Thank you, Bonnie.

>> Sherman: You're welcome.

>> Weaver: We'll go ahead and wrap up Eric's item. If he does pop in, we'll see if he had any final words. I also want to express my appreciation to Trent and to Bobby for your work on the committee. We appreciate all the time, the meetings, the side committees and everything that you guys did. You're going to be missed, but we know there's more fun things ahead for you, we're sure, and we're looking forward to our new members as well and the perspectives that they'll bring to the committee.

All right. So, the next item on the agenda is a presentation from Ken Mora, who is with the TxDOT design division's roadway -- he's the section director. So, Ken's going to talk about our bicycle accommodations design guidance, which many of you were part of a subcommittee helping put together some of that information and -- excuse me, that's our design effort. He's going to talk about the one that TxDOT did.

Ken, we're excited to hear from you today. Please share with us your information on the latest guidance.

>> Mora: Sure thing.

Again, I'm Ken Mora with the roadway design section of the Design Division. Today I'm going to talk I think briefly about some of the upcoming bike and design guidance. Next, please.

So some of the items we'll talk about, guiding principles, the TxDOT bicycle tourism example network, target design user, facility types, project implementation date, important topic, bike design guidance resources, of which there are many, shared use path example. Next slide. Typical section examples, and the RDM guidance highlights, which will be released in late August. And of course, questions. Next slide.

So, the interim bike guidance was released on April 2nd. Next slide. First thing, I'd like to talk about some of the guiding principles of bikeway selection. Basically, the first principle being bike accommodations will be considered in all transportation projects, and of course, this is covered in the bike guidance, particularly on page 2.

Also, the process requires consideration of bike accommodations on all projects. The design user of new bikeways should be bicycle dependent commuters and other bicyclists interested in riding but concerned about safety. So, that's covered on page 13 of the guidance to the extent practical, bikeway width and separation should be maximized. This was done throughout the document.

Frequency and severity of crashes and conflicts between all users is a priority. I would say that's even -- not beyond in spirit. To the extent possible we included significant buffer widths to provide protection for bicyclists.

Wide outside lane increase. Vehicle speeds, not adequate accommodations. So we have greatly limited the ability to use a "shared lane." Next slide, please.

Design flexibility is important. That's contained throughout the document. We offer several different opportunities for bike facilities, which I'll cover later in the presentation. Some of the higher priority bikeways on TxDOT roadways should be direct and convenient. This is covered on page 7 of the guidance. When locally maintained and State maintained roads intersect, TxDOT should collaborate, and this is covered with local jurisdictions -- this is covered on pages 5 and 7.

If a rural roadway is on the Bicycle Tourism Example Network, then transportation improvements should consider an appropriate bikeway, and I'll cover that more in the next couple of slides. Next slide, please.

We're going to talk a little about linear bikeway design. Where existing future bikeway demand is anticipated. A shoulder rumble strip. This was a topic covered in pages 27 and 28 of the guidance. Bicycle gaps should be included in the rumble strips. That, of course, is covered there. Shared use paths, signalized intersections. TxDOT should consider applying separate pavement markings to identify crosswalks and bicycle extensions. This is covered on page 22 of the guidance.

On shared roadways that provide key bicycle route connections, or where safety concerns are documented, TxDOT should use -- bicycles may use full lane sign, and this is covered in the guidance as well. Roadway

design should consider sidelines of all users, and of course, this is covered on page 11. Next slide, please.

Worth noting. Projects located on the Texas Bicycle Tourism Example Network are not precluded from bike accommodations regardless of location. The TxDOT Statewide Planning Map provides additional information on MPO boundaries, area types, and bicycle tourism example network. Shoulders, if used to provide bike accommodations, must be a minimum of eight feet in width.

The next slide shows a screenshot of the TxDOT bicycle tourism network. Of course, this is available publicly on the statewide planning map. Next slide, please.

The common target designed user who are interested in riding, but concerned about safety, interested but concerned, this is the largest group of potential bikeway users among the general population.

These bicyclists would ride more if they felt safer and thus more likely to take short trips, avoiding busy or arterial roadways. Interested but concerned, prefer separation from vehicles, and have a lower tolerance for traffic stress than more confident riders. And of course, this concept is incorporated directly into the bike guidance. Next slide, please.

So I'm going to talk a little bit about the kind of continuum of the different types of facilities. On the left to right, it shows decreasing separation between bicyclists and vehicles. Of course, you have the shared use path on the far left separated bike lanes, buffered bike lanes, standard bike lane, and then the bike accessible shoulders, and then, of course, on the far end of the continuum, you have shared lanes. Next slide.

So I'm going to talk a little bit about, since this is only a 20-minute presentation, we've already presented -- made some statewide presentations in April and May on this topic. This is kind of a truncated version of that for only 20 minutes, but the other presentations are available online, both on the Internet and intranet.

Shared use path adjacent to roadways, also the side paths. They're located within a corridor along the roadway alignment. Generally, we plan for two-way travel, because in addition to bicyclists, you have inline skaters, skateboarders, pedestrians, and runners. Conflict points such as driveways and frequent street crossings should be mitigated to the greatest extent possible. Bike speed of 15 miles an hour is generally assumed.

The desired width for a side path is 11 to 15 feet, and I'm going to cover a shared use path level of service calculation example in the next few slides.

To maximize service life and to assure reasonable SUPLOS grade, paved widths should not be less than 10 feet. As path user volumes increase, designers should consider increasing the width of the sidepath up to 15 feet. So the standard minimum width is ten feet and a minimum width of eight feet may be used in very rare circumstances. Next slide, please.

Now I'm going to talk a little about a SUPLOS example. The SUPLOS calculator is part of the FHWA guidance on the topic, which, of course, is publicly available at the link that you see at the bottom.

So in this particular example, what you see is the values in yellow are entered by the user, and then the far value on the right is the shared use

path level of service grade. For TxDOT, we are shooting for level of service or C or better, desirable over the life of the facility.

So in this case, you would basically -- you have the one-way per hour volume of all users. You then break up the user types by percentages, and of course, these have to add up to 100%.

And then you can adjust -- you can input whether or not you plan on having a center line. If you do have a center line, this will tend to degrade the level of service operation. Then the path width is then input and you can iterate on the path width until you get your desired level of service.

Generally, when foot traffic exceeds 15%, the level of service degrades more rapidly. Also, the Texas bicycle and pedestrian count exchange, available at the website shown, has pedestrian and bicycle count data for various facilities statewide. Next slide, please.

Now I'm going to talk a little about bike accessible shoulders. The key point on this is that the shoulder widths are a minimum width of four feet is allowable in low speed conditions. Minimum width of five feet is allowable for high speed. And of course, there's five feet is required for shoulders adjacent to bridge railings, guard fence, and other vertical elements in order to provide some shy distance.

Highlighted in yellow, roadways indicated in the TxDOT's Bicycle Tourism Trails Study must be designed with a minimum of an 8-foot shoulder, if a shoulder is used. Next slide, please.

So here we have the rumble strips, which is a very important consideration for the use of shoulders. And so you see on the figures on the right, generally, we recommend profile markings that would be on the even line there, so as not to encroach upon the bicyclist's path.

On the right, we have a more -- configuration. Also, going longitudinally, of course, you want to provide gap opportunities for the bicyclists to go in and out as needed. So where bicyclists are operating at 20 miles an hour or less, a minimum 15-foot gap every 40 to 60 feet should be -- as should be in the lower -- [audio breaking up] -- where bicyclists are operating over 20 miles an hour, the gap should be increased to 20 feet or more. Next slide, please.

Shared lanes. Shared lanes has been a primary topic in the last few years. So, I think what I'll just point out on those, that the allowance of shared lanes will be in very limited opportunities, in urban applications, shared wide outside lanes. Only allowed in locations with low volumes. 3,000 ADT or lower. And very low speeds, 35 miles per hour or less.

In rural applications, shared wide outside lanes are only allowed in locations with very low volumes, 1,000 ADT or lower, and low speeds, 45 miles per hour or less.

So the maximum width of a shared lane would be 14 feet, and 13 feet is the minimum usable width for a shared wide outside lane.

So let's talk about the implementation data a little bit. So, where the -- of course, the guidance westbound implemented immediately, and many districts are already doing so. But the required date will be September '22 lettings or later. By November 1st, the 30% schematics have not been approved. And then everything else is optional.

But already, many, if not most of the districts are already incorporating the new guidance into their plan development. Next slide, please.

So this is a snapshot of some of the resources. I believe this site is on the Internet site, and of course, you see the link there. And at the bottom, you see the link to our roadway design web page link that also has the same guidance. The roadway design web link also has the previous two bike guidance presentations which are more comprehensive than this particular presentation. Next slide, please.

So I'm now going to go through a shared use path example. You have a suburban context, a roadway with current ADT of 16,000 with current wide outside lanes, 14 feet. Posted speed of 40 miles an hour. Existing four-foot sidewalk. And you have driveways, about six driveways in a two-mile stretch of roadway. Driveways have relatively low volume. And you have one intersecting Collector type roadway at the midpoint. Next slide.

So for this particular example, as an initial starting point for bike facility recommendation, you would go to figure 4 within the guidance. Suburban means it's an urbanized criteria. And as you can see, you have the speed in the horizontal axis, the volume in the vertical axis. You see the red dot, which represents the location of this particular project. And due to relatively low driveway density, investigate the possible application of a shared view side path, which is what we're going to do now.

Next slide.

So general rules for the use of the shared use path level service calculator. Segment length analyzed, a quarter to two to three miles. The segment analyses should be broken up as needed to account for changes in user -- the project limits. All user mixes of the Treadway should be counted or estimated, includes adult bicyclists, peds, runners, inline skaters, and child bicyclists.

