

TEXAS DEPARTMENT OF TRANSPORTATION

BORDER TRADE ADVISORY COMMITTEE
MEETING

EL PASO COMMUNITY FOUNDATION
1st Floor Foundation Room
333 N. Oregon
First Floor
El Paso, Texas 79901

Tuesday,
October 18, 2022
8:37 a.m. MDT

COMMITTEE MEMBERS:

John B. Scott, Presiding Officer
Rafael M. Aldrete
Jon Barela
Luis Alfredo Bazán
Eduardo Calvo
Eduardo Campirano
Andrew Canon
Sergio Contreras
David A. Coronado
Warren Erdman
John Esparza
Raquel Spinosa
Juan Antonio Flores
Dante Galeazzi
Cynthia Garza-Reyes
Jake Giesbrecht
Maria-Elena Giner
Illiana Holguin
Lisa Loftus-Otway
Marga Lopez
Mayor Bruno Lozano
Stan Meador
Juan Olaguibel
Jesus Reyna
Mayor Pete Saenz
Mayor Rolando Salinas
Gerardo "Gerry" Schwebel
Pete Sepulveda, Jr.
Megan Shea
Tommy Taylor
Sam Vale
Cameron Walker

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I N D E X

<u>AGENDA ITEM</u>	<u>PAGE</u>
Welcome and Introductions - Roll Call	3
Adoption of July 19, 2022, Meeting Minutes Committee adopts Minutes from last meeting	17
Recap of July 19th BTAC Meeting Recap of previous meeting key discussion	17
BTMP Implementation Status Update Status update	21
S.B. 1308 Final Draft Report Discussion of Final Report	42
I-10 & I-20 Corridor Study Update Discussion of Final Report	27
Texas Freight Mobility Plan Update Discuss the Draft Freight Plan	69
El Paso Region Border-related Technology Projects Local Infrastructure Presentations	99
Autonomous Truck Deployment and Operation in Texas Presentation of different Autonomous truck deployment and operations in Texas	130
Open Discussion - Future Meetings and Topics Discuss any outstanding issues and summary of action items and future meetings and topics	152
Adjourn	152

P R O C E E D I N G S

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
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SECY. SCOTT: We're going to get it rolling.

First of all, El Paso, I have been a lot of places in my life and thought I'd been there before. This has been the first time, I think, I've ever known what El Paso is. It is the best hospitality, the friendliest people I've ever met, and so thank you all so much.

This was wonderful. It's a new standard for anybody and everybody. I was telling someone earlier today that the difference in Austin is we go from one meeting to the next. This is properly "the meeting" and it's wonderful, so thank you.

Mayor, you've got a great city here. The county is phenomenal. This is great. So with that, thank you.

I'll pass it over here and we'll go to the next and then we'll do roll call.

MS. MAYS: Yes. Good morning, everybody, and I echo Secretary's comments about El Paso. Thank you all for such a warm welcome. I haven't been in El Paso for a while, but it was great. David, ET, everybody in El Paso for the warm reception last night, it really got people connecting, and that's what BTAC is all about.

I was talking to Commissioner a few minutes ago. And in the past what we would have done, we would

1 have had BTAC members here earlier, go visit the border
2 crossings, do a tour and then come to a reception, and the
3 next day have a meeting. So we're kind of getting back to
4 our game before the pandemic, but in the future when we
5 travel, definitely want to incorporate that again.
6 Because each of you in different border regions and
7 different border crossings, it's great to go see the
8 others as well.

9 So we just want to thank you all for welcoming
10 BTAC here and welcoming the team -- a full house, you
11 know, here. I want to thank the district, as well, for
12 being here. We normally do a lot of our work at the
13 district level, so thanks so much.

14 And the team that also helped us coordinate a
15 lot of this, because we don't do a lot of the planning
16 from Austin, they actually helped us do a lot of the
17 planning that we do right here. So we really want to
18 thank them for that.

19 Also, we want to do introductions, but I want
20 to thank all the elected officials that came last night.
21 It was really amazing to see the support, to show up, to
22 be part of the reception welcoming all the BTAC members.
23 You're going to hear from some of those elected officials
24 today, but a lot of them are not here today.

25 So just want to say welcome and we're going to

1 have a safety minute but I want to let you all know the
2 restrooms are right back here if you're looking for it.

3 (Safety presentation inaudible.)

4 MS. MAYS: So before I turn it back to the
5 Secretary, a couple of things. We do have some of the
6 BTAC members online. So please use the microphone,
7 otherwise, they won't be able to hear and participate
8 fully in the meeting. So make sure you use the
9 microphones throughout the meeting.

10 And, Secretary, I'll turn it over to Eduardo to
11 do the roll call.

12 MR. HAGERT: Good morning. Eduardo Hagert with
13 TxDOT. Good morning, Secretary, good morning, Mayor, and
14 BTAC members.