If new user counts are collected, it's recommended that a minimum of three two-way hourly counts on each segment, an average one-way per-hour volume can be created from the three hourly counts. An assumed 50/50 split is recommended for conversion to the one-way volumes, which are input into the calculation.

So for this particular example, there are two one-mile segments analyzed. Break at intersecting collector for this project. So we broke this up into two primary segments.

After conducting two-way counts for each analyzed segment, the two-way volume is 240 for segment A, and 100 for segment B, then assumed to be for the one-way entry into the calculator. The calculator is very easy to use. It's basically a simple spreadsheet type format. Next slide, please.

So these are some of the background information that are in the actual calculator itself, which are not entered. It assumes a model average user speed of 12.8 for bicyclists, inline skaters 10.1, and it goes all the way down in the continuum, down to pedestrians at 3.4 miles per hour. And then, of course, you see the corresponding level service score, and the respective grades on the right. Next slide, please.

So for this particular example, for segment A, of course for the one-way volume, we had 120. Then we have the respective percentages, which add up to 100%. The center line on this particular example. And then allowing the 12-foot width, allowed us to achieve a level of service C on this. For

segment B, slightly lower volumes. Width of ten feet allowed us to achieve a level of service C.

Now I'm going to cover a couple of typical section items for urbanized application. In this particular case, you have an existing condition, it's a four lane urban low speed. This is simply a restriping opportunity that would exist.

So the initial configuration, you have a 12-foot lane with a 14-foot shared outside lane, and five-foot sidewalk at the back of the curb. So the after condition, note using the same primary footprint is an 11-foot lane with a ten-foot outside lane and a five-foot bike lane, and then, of course, the sidewalk remains as is.

This particular example would be for an urban frontage road with the speed of about 50 miles per hour, and 10,000 ADT. So in this case, we have two alternatives. You have the existing condition which has two lanes in the frontage road, and in the alternative A, we reduced this down to two 11-foot lanes and we put in a buffered bike lane with the three-foot buffer, five-foot bike lane adjacent to that, and then a five-foot buffer for the five-foot sidewalk on the outside.

And then on the alternative B example, we maintain the two 12-foot lanes, and then we put in a shared use path sidepath on the outside, and notice you want to maximize the opportunity for your buffer. So in this case, we were able to achieve the clear zone criteria of ten feet for this. So the 12-foot side path is on the outside. Next slide, please.

I wanted to talk a little too about some of the PED guidance that will be coming out with the RDM update. Of course, the RDM update will incorporate this bike guidance, obviously, and that will likely be released in the late August timeframe. Some of the PED guidance that's being provided, some better definitions of the pedestrian access route. Pedestrian circulation paths, walking speeds. Of course, three to four feet per second.

The clear width, a recommended clear width of the par, and typically we're recommending six feet. Five feet would be a minimum. Of course, this cross-slope criteria being 2%. Generally, you would shoot for 1.5% to avoid exceeding the [indiscernible]. Next slide, please.

We'll also be providing some guidance on the pedestrian zone, also known as the walking zone. The pedestrian access route is the portion of the sidewalk dedicated to ADA accessible pedestrian movement. And then, of course, we have a buffer zone. In the paragraph to the right. As well as a frontage zone, which is the area between the PED zone and the property lines.

Typically applicable in areas with buildings directly adjacent to the right of way line. Next slide.

And some other pedestrian guidance in the upcoming RDM. We'll be addressing curb ramp design, driveway design consideration, intersections and cross, overcrossings, underpasses, lighting, on-street parking, transit access, railings adjacent to steep slopes, and additional considerations.

And that's all I have.

>> Weaver: All right. Thank you, Ken. Are there any questions about today's presentation?

>> McManus: This is Clint. I have a couple questions. First of all, Ken, thanks so much for the presentation. I can definitely see the work of

our subcommittee in the guidance, and it's really great to know that y'all listened and incorporated so much of what we talked about. It's really appreciated.

I have two questions really. And one is about the SUPLOS. I'm just curious, for the shared use example that you showed -- sorry, let me scroll through that slide. Shared use path, the example number one in the suburban context.

So, for the way that the SUPLOS comes into that process, you're counting usage on that existing four-foot sidewalk and the four-lane divided roadway? Is that -- I'm just trying to understand how you arrive at the different percentages for the calculator.

>> Weaver: Clint, are you on slide 12, for people that are following along?

>> McManus: I was looking -- well, I was looking at 19, but also, yeah, 12 --

>> Weaver: Okay.

>> Mora: I think I got the question. This is a hypothetical example, right? So in this case -- and we have other examples we provided where a facility did not exist, but of course, due to time limitations, we don't have that in the limitation.

But in this particular example, the assumption is, the engineer, the designer would have the latitude to increase the percentages accordingly, and this is kind of addressed in the bike design guidance as well.

So in this particular case, it's an existing facility, they're going to change slightly the configuration, so existing counts were conducted on the two different segments.

And during those counts, they also identified the different type of users that may or may not be using that facility. And then, of course, the engineer will have the latitude to then increase -- you know, increase accordingly as they see fit.

>> McManus: So it's an estimate of future use, or a count of existing use?

>> Mora: The count of existing use can be used then to provide -- if there's a reasonable way to go ahead and say, well, I anticipate there might be 20% growth in this area. The engineer would have the latitude to go ahead and do that and incorporate that as needed.

Again, there's a lot of judgment involved with respect to that because there's not necessarily a lot of good data. We have some existing data with the PED and bike website that I mentioned earlier, but there's -- you know, existing count data is going to be, if the facility exists, it's going to be the starting point, if you will, of where you want to go.

>> McManus: Got it. Thanks for answering. I know it is definitely imperfect. I know we've all encountered -- the counts are imperfect. It's hard to know how many people are going to use the facilities, especially if the example showed a four-foot sidewalk is super unsafe for child bicyclists, for example.

So I know it's -- I think as long as the guidance that you mentioned before being used, for selecting the facility for the type of roadway, that still arrived at that. I'm curious if other committee members have thoughts or ideas about how that's worked in their areas.

>> Schofield: This is Mike Schofield. Yeah, I do see what you mean in terms of areas where there just might not be any bike or ped use. I'm thinking of a lot of the new TxDOT shared use paths in Austin get built along highways that are reconstructed and the highways often had no bike lane, of course. Sometimes no sidewalk even. So the numbers would be zero.

But I agree with you. There's probably no perfect answer in cases like that. Engineering judgment probably needs to go into it.

>> Weaver: In our area, we have a methodology to develop our own forecast. We have a lot of counters, but a lot of them are on trails. They're not adjacent to roads. So we're not seeing data of side paths and what that looks like relative to various roadway volumes.

So we're just sort of creating them based on densities and adjacent land uses and using that as our metric as best we can.

>> McManus: I just don't want to get into a situation where there are no counts, so there's assumed to be no future use, or along a highway, even though shared use path would be great, I'm thinking of the one in Travis County near the airport. I think CTRMA build. That's a great facility. I don't think anybody was using it before. Definitely served as some key destinations.

Yeah. Just asking.

>> Weaver: Clint, did you have another question?

>> McManus: Yes. So, up on slide 6, I'm just curious, for 2.1.8, this is about coordination with local jurisdictions on system crossings. I'm just curious, I know it says the interim guidance was mostly included. I'm just curious, how would that work in practice. Thinking of an example, like the city of Houston is wanting to construct a high comfort bikeway underneath highway 69, to get from university of Houston.

And the crossing itself under 69 is one of the big safety concerns. So in that example, how would this -- how would the new guidance be implemented?

>> Mora: I don't know the actual project specifics of this, so I'm going to address this a little more broadly. So, as far as coordination with the local entities or jurisdictions, obviously Dallas area, Austin, or Houston, et cetera, or in east Texas, wherever they may be, the local jurisdiction in TxDOT had the latitude to either use the current bike design guidance, or they can use another approved FHWA type guidance if both parties agree to that.

So I think there's going to be even additional flexibility with respect to working with local jurisdictions. And this is actually stated in the bike guidance.

>> McManus: Thank you.

>> Weaver: Any other questions for Ken about the presentation or information that was presented?

>> Schofield: I have one. Thank you, by the way, for the presentation, Ken. It's really interesting.

The slides that showed reassigning of street space, there's, you know, the one for reassigning on street space and one for removing that space behind curb for shared use path. Those are really useful, I think.

Is there a plan for those examples or similar examples to live anywhere in documentation? Like maybe upcoming RBG update or something. Or is

that really just for our benefit as an example of how to apply the guidance?

>> Mora: Good question. So, we already have the previous two presentations publicly available. But more than likely, what we plan on doing is once we completely finalize -- obviously the RDM update will have more specific guidance at different intersections and different things like that, right?

So when we released that in late August, we'll likely update our web page as well to provide -- you saw only two examples. In the presentation previously, about five. For rural applications as well. So more than likely, we'll just post those in our roadway design web page. So, for some different type of cross section scenarios.

We want to, you know, kind of let people know some of the alternatives that might be available depending upon the project criteria. But good question. And yes, we do plan on ultimately putting some example typical sections and other things like that in our web page.

>> Schofield: Thanks.

>> Weaver: Those are good questions and discussion. Other questions from the committee?

Ken, I have a quick question. So we've reviewed the guidelines, and I'm in the Dallas-Fort Worth region, and we just think this is huge steps for TxDOT and we're really excited about what we see happening.

And then with the fact that you're adding the pedestrian elements and more will come out in August.

Could I hazard to say, is TxDOT close to getting into the world of what some would say is a complete street policy? Or -- you have all the elements. Is that terminology anything that might be considered for future iterations? I know as part of our State score for bicycle safety, they look and see if DOT has a statewide complete street policy. I think part of our action plan as a future goal or task that we have.

So, do you think this is kind of leading up to that as maybe a future phase? Or is that terminology still sort of something to be avoided?

>> Mora: I would personally avoid it for now. It's not something that -- we're going to also -- so we have our rep 2 update of the RDM coming out, possibly near the end of August.

So any type of complete street consideration may be given to the next iteration of the RDM, which would probably be a year and a half to two years after that.

>> Weaver: And for those that are on the call, can you confirm RDM for them?

>> Weaver: Roadway Design Manual.

>> Weaver: All right. Sounds good. If there are no final questions, Ken, thank you again for your presentation, and that very interesting information. I'm just excited to see how the design guidance will be used across the state. I think we'll all be learning a lot as we do this together.

Our next presentation is by Carl Seifert. Everyone knows Carl. He's going to talk about a discussion on the bikeway design effort principles put together by the committee. Many of these, we've all seen before. We've had lots of discussion, taken previous action or endorsement, and today is sort of the culmination of all of the sections, and we're going to take a final action step to endorse and say, we think we've got it.

All right, Carl. To your presentation.

>> Seifert: All right. Thank you, Karla, and thank you, Ken. As Clint pointed out, we really wanted Ken to go first because we thought it was so cool to see all of the elements that we've been working on kind of starting to fit. In official guidance. So, with that, next slide.

My presentation today, this for those of you who aren't familiar, just is a slide to kind of position what we're talking about today within the last year's worth of work in phase 2 of the bikeway design effort.

So this effort has been distributed into four major categories. A whole lot of topics and a whole lot of meetings. But in general, bikeway selection, linear bikeway design, and intersection and conflict points were the three sections that the BPAC as a whole has already approved.

Today we're going to ask the BPAC to do two things. One, to review and give us some comment on approval on the last section, the maintenance section. And also, I will not go through all 33 guiding principles, but what we will do, we have those for reference for all the members that was sent separately. And then we will talk about some of the highlights and we will ask for approval for the whole, the whole body of guiding principles today. Next slide.

So first off, those bikeway maintenance guiding principles. Next slide. So, the first two principles are directly related to an important topic, which is seal coats. That is a maintenance task that is taken on TxDOT roadways frequently, depending on the roadway type, and it has a lot of relevance to bicyclists.

So, to start, number one, to leverage ongoing asset preservation and roadway maintenance dollars, encourage early coordination between district seal coat coordinators and district bicycle and pedestrian coordinators. Frequent engagement between these staff members across the state can lead to cost efficiencies, increased awareness of bicycle needs, higher quality pavement markings for bicycle accommodation, safer roadways, and better connected bikeway networks.

So we felt this one -- and by the way, I encourage all members to interrupt at any point. Ask me questions. You know, we have an opportunity here to hear and get feedback.

We had an opportunity at the working group level to hear from TxDOT's seal coat statewide coordinator and learn a lot about what the seal coat process involves. It was very educational, and I think he was impressed that some of the tools that the district pedestrian coordinators have to identify bicyclist needs, and I think we're going to encourage those moving forward.

Any comments on number one? Okay.

Number two, the content of the twine TxDOT chief engineer memo entitled Accommodating Bicycles in Seal Coat Construction, should be incorporated into TxDOT's pavement manual and communicated with TxDOT district main Nance staff. This memo emphasizes opportunities to improve riding surfaces for bicyclists including using smaller seal coat aggregates along the roadway or on the shoulder.

Additionally, shoulders should be swept during and after seal coat projects to ensure shoulders used by bicyclists are clear of debris.

We were not personally aware of this twine memo, and that is all the

more reason for it to be better incorporated and communicated about at the district level, for bicyclists' sake. And also the last element up here about shoulder sweeping is particularly important, as seal coats involve a lot of loose aggregate. Even though it's a standard practice to do so, we wanted to emphasize it by adding it here.

>> Garcia: My question here is, as we work regionally with our district offices, how can we ensure that the memo reaches our partners and that the street cleaning and all these pieces of the memo are incorporated? I know we're just discovering the guiding principles, but I think the application of it is sort of what I'm curious about.

>> Seifert: Sure, sure. The district staff should have access to this already. And I guess the action item here is about incorporating into the pavement manual, which will take time. So I wouldn't expect immediate knowledge with this. I think you armed with knowledge can communicate some of these elements to the district staff, and these are best practices, even if they're not doing them already.

I think that's probably a good place to start, more communication aspect. Anyone else from working group or TxDOT staff want to chime in? Did that answer your question at all, Eva?

>> Garcia: No, that was helpful. I do agree with incorporating it, so, thank you.

>> Seifert: Yeah. All of these guiding principles were reviewed by TxDOT administration including the maintenance division director. He corrected the manual title for us. So we made sure this is pretty accurate.

>> Garcia: Great. Thank you so much.

>> Seifert: And I didn't mention these two figures. The actual memo is figure two on the right, and there's a seal coat aggregate sizes on the left. Cyclists generally advocate for smaller seal coats, so a grade 5. A grade 4 is also sometimes used.

>> Weaver: When I first joined the BAC, we had somebody come out from TxDOT, whole different grades. What we learned is that you can't -- in different parts of the state, depending on where rock is being developed for projects and where it's being purchased, it's harder to get certain grades, and some grades are just sort of defaults for certain projects. And the costs may be more.

So, when pricing, you know, we put cost estimates together for projects at the MPO, and we award and fund a lot of projects. But no one's ever come to me and said, we're going to need X amount of extra money because we want to make sure that we've got a grade five because we're going to have a bike accommodation here.

So, is it significant enough, the budgetary process, that extra resources are needed to make sure that a grade 5 is eligible? Because, you know, it's my understanding that -- this might have changed, but things might have to ship from a pretty long way, because if I've got Hunt County up here and they don't have access to any of the surrounding areas, all they're making is four or three.

You know, how to get those supplies to certain areas or just not assume that it's in the budget the correct way. Any guidance on that, or is that discussed as part of the background?

>> Church: I have a comment on this one. Can I speak on this one?

Now we're talking the stuff that I do, other than ride bikes. I'm also in charge of maintenance schedule and cost for Williamson County. And so, grade 3 is -- I don't think that's even a thing anymore. But grade 4 and 5, what you said is exactly right. The costs are different, and it's not just because of the rock and availability. It's because of the oil. The oil, it takes more.

So, one thing that we always do, TxDOT updates the Austin district or whatever district, general notes, and at the very beginning of the general notes, which we're all familiar with, there's basis of estimate and application rates.

And you can see in there the application rates for whatever grade rock you use is significantly different. So the information is there to be able to come up with a cost estimate based upon what is preferred for your whatever municipality or county or whatever it is you're trying to get a cost estimate for.

But we prefer grade 4 because we use it as an underseal mainly. Seal coats, it sometimes varies on the ADTs. And as far as availability of rock, I guess maybe that's something that somebody from another district could comment on. In Austin district, there's no shortage of rock. Four and five is plentiful. But the cost comes down to the oil used with the rock.

So you can easily go to just the average unit prices of your district and look at what's been used the most, and that's probably the one that's most available, rock. If that's really a main thing.

So oil is the cost.

>> Weaver: Eddie, from what you said about four being the preference because it's your undercoat, is there a conflict between what's best for the road and what's best for the cyclist, potentially?

>> Church: Two things. The underseal is to keep water from migrating up through your pavement section. So it's actually put down on top of your flex base, and the asphalt goes on top.

Now, for the maintenance, at the eight-year mark, when you do a seal coat on top, on the county roads, I will say that typically, the bike usage is not a factor because they're county roads out in the middle of the county. But if it's ones that are like in Round Rock or in Cedar Park, I think you're right, grade 5 is preferred, because they don't want all of the complaints from the neighborhoods.

Because as you might suggest, the looser the rock, the looser the oil, it goes everywhere. So grade 5 is better, you're right. But it costs a little more also.

>> Weaver: So we had a big issue where some of our more rural counties, Parker County, Ellis County, Wise County, they were doing these big bike rides out on the shoulders in the more rural area because they could go miles and miles and miles. So they had a big community meeting. It was about this chip seal issue and the big rocks that were flying up, especially when they'd have 20 cyclists out there together.

So I know it's sort of like an ongoing balancing act.

>> Church: I think we had the opportunity to be a voice to the counties. I mean, we all kind of represent big cities, but the counties are moving more towards smaller rock for these issues. I mean, they don't want to deal with the complaints. And you're right, if I'm doing a long ride

and there's a loose seal coat, it's probably because there wasn't enough oil, or it's a grade 3 or something with bigger rocks.

I think it's going to be common that grade 3 is not really used anymore and it's grade 4 and 5 only. Yes, I prefer grade 5. It's put down correctly, which is constructability is my thing as well. But they've got to put down an even amount of oil. Grade 5 is preferred, and we should be the ones pushing that forward.

>> Weaver: All right, thanks. Sorry, Carl. Side route.

>> Seifert: No, and one level of conversation that we did have is about how districts and design engineers can figure out the level of bicyclist need, and that is one area where phase 1, our area of concurrence did speak to. Because we have in the pipeline district bike plans that were under contract to do the first round of, and starting in the fall.

And we have the statewide planning map that has more information and we're also, as Ken talked about, the bicycle and pedestrian county exchange. So there's increasing level of tools. There's not comprehensive information available. But I think focusing the -- maybe the grade 5 or the more involved maintenance activities on those routes for bicyclists are needed -- need is indicated, rather, is the way to go. Cool. Next slide.

Okay. Continuing on the maintenance guiding principles. Number 3. Shoulder maintenance. Where bicycle demand has been identified through coordination with district bicycle and pedestrian coordinators, proactively sweep and clear debris from on-system roadway shoulders. Where municipal maintenance agreements, MMAs, are in place, TxDOT districts should coordinate with municipal partners who are responsible for sweeping the roadway under the terms of an MMA.