15 So I'll move to the roll call and I'll start.
16 Rafael Aldrete?

17 MR. ALDRETE: Rafael Aldrete with TTI, Texas
18 A&M Transportation Institute. Welcome to El Paso.

19 MR. HAGERT: Ramon Macias with International
20 Boundary and Water Commission?

21 MR. MACIAS: Good morning. Ramon Macias, IBWC.

22 MR. HAGERT: Luiz Bazán, or someone
23 representing the Pharr Port of Entry?

24 (No response.)

25 MR. HAGERT: Jon Barela?

1 (No response.)

2 MR. HAGERT: Eduardo Calvo?

3 MR. CALVO: Good morning. I'm Eduardo Calvo,
4 the executive director of El Paso MPO, and again,
5 welcoming everybody to El Paso. After bugging Caroline
6 for the last three years, it's so exciting to have BTAC
7 here. And welcome again, everybody, to El Paso.

8 MR. HAGERT: Eduardo Campirano, or someone
9 representing the Port of Brownsville?

10 (No response.)

11 MR. HAGERT: Andrew Canon?

12 MR. CANON: Andrew Canon, executive director of
13 the RGV MPO, and thank you for having us here. It's a
14 wonderful city to visit.

15 MR. HAGERT: Sergio Contreras, or someone
16 representing the RGV Partnership?

17 MR. SILVA: Good morning. This is Daniel
18 Silva. I'm the new president and CEO of the RGV
19 Partnership. Thank you for having us.

20 MR. HAGERT: Daniel Silva is his name.

21 David Coronado?

22 MR. CORONADO: Good morning. Present, David
23 Coronado, City of El Paso. Thank you all for being here
24 today.

25 And most of you that joined last night, I hope

1 you had a lovely evening. It was really great to see you
2 all in our Plaza Theater, our historic building. Again,
3 welcome to El Paso, looking forward to the meeting.

4 MR. HAGERT: Warren Erdman, or someone
5 representing KCS?

6 (No response.)

7 MR. HAGERT: John Esparza, or someone
8 representing the Texas Trucking Association?

9 (No response.)

10 MR. HAGERT: Raquel Espinosa, or someone
11 representing Union Pacific?

12 MR. MOELLER: Tyson Moeller, representing Union
13 Pacific, present.

14 MR. HAGERT: Juan Antonio Flores, representing
15 Port San Antonio?

16 MR. FLORES: Yes. Good morning, everyone.
17 Juan Antonio Flores here online, representing Port San
18 Antonio.

19 MR. HAGERT: Dante Galeazzi, representing the
20 Texas International Produce Association?

21 MR. GALEAZZI: Good morning. Dante Galeazzi,
22 president and CEO of the Texas International Produce
23 Association.

24 MR. HAGERT: Michael Vargas, representing Pharr
25 Economic Development Corporation?

1 MR. VARGAS: Michael Vargas, present.

2 MR. HAGERT: Jake Giesbrecht?

3 MR. GIESBRECHT: Yes. Good morning. Jake
4 Giesbrecht from Presidio, Texas.

5 MR. HAGERT: Commissioner Illiana Holguin?

6 MS. HOLGUIN: Good morning. Commissioner
7 Illiana Holguin, representing the Guadalupe-Tornillo
8 Bridge, present.

9 MR. HAGERT: Lisa Loftus-Otway, or someone
10 representing the UT Center for Transportation Research?

11 (No response.)

12 MR. HAGERT: Marga Lopez, or someone
13 representing Progreso International Bridge?

14 (No response.)

15 MR. HAGERT: Michael Garcia, City of Del Rio?

16 MR. GARCIA: Good morning, everyone. My name
17 is Michael Garcia. I am the assistant to the city manager
18 for the City of Del Rio, and I'm here with you
19 representing Mayor Al Arreola. Thank you.

20 MR. HAGERT: Juan Olaguibel, representing
21 McAllen-Hidalgo-Anzalduas International Bridge?

22 (No response.)

23 MR. HAGERT: Stan Meador, or someone
24 representing Texas Pacifico Transportation?

25 (No response.)

1 MR. HAGERT: Jesus Reyna, or someone
2 representing the Donna-Rio Bravo International Bridge?

3 (No response.)

4 MR. HAGERT: Arturo Marquez with the City of
5 Eagle Pass?

6 MR. MARQUEZ: Arturo Marquez, present,
7 representing City of El Paso today.

8 MR. HAGERT: Mayor Pete Saenz?

9 MAYOR SAENZ: Yes. Good morning, everyone.
10 Present, and good morning, Mr. Secretary and Caroline and
11 everyone else. Thank you so much.

12 MR. HAGERT: Andrew Sovanyae [phonetic], or
13 someone representing the International Bank of Commerce?

14 (No response.)

15 MR. HAGERT: Manuel Mendoza with BNSF Railway?

16 MR. MENDOZA: Good morning, BNSF.

17 MR. HAGERT: Tommy Taylor, or someone
18 representing Fasken Oil and Ranch?

19 (No response.)

20 MR. HAGERT: Sam Vale, Starr-Camargo Bridge
21 Company?

22 MR. VALE: Present.

23 MR. HAGERT: Cameron Walker?

24 MR. WALKER: Cameron Walker, Permian Basin
25 Metropolitan Planning Organization executive director.

1 This community has a special place in my heart.
2 I was naturalized here about 30 years ago, so El Paso is
3 very special to me. I'm glad to be back.

4 MR. HAGERT: Dan Serna, Cameron County Bridge
5 System.

6 MR. SERNA: Good morning. Dan Serna,
7 representing Cameron County Bridge System.

8 MR. HAGERT: And with this, we have quorum.

9 SECY. SCOTT: So I'm fixing to introduce the
10 mayor of El Paso to say a few words to us, but it's hard
11 to turn on your TV and not know who he is in the room
12 because he's on there all the time and does a phenomenal
13 job and has a phenomenal city. So with no further ado,
14 Mayor.

15 MAYOR LEESER: Thank you very much. And you
16 know, Mr. Secretary, it was an honor just getting to talk
17 to you. And the first time I got to meet you, and I can
18 actually tell you and honestly tell you just in the few
19 minutes I had the opportunity to meet and talk with you, I
20 can tell you that the State of Texas and definitely the
21 City of El Paso has a great friend, and somebody that
22 really cares about this state and the cities that
23 represent the state.

24 So what a great pleasure and great honor to get
25 to meet you and talk to you for a few minutes, and kind

1 of -- you know, you can meet somebody and in two minutes
2 or less you realize whether you like them or not. And I
3 can tell you you're a good friend, and you're a friend to
4 not only the City of El Paso but the State of Texas, so I
5 really thank you for that.

6 And with that I'd like to welcome everybody.
7 Unfortunately, I didn't get an opportunity to meet
8 everybody in here, but I do know a few people in here.
9 That's Commissioner Holguin, Mr. Barela, Mr. Coronado, and
10 Mr. Calvo that are representing the City of El Paso and do
11 a great job of representing the City of El Paso.

12 I know this is a border community so we talk
13 about what's going on, but we all have different
14 challenges. And you know, I've always talked about
15 challenges, and challenges are opportunities to make a
16 difference. So when we can talk to each other and talk
17 about what the differences may be and how we can continue
18 to grow together, it's really important.

19 So Ms. Mays, thank you very much for being
20 here. I know I've gotten to see you on Zoom so I get to
21 see you in real life.

22 And talking about that, Consul General, welcome
23 here. I know that it's important that we talk about
24 Mexico and the United States. Even during COVID, we
25 couldn't slow down here. That wasn't an option.

1 And whether we had to meet on Zoom, whether we
2 had to talk about, you know, the issues and the things
3 that we needed to do didn't stop and didn't slow down
4 because Mexico and El Paso, Mexico and our border cities
5 really rely on each other and how we can continue to
6 become good neighbors.

7 So I'm very excited that you chose El Paso.
8 And now after being here, I'm sure there will be no other
9 choice but El Paso every time, so I thank you for that.

10 (General laughter.)

11 MAYOR LEESER: But it's an honor for y'all to
12 be here and make El Paso your home for a few days. You'll
13 see the hospitality that's really made El Paso what it is
14 today.

15 I know that we all have our issues that we deal
16 with and opportunities. But I can tell you the things
17 that we've gotten to do in the last month or two months,
18 I'm proud of our community. Our community has stepped up
19 to help asylum seekers as they come into our country.

20 They've brought toys, food, clothing. And
21 that's what El Paso is about. It's a warming city, and
22 I've never been so proud to be the mayor of an incredible
23 city and now to host you all and to be here so you can see
24 the warm, beautiful climate.

25 I was talking to the Secretary and we were

1 talking about the weather in August and weather in areas,
2 and I almost made a statement and I had to stop myself. I
3 said it never rains in El Paso and then I realized it's
4 cloudy out there, so I stopped myself for a minute.
5 Normally we have about 400 days in a row every year of
6 sunshine.

7 So welcome to El Paso. Thank you for being
8 here, and I'm very grateful that we all will be able to
9 share the needs and the wants, not only of our cities, our
10 state, but also our neighbor who is so important to the
11 growth of our state and our country. And I think if y'all
12 would see a map of where things go through our highways
13 from our neighboring city, you'll see that it looks like a
14 spiderweb because it's that important.