So we had a lot of good discussion about municipal maintenance agreements and how these can be either loosely interpreted or tightly interpreted or ignored, depending on where you're at in the state.

But it does specifically state who is responsible, TxDOT or the local partner. This is a good one.

Okay. Number 4. Separated bike lane maintenance. Where on-system, on-street separated bicycle lanes exist, coordinate sweeping and maintenance efforts with municipal partners who may have suitable equipment or resources for these facilities.

Clearly delineate the entity responsible for maintenance when installing separated bike lanes. At this point in Texas, separated bike lanes are a very urban context element, and that's probably going to stay that way for some time. And it's these urban areas, these municipal partners that may have the equipment necessary. And so TxDOT coordination with those partners should be preeminent.

So that tiny little vehicles don't have to be shipped across the state to maintain these facilities. You can see in figure 4 on the bottom is an example of one of these narrow street sweepers that can get between a vertical element and a curb to clean an on-street bike lane. Or separated bike lane.

All right. No exciting comments there, so number 5. When using green pavement markings to emphasize on-street bikeway conflict points, limit green pavement marking footprints, i.e., square footage. To reduce maintenance issues and maximize marking durability. During this

maintenance section, we revisited to get some additional research and studies about their durability and some of their lasting qualities.

And one of the elements that popped out of that is generally reducing the size of the application can have an impact on its long-term durability. So this is directly related to that. Great. Next slide, please.

Another one about green pavement markings. Training on proper green pavement marking application for a variety of marking technologies will foster proper installation. Training should focus on surface preparation and contractor monitoring. Additional training and guidelines should include maintenance practices to maintain durability, retroreflectivity, color intensity, and skid-resistance.

And you can see figure 5 is an example of both the reason why we have guiding principle 5 and 6. It is a larger green pavement application, and this one in particular had an error while the installation was taking place, and it led to a rapid deterioration of the application, and I think, you know, pretty ugly result.

So it not only doesn't do the intended result of what it's asked to do, which is highlight the area, but it also kind of looks shabby. It was pointed out and I think accurately, surface preparation and contractor monitoring could help out with not repeating this error.

Number seven. When attempting to incorporate separated bike lanes during edge-to-edge roadway construction projects, raised separated bike lanes placed behind the curb are preferred, reduce maintenance and construction costs, and easier to maintain. Raised separated bike lanes should have visual and tactile separation between bicyclists and pedestrians.

Admittedly, this is bike lane guiding principle, and as a consequence, we have -- in the total body of the guiding principles moved this to the bikeway selection section. However, it's important here because it's talking about how this is a way to reduce maintenance to make a better selection when it comes to what bikeway you're putting down. Okay, no comments? Number 8.

District bicycle and pedestrian coordinators with area office and maintenance staff should communicate with local jurisdiction on upcoming maintenance projects. For example, restriping. To evaluate the need, type, and location of bicycle facilities to complete local bikeway networks.

>> Weaver: I put in the chat about this one, about what is the timeline for plans to be approved? Bonnie responded she thinks it may be different per district. And I think they're on three-year rolling windows, it might even be four. So, I feel like everybody needs to -- do you know your district's maintenance schedule. My answer is no, and I've been in the same district for 15 years.

So it probably would be helpful to talk to the districts and say, when do you need feedback on this, and maybe you could have an annual meeting where you sit down and go over the upcoming roadway projects for the next year and then superimpose that with your bike plans.

And that way you can sort of try to sync those things up for what's coming. That would be -- we've talked about having that meeting, but I don't think we've ever done anything up in Dallas-Fort Worth, at least.

>> Seifert: I think it's a good best practice. It's my understanding, based on discussions with the maintenance division, that districts submit an

annual proposed budget and list of projects for every year, and then the maintenance division distributes dollars based on need across all 25 districts.

Another thing, and maybe someone could add this to the chat, is the project tracker on TxDOT's website. You can actually filter by district and by type of project, and if you do maintenance in your district, you can identify all the maintenance projects in your district. And that's updated pretty frequently. There we go. Bonnie took care of it.

>> Weaver: Awesome. Thank you.

>> Seifert: Yeah. Next slide.

All right. This is our last one. And it is -- had the most controversy. So let's read it. Number 9. Right-sizing projects, known as road diets, are roadway reconstruction projects involving travel lane reductions. When implementing right-sizing projects for the purpose of adding bicycle accommodations, consider public involvement, safety evaluation, and vehicle traffic flows. Road diets are a FHWA proven safety countermeasure, and when applied in appropriate conditions, road diets can improve safety, calm traffic, and provide better mobility and access for all road users.

See FHWA's website for more information, and that is an active link.

So you can see in these two graphics figure 7 at the bottom, an example of how you can incorporate bike -- on-street bike lanes by shrinking width of roadways, and figure 8 shows the example of how reducing the number of lanes can also provide space on the roadway for bike lanes.

>> Weaver: So, Carl, is the idea here that if a community already had planned a road diet, they should coordinate to have that completed as part of a roadway maintenance project or new overlay coming in? And just do them at the same time? Is that the tie-in? And what was the controversy everybody had?

>> Seifert: That is what we certainly started. You know, FHWA has a whole manual on road diets. It's had another manual on how to incorporate bike lanes during maintenance projects. And I think both of those are really good guidance documents.

And so the point of this guiding principle is to highlight some best practices that should take place. And I think several of our working group members talked about some of the ways that they have seen this be successful in their district, in their areas. And some ways it hasn't been.

Because when you're reallocating roadway space, it certainly affects the motor vehicle population for drivers. And so it's important to have a well-rounded, well thought out approach to how to do this. And there's some good guidance in FHWA's information about what types of roadways are best suited for this, with, like, speeds and ADTs involved.

And I think the other thing is that language is a big deal here, and so right sizing is I think a good term to use, instead of road diets, because no one likes diets.

>> Weaver: Right. Well, this one's a little tricky, because I could see a community wanting this, but it may not be on TxDOT's radar. So, is it the community's job to have that public involvement and to get feedback on the options, and -- because if the State just has a standard maintenance project coming up, but maybe there's a comprehensive plan or this is in someone's ETJ, and this was their vision for it, you know, how did they connect the dots and do that leg work for the state?

Or is that state's role? I wouldn't think so. So how that gets determined is maybe still a work in progress.

>> Seifert: Certainly if it's on TxDOT's roadway, then, you know, early communication is always really important. And I know there may be new processes in place at TxDOT to seek approval of road right-sizing. So that is -- early coordination is definitely important.

>> Schultz: So I can jump in real quick with a good example of this. The city of Waco had a corridor study for 17, 18, 19 streets that they commissioned. 18th street is a TxDOT road. They came in with a maintenance project because there was good communication between the city of Waco and TxDOT, they were aware that as part of that corridor study, it included a road diet or a right-size for segment of that roadway with the buffered cycle lane.

So because they knew about that study, they were able to implement the city's preferred design for part of that project. So that's a good example of where it worked and where we got that in.

>> Weaver: Yeah, that's great.

>> Seifert: Did I answer your question, Karla?

>> Weaver: Yes.

>> Seifert: Okay. Just checking. Okay, next slide.

So, this slide and the next slide are only here to have all of them as close together as possible in case we needed to look at specific language or needed to refer to anything. So go ahead and go next slide, and then we can go one slide after that, too. I think slide 11. Perfect. 10. You got it.

So, we had some discussion along the way. I didn't hear very much dissent. So, Karla, I'm going to turn it over to you. The action item for this portion of the presentation would be to support the interim guiding principles for bikeway maintenance.

>> Weaver: Yes. All right. Thanks, Carl.

So, we've heard the last section presented today on bikeway maintenance. We can take a quick action item vote for this particular section, and then I think we want to take action on the entire document being supported by the committee.

>> Seifert: We'll do that separately.

>> Weaver: As a separate action? There's an additional slide for that. Okay.

So I am asking for a motion to support the interim guiding principles for bikeway maintenance that were presented here today.

>> Church: This is Eddie. Motion to support.

>> Weaver: Okay. Eddie is supporting. Bobby, do you want to be my second?

>> Gonzales: Well, I'll definitely second that. And I just want to say, first of all, thank you to Carl, TxDOT staff, and obviously the working group on this effort. We have put in countless hours on this effort, and I would like -- obviously, I would definitely like to support this.

So I definitely second it.

>> Weaver: Thank you, Bobby. All in favor, say aye.

[Ayes]

>> Weaver: Any opposed? All right. The ayes have it. So the interim guiding principles for bikeway maintenance passes.

>> Seifert: Great. All right. Next slide. And I'm looking it's 5 until 11:00, so I'll try and go as expeditiously as possible. So as I said, I'm not going to go over the guiding principles, but I'd like to highlight a few. Next slide.

So, guiding principles were in four different sections. I just want to highlight the general topics that were in here and point out that a number of the maintenance items got switched around because they were really talking about green pavement markings, so they got put in that section, or they were talking about bikeway selections.

So in the bikeway selection section, there's some really solid guiding principles, which I think Ken highlighted how they've already been incorporated. So I won't spend too much time.

Bikeway accommodations are considered on all transportation projects. There was only two exceptions provided in the guiding principles. One was the when bicycles are not allowed on that roadway, and two is when the distance between low population centers means that the likelihood of a cyclist being there is not possible. Or not likely. Not high.

And then design user, Ken talked about bikeway width and separation from travel lane. I think he did a good job of talking about how certainly more separated facilities are more desirable. Next slide.

Another slide about bikeway selection. Just pointing out that there was elements about context sensitive bikeway selection, and that there should be a number of inputs considered, and those be the users, the context, how it's connected to network, roadway characteristics, et cetera.

Ken mentioned some restrictions that have already been put on when shared lanes are appropriate. That I think is huge, and the guiding principles are actually a little more concise about that. But I think it still is an effective outcome.