15 So thank you again for being here and enjoy
16 yourselves. And if you need anything we're here for you,
17 and may God bless everyone. And you're more than welcome
18 to clap --

19 (Applause and general laughter.)

20 SECY. SCOTT: I don't even want to follow him.
21 Here, just take over. Okay?

22 Representative Morales is here. Would you have
23 any comments for us? Please.

24 MR. MORALES: Good morning, everyone. My name
25 is Eddie Morales. I may be unfamiliar to some of you.

1 After redistricting, I now proudly represent the northeast
2 portion of El Paso.

3 It is one of the fastest growing areas. And
4 back in December I had the opportunity to meet with the
5 mayor, the county judge. Commissioner Holguin brought me
6 up to speed since you represent a major part of the area
7 that I represent.

8 A little bit about me. I'm from Eagle Pass
9 originally, and we represent House District 74. When the
10 constituents voted for me, they sent me up to Austin to
11 represent the largest district in the State of Texas.

12 We are bigger than 15 U.S. states. There's
13 over 750 miles of a shared border with Mexico, and I
14 represent nine of the 14 counties that actually share a
15 border with Mexico.

16 I think that's an amazing opportunity for
17 somebody like a state representative to make sure that the
18 focus on border and on trade is in the right context up
19 there in Austin. If we need to double down on the border,
20 even in the middle of the pandemic -- you've seen, we've
21 all been experiencing how hot the economy is when it comes
22 to all the border trade.

23 So that's my plan. I plan on representing the
24 entire border, making sure that we get the infrastructure
25 that we deserve. And more importantly, having these sorts

1 of relationships with Caroline at TxDOT and her team, it's
2 truly invaluable so that they can understand the needs of
3 our communities.

4 I want to thank the mayor, the county judge,
5 and all of the El Paso and county representatives for a
6 warm welcome.

7 And also, Secretary, we had a great time
8 meeting last evening at the reception and we enjoyed
9 spending time, and I know that you will represent the
10 border well as Secretary of State. I echo the mayor's
11 sentiments that you are a friend to El Paso and the border
12 and we truly appreciate that, because that's where the
13 focus needs to be.

14 Lastly, I want to make sure -- my beautiful
15 wife who does a lot of the work, I want to introduce her,
16 Helen Martinez Morales, also. She does all of the
17 driving, 7-1/2 hours, from Eagle Pass to get over here and
18 along the border so that I can make sure that I actually
19 don't lose my job during the daytime as an attorney. And
20 we can make sure that we're representing the constituents
21 right by responding to all of the emails.

22 So thank you for the warm welcome yesterday and
23 today. Look forward to representing you all well, and I'm
24 just here to be a friend for y'all in Austin. Thank you.

25 (Applause.)

1 SECY. SCOTT: We also have the honor of having
2 Consul General Ponce de León from Mexico. And would you
3 care to please address?

4 CONSUL GENERAL PONCE de LEÓN: Secretary, it's
5 a pleasure having you here. Caroline, also, very
6 important to have BTAC here in El Paso. Mayor, thank you.

7 I'm part of this very beautiful and welcoming
8 community; it's great. But I think it's really important
9 to have BTAC here. We're in a moment where Mexico is
10 committed of investing money for enhancing all the ports
11 and for facilitating and promoting even an increased trade
12 with Texas. So I'm really happy that you all are here and
13 we're looking forward to keep working with U.S. for all
14 improvements at the border.

15 Thank you, Secretary.

16 SECY. SCOTT: Thank you, Consul General.

17 We are also honored to have from the U.S.
18 Consulate, Alejandro Melendez.

19 Would you please care to give some thoughts?

20 MR. MELENDEZ: Thanks so much, Secretary.

21 It's a pleasure to be here representing the
22 U.S. Consulate in Ciudad Juarez, which represents all the
23 State of Chihuahua, and glad that you chose El Paso for
24 this meeting.

25 Thank you so much.

1 SECY. SCOTT: Thank y'all for being here.

2 And so next up is the minutes. So has
3 everybody reviewed the minutes, and if so, can I get a
4 motion?

5 (Motion and second made by committee members.)

6 SECY. SCOTT: All in favor?

7 (A chorus of ayes.)

8 SECY. SCOTT: Opposed?

9 (No response.)

10 SECY. SCOTT: Hearing none, they're adopted.

11 So we're running through and we're catching up,
12 we're going to get some extra time because we've got some
13 other stuff going to happen that we're going to insert in
14 here. So I think next up will be the recap of the July 19
15 meeting.

16 Francisco.

17 (Note: Mr. Almanza was at the podium which had
18 no connection to Teams link audio, so the following is
19 from his written materials.)

20 MR. ALMANZA: All right. Good morning,
21 everyone. I'm Francisco Almanza with the Texas Department
22 of Transportation. I want to thank you all for joining
23 us. Let me give a brief recap of our last BTAC meeting on
24 July 19, 2022.

25 The last BTAC meeting had five tasks. First,

1 we provided an update of the Senate Bill 1308 preliminary
2 final report. Second, we presented the preliminary report
3 on the Nearshoring Study, as well as providing a briefing
4 on the Monterrey visit.

5 Third, we reviewed and discussed the
6 implementation milestones and progress of the 2021 Texas-
7 Mexico Border Transportation Master Plan. Next, we
8 provided a brief update on the US 83 and US 57 Corridor
9 studies and their next steps. Finally, our partners from
10 the States of Nuevo Leon and Coahuila provided
11 presentations on their respective infrastructure projects.

12 At the start of the last BTAC meeting, a joint
13 presentation was given by TxDOT and Cambridge Systematics
14 regarding the Senate Bill 1308 study. We heard about the
15 study's focus on automated driving systems (ADS),
16 connected driving (CDS), and other emerging technologies
17 and their potential benefits at the ports of entry in the
18 Texas-Mexico Border, as well as their effects on driver
19 and public safety. Additionally, the consultant team
20 presented the initial draft findings of the study,
21 including the preliminary findings of the impacts and
22 future considerations for ADS/CDS at border crossings.

23 Members pointed out that in other bridges in
24 the northern U.S. border there has already been
25 significant investments in emerging technologies to

1 measure wait times. There were also questions from
2 members in regards to combining these technologies with
3 existing trusted traveler programs which would support the
4 use of these technologies. It was noted that ADS and CDS
5 could potentially drive greater adoption of those programs
6 and their efficiencies.

7 Following an insightful discussion on the SB
8 1308 agenda item, we were guided by Claudia Lagos, manager
9 of the International Trade and Border Planning Branch,
10 through what would be presented in regards to the ongoing
11 efforts for the implementation of the Texas-Mexico Border
12 Transportation Master Plan. Further, several speakers
13 from TxDOT, TTI and UNT briefed the BTAC members on the
14 studies and ongoing efforts which stemmed from the BTMP.

15 We heard about the nearshoring/onshoring study,
16 which is a direct recommendation of the BTMP, and how it
17 looks to better understand nearshoring and reshoring and
18 its impacts on the border. Further, presenters spoke
19 about how we are currently seeing a lot of nearshoring in
20 Mexico and reshoring in the United States, as well as a
21 briefing on their visit in Monterrey which yielded great
22 results with the participation of binational stakeholders.

23 After that, we heard from the corridor team to
24 learn more about the US 83 and US 57 corridor studies.
25 The presenters noted how the corridor studies are looking

1 into improving connectivity, capacity, and enhancing
2 corridor safety among its objectives. Our members voiced
3 their strong support for these projects and their
4 objectives.

5 In regards to the Border Wait Times Measurement
6 System Expansion, we provided a brief update that outlined
7 some of the project activities such as maintenance across
8 the border regions, accident repairs and undergoing
9 expansions. We were provided a high-level overview of the
10 project and the plan to expand to the remaining six
11 commercial border crossings this year and POV crossings
12 the next year.

13 Further, we heard about the Binational Cross-
14 Border Oversize/Overweight Needs Assessment which will
15 assess the state of practice, document needs and
16 challenges, as well as identifying mitigation strategies
17 and investment priorities.

18 Regarding the Border Master Plan's Project
19 Implementation Tracker, we were provided an update
20 regarding the functionality, how the projects were
21 categorized and about the ongoing review of the BTMP
22 project list.

23 Our final presentations were updates from the
24 States of Nuevo Leon and Coahuila regarding infrastructure
25 projects in their respective states.

1 We heard from Nuevo Leon about the rebuilding
2 of Highway 1, the establishment of checkpoints to the
3 entrance of their port of entry and the creation of the
4 border police force, among other projects.

5 From the state of Coahuila, we heard about the
6 plan to connect Highway 547 to the Mazatlan-Matamoros
7 corridor, the bypasses to reduce congestion, and how they
8 are working with the federal government to expand the
9 Piedras Negras border crossing.

10 There has been a lot of developments in a lot
11 of our projects since our last meeting, and we look
12 forward to sharing more about them in their respective
13 agenda items.

14 That concludes the recap. Back to you,
15 Caroline.

16 SECY. SCOTT: Claudia is going to give us an
17 update on the BTMP implementation status.

18 (Note: Ms. Lagos began her presentation at the
19 podium and then moved to the table where the microphone
20 was connected to the Teams link audio.)

21 MS. LAGOS: Sorry. We have some problems with
22 the microphone. So I would like to kindly remind everyone
23 that has projects in the three regions, if you can help
24 and share the update of your own projects.