And then rural roadways. So we do have a statewide network of tourism -- bicycle tourism trails, and the good news is that those guiding principles and how they've been incorporated thus far means that roadways that feature those must include a bikeway.

Okay, next slide.

Ken mentioned the rumble strips. All the guiding principles indicated six feet or more of clear space to the right and also talked about where the location should be on or adjacent to the edge line and that rumble bicycle gap should be included.

And in particular, the type of rumble strips that were included in the guiding principles were PPMs and milled-in, and there's some pictures there.

Lastly, we had a lot of discussion about green pavement markings. I think there's several of them that got all the way into all of the guiding principles, and those are important. We talked about future research to help the future application of that, because there's still a number of different technologies that are being used. Some of them have advantages in certain applications than others.

And we talked about where they should be used, in particular at conflict points with smaller footprints to, again, increase that durability and reduce maintenance issues.

And lastly, as that research comes out, training should also be involved to make sure that on the front end, what we're putting in lasts the longest.

A good use of dollars. Next slide.

Okay. Now, the BPAC members have a copy of all the guiding principles. It's the colorful PDF. And those should match the colors in the presentation. I know you guys have been bugged by us to review those before the meetings, even though we didn't go through all 33 of them.

I do ask you to please take an action to support all bikeway design guiding principles.

>> Gonzales: Carl, this is -- oh, sorry.

>> Weaver: I was just going to say, so, thank you, Carl, for that presentation. I am looking for a motion to approve to support all bikeway design guiding principles.

>> Gonzales: I make a motion to approve all of the bikeway design guiding principles.

>> Weaver: Thank you, Bobby. Do I have a second?

>> Church: I second that motion. This is Eddie.

>> Weaver: Thanks, Eddie. All in favor say aye.

[Ayes]

>> Weaver: Any opposed?

All right. The motion passes unanimously. Nice job, everybody. Thank you for all your hard work on this item. This is very exciting.

>> Seifert: I also want to personally thank you all, because I feel like I've been trying my best to lead this and nudge everyone for a couple years now. So thank you so much for your support.

>> Gonzales: Thanks, Carl.

>> Weaver: Thank you, Carl, for keeping everybody on task and keeping it moving.

Bonnie is going to give a quick presentation on the TxDOT safety task force pedestrian and bicycle subcommittee, which is new, and she's going to tell everyone a little bit about it. Bonnie?

>> Sherman: All right. While the presentation gets uploaded, if you recall at the beginning of the meeting today, I presented some pedestrian and bicyclist crash data. And while other crashes involving people walking and bicycling have been declining, fatalities of bicyclists and pedestrians have continued to grow.

And in the case of pedestrian serious injuries, also continue to grow when looking at the crash data.

So, we have an important new effort where the bicycle and pedestrian advisory committee's participation and advice is being specifically requested. TxDOT has a safety task force that is led by TxDOT's traffic safety division director, Michael Chicone, and involves an interdisciplinary team of TxDOT leadership as well as some involvement with some commission members, in support of TxDOT's commitment to the road to zero.

So, a new pedestrian and bicycle safety subcommittee is currently being stood up to support this effort. Next slide.

The goal of this subcommittee is to work with its members and the BPAC to identify data-driven, outcome-focused recommendations to the safety task force on a series of actions that hold promise to effectively reduce pedestrian fatalities. The membership will include Karla Weaver, the BPAC chair, myself representing Public Transportation Division, some staff from the design division at TxDOT, safety traffic division, and four district

staff.

This is just being stood up, so we have some potential tasks to undertake. The first activities of the subcommittee are envisioned to try to link TxDOT research, crash analysis, planning, and countermeasures all together.

We will start by looking at recent TxDOT research on pedestrian and bicyclist crashes that you will hear more about from Tom shortly.

We will also be considering NCTCOG's recent adoption of their pedestrian safety action plan. Hopefully, Karla will be able to present to this committee on that in the future. We're really excited about that. And it also utilized TxDOT crash research in developing their priority corridors.

And we will also be identifying potential countermeasures in a pilot for TxDOT's Fort Worth district in high-risk pedestrian corridors.

We plan to engage the bicycle and pedestrian advisory committee throughout the next year to understand walking and bicycling safety needs and issues, learn about local methods for pedestrian and bicycle safety analysis and programs in your communities, to get your feedback on our approach and the identification of high-risk corridors, and to get the word out in your communities once we have some recommended actions.

Future activities could potentially involve systemic safety analysis and countermeasures.

So, with that, this is just a quick overview. Last slide. This is just a quick overview of this mission critical effort and the committee's anticipated involvement. Do you have any questions for me on this effort?

>> Garcia: I do have a question. This is Eva. Specifically, I believe there's Texas Traffic Pedestrian Safety Coalition, so we'll be working in coordination with their efforts, or do we have more information? That was a consideration.

>> Sherman: Okay. We have not discussed collaboration with the Safety Coalition, but we will include that in our consideration for the efforts that we undertake.

>> Garcia: Okay, great, yeah. And I'm not sure if there's like a traffic safety one. I know we have a regional one here, traffic safety passenger -- traffic and passenger safety coalition. But, yep, just basically wanted to bring that up as a consideration for moving forward. But I think this is great. Clearly a need with the rates that you shared at the beginning, which I immediately shared with my coworkers here.

So, thank you for pushing this forward and prioritizing it.

>> Sherman: Thank you, Eva.

>> Weaver: Other questions or comments for Bonnie?

>> McManus: This is Clint. I'm just curious now that we've kind of wrapped up the bikeway design recommendations that came out of the strategic -- or it seems like it came out of the strategic planning document and work that y'all had done.

I'm curious if there's any intention to stand up another working group of the committee to tackle anything else, or if that was just a specific approach for the one -- the bikeway design guidance, or I don't know if y'all have given any more thought to that.

>> Sherman: Do you mean a separate working group of BPAC members to support this subcommittee?

>> McManus: Well, that -- not support this, or if there's some other component of the work that needs to be done that would benefit from a working group. Like I said, I'm not sure what that would be. I know that we kind of -- we've submitted some ideas about next steps for the committee or things that we can work on.

I just didn't know if there was a need for -- I found the working group effective. I hope -- I mean, I know it's a lot of work on your end. A lot of staff time. It felt like we were doing something productive, and it's nice to see the impact of it on the work of TxDOT as a whole.

So I just didn't know if there were plans to stand up any working groups for anything else like that.

>> Gleason: This is Eric. I think we have found that the working group model is a great way to sort of advance work on topics in between the quarterly committee meetings.

And so, yes, I would assume that we would consider more working groups as the committee moves forward to whatever the topics are. I think it's been a useful model for us, so you can expect more of those.

>> McManus: Great. Thank you.

>> Weaver: All right. Anything else about the safety task force pedestrian and bicycle subcommittee? It was a possible action item. I think at this point, I don't think we need to take action on it. So I will move us on to our next presentation. Thank you, Bonnie, for that update.

And as Bonnie mentioned, we'll keep committee members aware of what that subcommittee is up to and kind of information coming out of it or tasks or other things. This is a great place to communicate that to you guys so you can bring it back to your parts of the state.

Our next presenter is Mr. Tom Schwerdt -- hopefully I said that correctly, Tom. Tom is with TxDOT, and it scrolled down -- I had your information right here. Tom is the Research Project Manager at TxDOT's Research and Technology Implementation Division.

So we had talked a couple of months ago about -- we know TxDOT is working on a lot of different research and different topic areas, some of it being Bike/Ped related. So how do we come out about everything that's come before and where that's archived and what we can learn from things.

So Tom is going to tell us I think about their program and some recent projects, and Tom, we look forward to hearing from you. Go right ahead.

>> Schwerdt: Thanks, Karla. I don't pretend to be an expert in bicycle and ped activities. I'm one of the enthusiastic but interested and concerned users in that chart. Like many people, I have been cycling a lot more over the past year.

So, yeah, most people don't even know TxDOT has a research division. And the nutshell is we typically have about 150 active projects, with six project managers overseeing about 25 each. Next slide, please.

So, briefly, we'll talk about RTI and the research process and hopefully, you know, you get interested in being involved. I'm going to go over some completed research over about the past ten years. A little more detail up front, and then just kind of fairly quick snippets after that.

Current research, and then a final thought. Next slide, please.

So basically, three things that we do. Research projects, which is first, figuring out answers to problems. Implementation projects, that's taking

the answer and implementing it, making it happen in a widespread way across TxDOT. And we also do a product evaluation. TxDOT has a lot of approved materials list, a producer list, and things that have categories of things that TxDOT buys.

However, when there's something new, RTI will often evaluate the product, or at least we coordinate the evaluation. RTI coordinates the efforts. We're typically not the experts on what's being researched. We have somebody like Bonnie would be on, you know, one of the committees, or we can have somebody from NCDCOG or some other governmental group as advisors.

And then we oversee the work the university is doing under the guidance of those experts. Next slide, please.

Again, RTA runs the process. TxDOT as a whole selects the research, topics, proposals, and monitors progress. RTI doesn't actually get a vote of any selection in the project. We run the process to make sure it happens openly, fairly, and helps solve our issues.

So the first step is seeking problem statements for Texas transportation problems. And I'll tell you how to do that a little bit later. But anybody can submit a problem statement. Anybody. If you think there's a problem that we don't know the answer to, that's research.

So, we then select the best ideas for the annual research program. Select the best university proposals to actually solve the ones that we want to pursue. Fund and oversee that university research for a solution. Publish the results. And then hopefully, we implement the successful research back into Texas Transportation.

So, implementation means it's going to become a standard or accepted TxDOT practice after we prove the research once in the field. We use a scale called technology readiness level, which I can talk about some other time or offline. I don't think we have time today.

But when the research is done, we'll implement it as a standard test method, plan notes, something that TxDOT will use on a regular basis. This could be a handoff to another division. You know, if the research is pretty self-explanatory and the division knows how to take it and incorporate the guidance, great, we're done.