25 We also looked at our 2023 UTP program, and we

1 tried to focus on some of the projects that we are going
2 to have by the three regions. And here we are presenting
3 that we have 604 projects along the three regions that
4 represent \$7,000 billion. We tried to present, and you
5 will see it on the slides -- we will try to map those
6 projects by region.

7 So our goal here will be to have every single
8 thing that the projects are like ongoing, starting or
9 moving about the projects. We would like to have that
10 information as part of the Border Master Plan.

11 Secondly, the other facts that we want to
12 present this today. We presented last time the border
13 wait time measure system that we are implementing, and I
14 mentioned that we are on the expansion of that system.
15 And we are already doing the installation of the six new
16 commercial vehicle crossings and the five passenger
17 vehicle systems. So we would like to have like those,
18 probably by middle of 2023.

19 About our study of oversize/overweight
20 assessment, we already interviewed international bridge
21 directors. We analyzed ProMiles oversize/overweight
22 permit data, and we are going to conduct stakeholder
23 interviews during the fall. And we are looking to host
24 oversize/overweight border crossing and corridor
25 stakeholders forum in spring 2023.

1 We are starting to work on a new program that
2 is the Mexican driver training program. We have as a
3 recommendation from the Border Master Plan to develop and
4 implement a Mexican driver training program that will
5 refine the citation and fines when Mexican trucks cross
6 the border into Texas.

7 We are able right now to add this on the DOT
8 program that they already have. So we would like to have
9 the better practices that they are using, and we are
10 preparing the implementation plan for Texas and we want to
11 develop training curriculum in English and in Spanish,
12 then develop performance metrics.

13 Another thing is the Texas-Mexico Passport.
14 That is another important thing that we would like to
15 present today. We have the recommendation on the Border
16 Master Plan that would implement the Texas-Mexico Task
17 Force to provide a forum for engaging bilateral
18 communication, coordination and collaboration between
19 Texas and Mexico on cross-border trade transportation
20 issues related to planning, programming and implementation
21 activities issues.

22 So we would like to have this as probably a
23 permanent forum, where we can develop a framework for
24 implementation, have memberships and have meetings
25 frequently with the members and structured communication

1 and protocols from different joint working group in BBXG.

2 We have the binational groups. And our idea is to
3 develop implementation strategies from that continuous
4 coordination with the Mexican side.

5 That will be like all for the updates.

6 SECY. SCOTT: Thank you, Claudia.

7 So next we'll get an update on the I-10 and
8 I-20 corridor studies.

9 MS. MAYS: Secretary, before we go to that, any
10 questions from the members on what Claudia just presented,
11 any questions, comments?

12 I know Mauricio mentioned to me that the Texas-
13 Mexico Border Transportation Task Force is a great idea.
14 And I told him, I said, Look, GRUC [phonetic] and BBXG are
15 binational, and the last couple of years have not been as
16 effective and really for us as Texas to stay ahead of the
17 crowd to ensure that we're fostering our continued
18 relationship with Mexico.

19 Really, that's why we're focusing on creating a
20 bilateral group that is just Texas and Mexico to help
21 facilitate this dialogue moving forward. So we just kind
22 of wanted to sideline to let you all know that there was
23 some comments that me and Mauricio were sharing.

24 So any comments from the committee members on
25 any of the items that Claudia presented?

1 MR. VARGAS: Hi. Michael Vargas, City of
2 Pharr.

3 I just had a clarification question on the task
4 force. Is it going to be set up like a committee, like we
5 are currently? Or is it going to be more of a virtual, by
6 e-mail, type of thing?

7 MS. MAYS: No. In order to foster this
8 relationship, it has to be face-to-face. And you know, we
9 continue to spend time in Mexico. We went to Monterrey a
10 couple of months ago and Saltillo and Torreon, Eagle Pass
11 with Representative Morales two weeks ago. And really the
12 face-to-face is where we can continue to engage in a
13 meaningful way.

14 You know, virtual, yes, we did that during the
15 pandemic which was great. But I think really for what we
16 need as Texas and Mexico to really address the issues,
17 it's got to be face-to-face. And that's going to require
18 commitment on either side to be able to participate.

19 We've already had some conversations on the
20 Mexican side and definitely want it to be both public and
21 private sector to make sure that we're engaging at that
22 level. And then on the Texas side, the same thing.

23 What we're struggling with moving forward is
24 going to be how many people we have on this binational
25 task force. It's going to be the challenge of

1 representation. We have three distinct border regions,
2 how we would have that represented fairly on the committee
3 is going to be really important.

4 And then we'll just make sure that the
5 dialogue -- we're talking about the issues that really
6 matters to all of Texas and all of Mexico. So that's the
7 kind of end goal.