And also, RTI can lead a project with the university, which will often have implementations across multiple districts just to show how it works, get the word out a little bit more, that sort of thing.

So, again, anyone could submit a problem statement. Is there a solution that we don't know or it's unproven? We think this might be the answer, but we don't know. Could we do research to find and verify the solution? Just fill out a problem statement.

There's a link there, but what I actually do, I just Google TxDOT RTI forms. Even though I'm in RTI, that's the easiest, fastest way for me to just type that in my browser, and done.

One aspect, having a TxDOT champion is really important selection. It's on the form, but a TxDOT champion is someone within TxDOT, they believe in the idea, and they'll be the lead for the research oversight.

They don't even have to be an expert in the area, but they have to believe in the need and help us find other people to be on that oversight group to make sure that this goes in the right direction. Next slide, please.

All right. Any questions on the process before I go forward and start covering some projects? All right, hearing none, I'll presume it's effort. Next slide, please.

Okay. So, this is one that was a multi-phase. I think it's good to show how things can grow from an initial problem statement. If you look up top, there's a link -- there's an address, all of our reports at Texas CTR library, transportation library that we partially fund everything that we're doing. Now, typically there's a delay in actual publication, but you should at least be able to see current projects, what they are and get in contact with an RTI project manager.

So, this was project 0-6875. And that number is a good key if you ever want to look up more about a project. The autonomous and connected vehicle test bed to improve transit, bicycle, and pedestrian safety phase 1. It wasn't called phase 1 at the time, but that's what it ended up being. Fairly short project. Started out with identify safety issues, potential solutions with automated connected vehicles.

Examine some CAV case studies. Piloted one collision avoidance technology. But the important part is developed a plan for a connected and automated vehicle test bed related to bicycle and pedestrian safety. Next, please.

So, based on that plan, we got to phase 2 of the same project, which ran for another couple of years. We did preliminary testing of multiple technologies to alert pedestrians about vehicles coming onboard, outreach to a wide variety of user groups, including Spanish-speaking, wheelchair users, visually impaired users, hearing-impaired users.

And developed a test bed smart intersection to alert pedestrians of an approaching bus in a controlled test area. This is -- was it TTI in College Station, controlled area, not open to the general public, but it's constructed as a mock-up intersection. So we can test how things work.

And one of the big conclusions that users like having multiple methods of getting short alerts, audio, visual, and smartphone, were the top ones. All right. Let's go on to phase 3. Next slide, please.

So. Next one, deploy the smart intersection in a real world roadway. Once we get out of the test bed, we think everything is working right. We take it to the real world. And that's in College Station, George Bush, and Penberthy Boulevard. It's just wrapped up. Hopefully the report will be published soon and you can find that report and all the other ones at that CTR link up at the top.

All right. Next slide, please.

All right. So I'm going to talk about some detection projects we've done. 6434 was developing and prototyping a video detection system for vehicles and pedestrians. This was back in 2009 to 2011, when it was a lot more new. You know, we kind of understand this better now.

Personally, I really like noncontact detection systems rather than the push buttons. This next one actually got put in here twice. The CAR-STOP program was testing what they call frameworks for advanced driver assistance systems, so how you set it up, including pedestrian detection. It was done by combining camera with radar or lidar. Something I've heard about recently is using thermal imaging, because pedestrians and cyclists are typically warmer than the surroundings, especially at night.

It can make it a lot easier to spot them.

6934, this was basically evaluating controller settings. It's a whole selection of methods to detect both vehicles, pedestrians, bicycles, and they looked at radar, infrared, wireless, and hybrid.

All right. 6927, evaluation of bicycle and pedestrian monitoring equipment to establish collection database methodologies for estimating non-motorized transportation. Usually the proposers use very long titles for these things, but it is what it is, and usually it's descriptive.

So this was basically to develop and pilot a count monitoring process, establish a consolidated database, perform counts at a couple locations and evaluate and incorporate crowd sourced and other data sets, which, you know, something like Strava, which has its own challenges. You're obviously not getting every user with that.

But it's more broad-based than setting up count locations. Count locations better getting numbers, but you know, there are only so many you can set up for so long.

And then following that was the actual implementation of that project. The project number changes a little bit, but we keep that 6927. And that was conducting some training webinars and developing in-depth training that's available on the TxDOT web page to get the word out about this. Next slide, please.

All right. Design and planning. A while back, ten years ago, we did a synthesis of successful bicycle planning in midsize cities. So a synthesis is when we go look at other research that's been done, and bring it together to find best practices. Instead of doing original research, it's looking at what has been done, what's the current state of the practice, that sort of thing.

6810 was to develop slip lane designs, balancing safety and mobility of all users. So instead of just looking at motor vehicles for right turn slip lane, it was to incorporate, you know, needs for cyclists, pedestrians.

And 6840, shoulder widening need. This was to evaluate the shoulder suitability for pedestrians and bicycles, which we talked a little bit about with the chip seal with the size of the rock. But also, primarily to identify candidate locations, which could have shoulder improvements, which are needed.

All right. Development of pedestrian crash countermeasures and appropriate crash reduction factors. So basically, this is, you know, determining or developing effective approaches to reduce pedestrian involved crashes. And assign an expected percentage reduction for each of these approaches. 6402. We did those right turn slip lanes. We also looked at left turns.

This was providing guidelines for design to better consider pedestrian demand and safety for turning and design. That was incorporated in the traffic signal operations part of the project.

And then there was the implementation project, where we had workshops to get the word out for the people developing and implementing these intersections.

And we've already looked at this one, but CAR-STOP is neat. It was trying to figure out better ways to detect and avoid cyclists and pedestrians with connected and automated vehicles. Kind of an important topic now. Most of you may have heard about the Uber test where a cyclist or

pedestrian walking a bicycle was hit during testing. Next slide, please.

North Texas bicycle and pedestrian crash analysis, wrapped up a year ago, which was to code five years of crash reports analyzed to identify areas with unusually high crash incidence. Once we have the data, take it, and figure out where the real problems are, and then evaluate what were the contributing factors and what safety countermeasures could we take.

6703 is a marginally related, it's prevention of backing fatalities in construction work zones. It's more often the workers rather than the public, but it's sometimes the public at the edge of the work zone. It was to review current best practices, identify and review proximity warning systems. So kind of like the backup alert on your car that tells you when you're getting too close to somebody.

And then develop a method for selecting one of those warning systems. Typically with the research, we're trying to set up a structure for TxDOT to then do that evaluation. Sometimes we'll evaluate individual technologies, but it's often setting up a framework or setting a method of how does TxDOT do this going forward. Next, please.

All right. Current projects. These are just titles for you, because they're under way, and we don't have a lot to share about them yet, although we can get you more information if you're interested. Addressing bicyclist safety through the development of crash modification factors for bikeway facilities. Kind of hearkens back to an earlier one looking at different types of bikeway facilities and crashes.

I know we talked about green pavement markings. There was analyzing the use of green pavement markings for intersection safety nor non-motorized users that's going. We can also look at durability. That should also be crossed over with normal pavement marking materials.

I mean, just because it's green, thermo plastic, the only real concern about it is color and skid resistance compared to normal traffic markings. So that might be an interesting project for someone to propose this year. It's coming up soon. Typically we have an annual selection that starts at the end of August, so you've got a little while to put together a proposal.

All right. So, 7048, identify risk factors that lead to increase in fatal pedestrian crashes and develop countermeasures to reverse the trend, and evaluate attachments to concrete barrier systems to deter pedestrians. You know, I expect many of you have heard about the pedestrians, like in downtown Austin, who try to cross I-35. And that's a problem.

All right. Next slide, please. Well, thank you very much for your support. If you have any interest in putting together a problem statement, I'd be happy to help. I can't be a champion for you. RTI doesn't do that. You need somebody within TxDOT who knows more about the area of expertise.

And then someone who's been cycling a lot. How can we improve this crossing? It seems pretty obvious to me. But, you know, for me, your sidewalk transition needs to be at least as wide as your crosswalk, right? You're kind of killing your access point down to a very narrow area.

If it was full width, you could have a wheelchair going each way. Or someone with a cargo bike going each way. And the way the current -- if you narrow it down that much, you're down to just one.

All right. Any questions or comments?

>> Weaver: Any questions for Tom?

I will say that we submitted a research project, North Texas pedestrian safety analysis. At the time, Terry Kaplan was our champion, our previous advisory committee staff lead, and then Bonnie took her place.

But then also our district Bike/Ped coordinators were onboard. So, talk with folks in your districts and your Bike/Ped coordinators especially, and they may be your champions. If you want to test out and do there research within your part of the state. It worked out really well for us. There's no way with our own research capabilities we could have coded all of that data. It was thousands and thousands of records.

So the research arm of it is just really interesting, and we learned some really cool tough about the impacts of nighttime fatalities, which was our number one factor. Demographics. Just some really interesting things. And now we're going out and doing roadway safety audits on our top ten most dangerous corridors for pedestrians.

So really going to take that research and kind of launch it into, can we fund improvements, can we look for patterns to get out ahead of it in the future and existing infrastructure. So we're really pleased with the outcome.

>> Schwerdt: And usually the selection committee is quite receptive to projects coming in from the districts. Divisions, too, but having seen the process and actually run it one year, there seems to be a little extra emphasis on someone coming from the district who says, hey, this is a real problem we have out in the field.

>> Weaver: Yeah. All right. Well, thank you, Tom.

>> Schwerdt: Thanks. I see there's been some chat. Maybe that was just for me.

>> Weaver: People are dropping the links to get to the research forms. And then there are some thank yous.

>> Garcia: An extended thank you. To look at the research that you've done and think -- it's just good to be informed about the other divisions and the work that contributes to our work and our participation here. So, thanks so much and I'll look into submitting a form potentially for the future.