8 MR. CALVO: Caroline, what about the timing?
9 When are you looking at creating this task force?

10 MS. MAYS: In terms of timing, it will probably
11 be sometime next year. We're working with the consulting
12 team, TTI and UNT folks, to really help us develop the
13 framework. This has been something that this committee
14 has been working on even before the Border Master Plan.

15 That was one of the recommendations, remember,
16 when you guys did the strategic blueprint. So it's just
17 now because of staff changes we were focusing on the
18 Border Master Plan. So we didn't really have the
19 resources to be able to do that, but now we have the
20 consulting team and they're actually working on it, on the
21 framework.

22 So hopefully we can present it to you all at
23 the next BTAC meeting, a framework and approach to moving
24 forward and maybe even have a potential list of members
25 and then start maybe a meeting, we're hoping, before

1 hopefully the summer of next year to have the inaugural
2 meeting really. And where and when is something that we
3 will have to discuss with you all at the next meeting.

4 Any other comments online?

5 (No response.)

6 SECY. SCOTT: Okay. So now let's go to the
7 I-10 and I-20 corridor study update.

8 MS. deMISI: Good morning, BTAC members. I am
9 Lorena Echeverria deMisi, and I lead the Statewide
10 Corridor Planning Program for TxDOT.

11 We are pleased to be here today, allowing us to
12 be on your agenda to provide two updates on one-of-a-kind
13 studies on Interstate 10 and Interstate 20. Cary
14 Karnstadt, he is a TxDOT project manager, will be
15 providing where we are in terms of development of these
16 corridor studies.

17 Interstate 10 and Interstate 20, when we think
18 about those interstates we are talking about statewide
19 connectivity, connecting across the rural areas to urban
20 areas, connecting our international borders to our
21 maritime ports. These two corridors are the only east-
22 west interstates in Texas that facilitate the movement of
23 that trade in addition to supporting the energy sector,
24 supporting agricultural production that occurs in Texas,
25 as well as timber production. So two very, very important

1 corridors, critical for Texas but also carrying national
2 importance and significance, as well as international
3 significance.

4 So I'll hand it over to Cary Karnstadt to
5 provide those updates.

6 MR. KARNSTADT: Thank you, Lorena.

7 Good morning, everyone, BTAC members, Mr.
8 Secretary. I'm Cary Karnstadt. I'm with the Texas
9 Department of Transportation.

10 I'm also the project development manager for
11 the I-10, I-20 Texas Corridor Study. So we really
12 appreciate the opportunity to be here this morning to
13 present kind of some updates on where our studies are. So
14 I will go ahead and move forward with the next slide.

15 Some of this information probably won't be new
16 to you, but we always like to include reminders of why
17 TxDOT is conducting this I-10 Texas corridor study and how
18 important it is to the state, nationwide, as well as an
19 international road. I-10 runs approximately 2,400 miles
20 from SR-1 in Santa Monica, California, to I-95 at
21 Jacksonville, Florida, providing critical and
22 international and national freight links that support our
23 population and economy.

24 Next slide. So the Texas portion of the I-10
25 study covers 880 miles, from the New Mexico state line to

1 the Louisiana state line. It serves as a critical
2 corridor to our international border crossings, as
3 indicated by the green dots on the map.

4 One additional note I do want to emphasize is
5 the importance of the I-10 to the economy. It also
6 generates 36 percent of the state's GDP and is critical to
7 international freight movements for many industries.

8 Next slide. So the purpose, again, of this
9 study is to identify transportation needs, prioritize
10 improvement strategies to improve safety -- TxDOT's number
11 one goal -- connectivity and mobility along the I-10
12 corridor in Texas, which will help support the regional
13 economy.

14 Next slide. So recently TxDOT posted a survey
15 to gather input from the general public about their
16 perspectives on I-10. The survey was live from July 27
17 through September 6.

18 It was actively advertised by various means, to
19 a number of stakeholders, including BTAC members, MPOs --
20 Eduardo, appreciate it; Cameron, appreciate your help in
21 getting the word out -- and also social media channels and
22 email distribution list. We also had TxDOT districts help
23 us, too, to get the word out. So we received just under
24 3,000 responses and also had just under 6,000 mapped
25 comments where folks could go in and mark areas of concern

1 along the different areas along I-10.

2 Next slide. So the I-10 Texas corridor study
3 team has been identifying proposed policies, programs,
4 plans and projects based on our technical analysis and the
5 stakeholder input that we've received up to this date. We
6 will be doing a review of the policies, programs, plans
7 and projects during the BTAC workshop session this
8 afternoon, and we will have a focus on border crossing
9 impacts.