>> Schwerdt: Happy to help. If somebody would like help filling out the form for problem statement, let me know.

>> Weaver: We are near the end of our agenda. We're going to wrap up a couple of items. We always go around and talk to everybody on the agenda and see what's going on in your part of the state. I think, Eddie, I know you're about to jump off. Do you want to mention one or two items really quick? Or do you need to go?

>> Church: Oh, yeah, thank you. That's awesome. I'm putting my video on so she can see.

So, we have 15 projects right now in construction, and seven of them have ped crossings with ped buttons and facilities. I'm estimating. Maybe 20 to 30 in design and maybe half of them have pedestrian facilities, because they're within the city limits of Round Rock, Cedar Park, Leander, or Georgetown. A lot of pedestrian stuff.

In the beginning, I was so excited because of cycling, but now I'm excited because of pedestrian. Call it the BPAC for a reason. I like that.

So, thank you, and if anybody has any questions about Wilco or maintenance or rock, just let me know. I'd love to talk about construction any time. Thank you for all your hard work. That's it.

>> Weaver: Thanks, Eddie. Safe travels. Bobby, do you want to go next?

>> Gonzales: Sure. Thanks, Karla. A couple of things. 2020, it was a bit challenging, to say the least. But some of the positives that came out of 2020 was that it was an increase in Bike/Ped activity. However, in terms of design and implementation of bikeway facilities or projects, it was obviously a little bit slow, but it looks like this year, several of roadway reconstruction projects are on the front burner. So that's good.

So we're excited about that.

So the other thing I was going to say is that our firm has recently designed for and implemented for bike pop-ups in El Paso and some of the outing communities to test new strategies in specific areas.

And we put down temporary paint, and we get the communities involved, neighborhood associations, and the municipalities obviously. And we get their support and buy-in for these types of facilities before they are actually implemented. And they were received very well. They were successful.

And so we're happy about that and we're continue to do some of these. And we're actually doing a couple more, but in New Mexico, because it's -- we have -- we're really close to the border with New Mexico. So part of our work is actually in southern New Mexico. So we're kind of doing some really fun things out here.

So that's all I have, Karla.

>> Weaver: Very cool. Those pop pops sound great. I'd love to learn more about the type of paint that you're using and how it's working coming up and those types of things.

We had some community advocates that didn't really coordinate with the city, and they did a kind of overnight kamikaze bike lane, but they used the wrong kind of paint and the city couldn't scrape it up, so that created all kinds of problems.

>> Gonzales: What we're doing on some of these is just chalk.

>> Weaver: Okay.

>> Gonzales: Because we were having the same issue. The first one we did, the cities were having a hard time with the paint. So we went to this chalk. And actually, they have chalk spray paint, too. So what we've been doing is using it, and then the street folks just go out and wash it away.

>> Weaver: Very cool, very cool. All right. Thanks for that update. Eva, you're next on my list here across the top.

>> Garcia: Thank you so much. I guess our update is that our RGV MPO call is closing at the end of this month, so we're excited to work with partners. We've had some projects that I guess as we're coming to the end of the fiscal year are at lapse of funds, so we're making sure all of the documentation is ready to submit those requests.

And then just basically just working mostly on that. Infrastructure-wise, as far as programming, we are tentatively awarded traffic safety funds. I need to fill out some forms and do an interview, but

we're hoping to have training for law enforcement officers and for project managers and planners in the region.

It would be two each for each type of -- for each category, and I'm hoping the look deeper into the research and countermeasures and following the group because it would be really helpful, maybe to get some technical assistance, or just assist with developing an agenda when we're able to start that grant program.

So that's the three bullets on our end. Thank you so much.

>> Weaver: Very cool. Trent, any items for you from Tyler?

>> Brookshire: Thanks, Karla. Not much else from me. The bike striping project that we did is completed, and -- or it's mostly completed, and I think it's going well. I think we still need to work -- I'm going to talk to our MPO office here about gathering more data around the actual usage.

But nothing very much else from me, other than just want to reiterate my thanks for everybody on the committee and their hard work that's being done, and I look forward to seeing the work in the future. And will miss seeing you guys once a quarter.

>> Weaver: Us, too. Thanks, Trent.

All right. Mike, you're next. Anything exciting in Austin you want to share?

>> Schofield: Yeah. Lots of exciting stuff happening in Austin. One recent top of mind is a couple years back, we got a grant from people for bikes for their final mile challenge, which was a challenge to get 100 miles of all ages and abilities bikeway facilities down in two years.

We got a six-month extension on that commitment because of COVID. As of this month, we hit that 100 miles with -- along with our partner agencies, I'll have to say, including TxDOT, because they had a good number of those miles as well with some of their shared use sidepaths, which is great.

Besides that, we're staffing up for all of the work to come from the compositions A and B that passed all-star year. We got 460 million in funds for lots of things, sidewalks, bikeways, urban trails, safe routes to school. So lots of bike and ped funds that were going to need to have more staff and design capabilities to get that all built. That's kind of our next eight years or so. Lots of good stuff coming up.

>> Weaver: Sounds like some job security there, Mike. That's exciting, though. And congratulations on the 100 miles. That is not easy to do. Tipping my hat to y'all on that for sure.

Clint, any items you want to share from the Houston area?

>> McManus: Sure. We've got a lot of really cool agencies that are kind of pivoting from completing a plan or having -- dusting off a plan and moving that into a project list. So I know that Houston parks board, who has done a lot of our bayou trails in the last several years, they are starting to look at how to connect those more south through some easements, things like that.

So I believe they're beginning to look at which projects would come first, and identifying priorities there. Harris County precinct 2 is doing something similar. And then the county as a whole is also trying to figure out how to more equitably spend their mobility dollars. They're going through a planning process right now to determine project criteria for that.

And that includes more allocation to projects like sidewalks, bikeways, and transit access. So that's super exciting. And precinct 1 continues to build on their bikeway network. And then the city is also doing something similar. They are in the process of also figuring out which bikeways should be prioritized from the bike plan, so that they can get rolling on implementing those.

And I know that our city's bike advisory committee is also finalizing their bike maintenance plan. I don't know the details on that, but it would be good. I'm excited to compare that against what we talked about today.

And then I did also hear from the city that after we adopted the Vision Zero action plan six months ago, and so far, 12 of the 13 priority actions in that plan have been initiated. So they are -- they're doing a lot of work over there. It's really great to see.

>> Weaver: Great. Those all sound like exciting initiatives moving forward.

The bike maintenance plan for the city, I would be very interested in that, if that's something you could send to Bonnie to distribute to us once that becomes available. I think that would be a great resource.

>> McManus: Sure, yeah.

>> Weaver: Cool, thank you. Frank, you're next on the list. Anything to share from your part of the world?

>> Rotnofsky: Sure. A couple of things. I know they're baby steps, but they're also milestones for us. The city activated our first bike pedestrian crossing signal, connecting a newly developed hike and bike trail. So, very excited about that. It's the little things, one by one, that we're hopefully getting going in our city.

And also, something that's pretty exciting for us, Texas A&M International University, it's our only University here in Laredo, joined our Bike Laredo group as well as our MPO active transportation committee. And we're working with them on incorporating an outdoor activity program. Obviously, like everybody else being shut down and shut in over the past year, they went from their rec sports program and looking at things to do outdoors.

And so one of the major focuses, which is no surprise, has been cycling. And so we're working with them right now on developing a smart cycling curriculum for the fall for their students. As well as we're working with the league of American cyclists on getting some of their faculty, you know, certified instructors.

And they want to develop a program at the campus. And that's -- those are the kinds of seats that we need, as we know, to continue to grow our cycling culture here. So, we're pretty excited about that.

>> Weaver: Very cool. Thanks, Frank.

Chelsea, what about the Waco area?

>> Schultz: We have a couple interesting things that we're doing on the planning end. The City of Waco Parks and Recreation Department is about a quarter of the way into a trails master plan, and they're expecting that to be completed by the end of the year. We're really excited about that at the MPO, because that dovetails really nicely with their active transportation plan that was adopted two years ago.

They're going to do a lot to make sure that the trails are not just

recreational, but can also get people to where they need to go.

The city of Waco's scooter pilot -- like, scooter share pilot program just ended its first year. The city decided to extend it an additional year because it's been really successful, and one thing that we're really excited about at the MPO is we just got our first batch of aggregated trip data from the scooter company, and that's something that was included in the contract language.

And the city's GISP created a dashboard for us where we can actually use the data and pull up some information on highest use corridors, times of day, things like that. I think it's a great product so far. And that's something that if anyone has any questions about how to do that, we'd be happy to put you in touch with our awesome GIS folks.

And then the last thing I want to mention, most people who are in the public sector, as a reminder to build relationships with your local health district. I've had a couple of really great conversations recently with some of our health education members and team members, and now that they're kind of coming out of COVID and have some resources available again, one of the things that they need to work on is an active living plan.

Which, again, is really similar to our active transportation plan. So we've identified a couple of really cool projects that I think we can partner on that will directly help us implement some of the recommendations in our kind of encouragement and education part of our active transportation plan.

So between all three of these things, I think we're going to be making really great progress on checking some of those boxes off and showing that we are implementing, not just, you know, infrastructure projects, but again, building that bike and pedestrian friendly culture. Excited about all those planning activities that are happening now.

>> Weaver: Very cool, Chelsea. Thank you for sharing. Yeah, health is an important component, one I wish we could do a little bit more on. It's sometimes a moving target in finding the right partners. I love to hear that you guys are making good progress there.

From the Dallas-Fort Worth region, a couple of things I guess I'll mention. We have several counters that we've purchased and have placed within various cities. We have an annual report that comes out on our count program. I believe our last report was published about two months ago for the 2020 counts.

And there's always issue with counters, if you're in the count game, whether it's maintenance, it's batteries, something goes offline, you've got to figure out what the issue is, and either you're going out there or we're asking cities to go out there, or somebody.

So we're working with our Vendor, Ecocounter, to come up with a regional maintenance plan, because it really throws off our reporting and our validations if we just have random, sporadic shutoff to the system.

So I think this regional maintenance will be very beneficial and our cities are really going to appreciate that and we'll just at one time have the batteries and the tubes and everything sort of on a schedule. And that way hopefully we have less periods of time where equipment is down.

The other thing that we're doing, I mentioned kind of briefly is as an outcome of -- we've adopted a regional pedestrian safety plan. That went to our policy board I believe the month before last for endorsement. So

we're actually updating our long range transportation plan with some additional policies that came out of that.

And one of them being a multi-modal level of service should be considered in coordination with all roadways.

And then we identified our top 50 most dangerous corridors in the region for pedestrians. And so for ten of those, at least ten of them, up to ten, we're going to go out and do roadway safety audits. Federal Highway Administration have agreed to come do the first one for us, which will be great. And kind of create the template for all the rest of them.

So if you're interested in roadway safety audits, Federal Highway has some great tools and a process, and we'll bring in the city, and I think the first test site is on a TxDOT roadway. So it's really getting all the stakeholders together to talk through that, so we're excited about that and seeing how to apply the countermeasures that we talk about in the regional pedestrian safety plan.

So if you're interested in that, we have a website, you can check out our plan. If you need any information, I'm happy to set up a call, if you want to do something similar in your part of the world. Or you may already have something. Maybe we borrowed ideas from you. Not sure.

We also just kicked off a project with Alta's design firm. As you guys know, Alta is one of the big Bike/Ped design firms in the country, and they're going to do a regional branding project for us. We have a trail, Fort Worth to Dallas, it goes through five cities, 64 miles, and it's completely funded. There's one last section under construction.

So, we're going to meet with those five cities and stakeholders, and we're going to put together, how do we brand the region, how do we keep your own identity, what are we connecting to, how do we get excitement about this.

And so we're really excited that that's about to kick off. Our kickoff meeting is in a few weeks. That will probably take about a year. We'll pick a name for the trail. We'll pick color schemes and signage. And as the region, we're going to start some of the funding for the implementation of the sign network as well.

So this will be a template for a lot of our trails that are cross-jurisdictional, we hope.

And then the final thing, GIS is always a work in progress, when you have a lot of trails that you're receiving from a lot of different communities. So, we're doing a lot of cleanup right now. And consolidating our GIS databases, and how people can enter trail information. So there's a lot of inconsistency among how they name things. This thing is capitalized, that thing is not capitalized.

Or just different attribute tables get all kind of variations, so it makes it really hard to run analysis. So we're coming up with a process that we're going to give to all of our cities and say, when you digitize your trail network, use this nomenclature, and make sure these files match, and we're showing them how to set up drop-downs, so there's no error -- user error in the system.

So that process will be distributed to all of our cities, and then we're using it up to clean up our -- like 11,000 miles of planned, built, and funded. So it's a lot. So I just got planners going through that dividing up the

counties and trying to weave through it.

So if you've got any GIS naming and kind of issues or problems, if you're interested in that process, just let us know, and we'll be happy to share that with you. We're going to be presenting it, I believe, at our next bike advisory committee for the region. Excited about that.

I think the final thing is, we're about to start a bike plan. We just got our contract executed with TxDOT for the city of Irving. It's the largest city in DFW without a bike plan. It's got over 250,000 people and they don't have a bike plan.

So this will be huge. It's a big doughnut in the middle of our region. We're doing that study in-house. And so we're excited to start meeting with the community and develop ideas and to get Irving onboard with the rest of the region. So, that's fun.

Okay. So, thank you, everybody, for your quick updates. I just wanted to remind everyone that, again, public comments are due to the virtual format of the meeting. They're being submitted to bikeped@txdot.gov by July 26th. They will be included in the meeting records. Please get those in by July 26th to bikeped@txdot.gov if you have any comments on today's meeting or the information that you've heard.

We have just a few minutes left, and we want to have a quick discussion on agenda items for future BAC meetings. So, I have a list here that was developed by our BAC team, and I want to go over these with you guys really quick, and see if there are any that is like your favorite or the one that you think you're really excited to hear more about, or you want to present on. Wink, wink, nudge nudge.

Because sometimes we need some presenters on these specific topics. Bonnie or Noah, is there a way to share this, or would you prefer me to just walk through the items? What are our best options?

>> Sherman: I think the easiest way, because it's being administered by someone else, is to just read it.

>> Weaver: Okay. So the first one is wayfinding and branding. I know I just mentioned that one. But if others have projects they want to talk about or you want to hear about, that's one of them.

I'm going to list kind of all of them, and then I'm going to open it up for discussion, and speak now or forever hold your peace on your most interested topics.

Wayfinding and branding.

Number two is neighborhood street designs/neighborhood bikeways. I guess how neighborhoods are being planned appropriately for bike facilities.

Number 3 is micromobility. So, where is micromobility at after the pandemic. You know, I think if we want to do this one, we need to do a survey amongst people on the committee. What's your own local information, are companies still around, what kind of infrastructure, do you have bikes, do you have scooters, do you have electric bikes. I think it will be different in different parts of the state.

If only one person's got something, maybe this isn't the best topic, but if everybody's got something, maybe yes. Maybe someone from the industry perspective comes and talks to us. We could go a lot of different directions on this if people are interested.

Number 4 is how is TxDOT positioning itself for the future infrastructure

bill. There was one that a member threw out for consideration.

Number 5 is ADA transition plans. What are they, who's got them, who doesn't have them. How are they being developed, you know, kind of general information there.

Number 6 is a round robin of local Bike/Ped projects. So maybe there's a pick your top 3 in your region. So everybody does like a quick, here are our coolest bike facilities or technology or whatever that is, and we just kind of learn more about stuff that's happening in other parts of the state.

Next to last is an update on the bicycle tourism trail. So, where are we at with that? How much of it is being built? Are we tracking that? Are the funds coming up that will be available for that? Kind of, are people making individual progress, or is the State going to have a push for that? That could be a topic.

And then finally, a presentation on Bike/Ped facility inventory. TxDOT's Bike/Ped facility inventory. So, I think this is TxDOT's effort to map where trails are versus on street versus bike lanes versus wide shoulders. So that was a lot of items. Any of those strike your fancy and you're like, this is the most interesting thing, we should dive into it?

>> Rotnofsky: This is Frank. Well, being that we've expanded to Bike/Ped, I think obviously we have a lot of great topics revolving around bicycling, but I think the ADA transition plan is important, really as we expand our scope.

>> Weaver: Good observation.

>> Garcia: I think ADA transition plans is pretty critical for accessibility. We want to have the network. Additionally, I think for our region, speaking here in the Rio Grande Valley, I think we also need a Bike/Ped facility inventory. So working with the State to follow best practices and guidance and ensure standardization or consistencies in some way would be fantastic.

And then third for me would be wayfinding and branding, which has been expressed interest from our municipalities here in the region, especially as we develop a more regional network and each city kind of has their own theme right now.

>> Weaver: Yeah, great.

>> Garcia: That would be the third one for me. Thanks.

>> Weaver: Okay, thanks, Eva. Two votes for ADA transition plan. Bike/Ped facility inventories. What that looks like at the state and local level. Wayfinding and branding. Anybody else want to weigh in?

>> Schultz: I would agree that wayfinding and branding has come up a lot in our MPO Bike/Ped working group lately.

I agree also on the ADA transition plan. And also just because I just talked about it and it would be interesting to hear what other folks are -- what their micromobility programs look like.

Particularly from my perspective, how the data from those programs is or is maybe not being used to inform Bike/Ped planning.

>> Weaver: Anybody else want to vote on what you heard or add your own? ADA transition plan, Bike/Ped facility inventory, wayfinding and branding, and micromobility.

I would add for me the update on the bicycle tourism trail is something

I'm interested in, because we've got a big chunk of it in our region. But all of you have got a chunk of it really. What are we doing with that. Do we need to be doing more at the local level? Does TxDOT have plans for the future? How is that being hosted?

To me that's one. We accomplish that as a grouper but is it now on the shelf, or will it keep going? To me, that's an important one to follow back up on.

>> Garcia: Just to echo you, I think that was one of the ones I forgot on the list. Maybe I didn't write it down fast enough.

>> Weaver: I'm adding your vote.

>> Garcia: Right, yeah. Add my vote, because particularly the area for getting USBR designation through Ashto, what is the approval process from the state, if our region and -- because our region is interested in designation, talking to local district staff. You know, currently, in my area, Cameron County had a plan for a route for USBR 55 and 255. But through coordination with our district, they expressed some interest in looking and getting public involvement or feedback on extending the proposed route into other areas within the far district.

So just FYI, that's a little bit of info in case we do get to discussing that one. Thank you.

>> Weaver: Okay. All right. Any other thoughts? If not, we'll -- hopefully that gives Noah and Bonnie and Carl enough information for several BPAC meetings to come.

All right. With that then, we are wrapping up the end of our meeting. Are there any other final thoughts, comments, questions, or anything people would like to say?

>> Garcia: Just thank you so much to the TxDOT staff who helps us with all of this coordination and all of this information. Appreciate it.

>> Weaver: For sure. They've done a great job getting ready for this meeting today.

All right. Well then, with that being the case, I will ask for a motion to adjourn today's meeting.

>> Gonzales: So moved.

>> Garcia: Seconded by Eva.

>> Weaver: All in favor say aye.

[Aye]

>> Weaver: All right. I hear -- any opposed?

All right. The ayes have it. Everybody have a wonderful weekend. Thank you for your time.