10 Next slide. So as a recap, the study is
11 conducted in five primary milestones, as we can see.
12 We're currently wrapping up milestone number three, which
13 we've identified initial improvement strategies based on
14 our analysis and input that we received from the second
15 round of stakeholder groups meetings and the public
16 survey. In the next milestone we will analyze the
17 potential economic impacts of the agreed-upon proposed
18 transportation investments and prioritize the list of
19 proposed improvement strategies into mid, short and long
20 term.

21 Now let's go ahead and move into our I-20
22 study. Before we -- one thing I do want to mention, on
23 this particular I-10 study we will be wrapping things up
24 probably early to mid spring of next year.

25 So we'll go ahead and move into the I-20 study.

1 Next slide. So this particular study is further along in
2 the development process, but I do want to keep the
3 overview to a very high level. I can also answer some of
4 the questions during our BTAC workshop this afternoon, as
5 well.

6 Next slide. So as we can see, I-20 is a major
7 east-west corridor across Texas. It also has national
8 significance, since it extends 1,539 miles from end to
9 end, giving Texas an important connection with the East
10 Coast and southern states.

11 Next slide. So the study area of this corridor
12 extends to include 635 miles within Texas, which would
13 take you about nine hours to drive along. The Texas
14 portion of I-20 includes five metropolitan planning
15 organizations, 30 cities, 22 counties. It also includes
16 101 interchanges and just under 1,400 bridges that are
17 being studied under this effort.

18 The corridor is significant due to its big
19 contribution to the state GDP, which rose to 37 percent in
20 2019. The value of it is tremendous and is expected to
21 rise to \$129 billion in 2050.

22 Next slide. So the purpose of this study,
23 again, is to identify multimodal needs, improve safety and
24 prioritize improvements that facilitate the movement of
25 goods and people along the corridor. The study was

1 structured around data collection and analysis of existing
2 conditions, as well as a multimodal, identify needs and
3 challenges to proper function of the corridor.

4 This analysis led to the identification and
5 prioritization of improvements, policies and programs for
6 the corridor. This effort is being supported by
7 stakeholder engagement, public involvement strategy based
8 on corridor steering committee and the three working
9 groups, the West, Central and East.

10 Next slide. So as part of the public
11 engagement strategy, the corridor study released an
12 interactive online survey to allow the general public to
13 inform the effort about their vision of the corridor, the
14 attitudes and practices we use in the corridor, locations
15 of concerns and priorities regarding areas of improvement.

16 The survey was available in two languages for six weeks
17 and was advertised with both TxDOT and all members of the
18 stakeholder groups involved in tracking the study.

19 The survey has been one of the most successful
20 metroplex surveys since TxDOT started using this platform,
21 now almost 8,000 responses completed the survey, providing
22 more than 21,000 locations of concern or interest on the
23 maps that were also included in the survey. This
24 information has gone a long way to inform improvement
25 definitions and places of further study.

1 Next slide. So at this point, the study has
2 identified potential policies like flipping the stack or
3 the reconstruction of I-20 main lanes to go over the cross
4 streets and the programs that would be needed to support
5 them. The study has also identified and vetted with
6 stakeholders 497 miles of additional lanes needed along
7 the corridor, as well as 127 miles of frontage roads to be
8 built or converted from two-way to one-way operation. And
9 finally, the study has also defined another 215
10 improvements needed along I-20.

11 Next slide. So as I previously mentioned, the
12 I-20 Texas corridor study has completed three-quarters of
13 its schedule by collecting and analyzing data on existing
14 conditions around the corridor's safety, traffic,
15 connectivity, preservation, environmental and economic
16 characteristics. Background information was also
17 completed with the traffic, population and economic
18 forecasts.

19 At this point we reach out to our stakeholders
20 and the public to corroborate and augment our findings
21 with local knowledge and context. By this point the study
22 has defined needs and challenges to corridor improvement,
23 parallel these efforts, funding possibilities are being
24 explored, and input about the needs and challenges from
25 private entities was being collected.

1 Some conceptual improvements were followed by
2 preliminary policies, programs and projects. The projects
3 were grouped to allow for ease of implementation and
4 presented to the stakeholders for their consideration and
5 prioritization of short, mid and long term.

6 So in the upcoming months, we will be giving
7 our stakeholder groups and the public and the private
8 sector another opportunity to contribute to the study by
9 reviewing implementation strategy as the final report is
10 being developed. The final I-20 corridor study is
11 expected to be completed by the spring of 2023.

12 So this concludes my recap and update for the
13 I-10 and I-20 Texas corridor studies. So at this time
14 I'll be happy to answer any questions, if anyone has any.

15 MS. MAYS: I would like to open it up to the
16 committee members. I know definitely, Eduardo, you are in
17 the El Paso delegation, their interest in both studies and
18 have also participated in both, but specifically the I-10.
19 So wanted to give you all a chance to at least tell the
20 BTAC members that are not from this region why these
21 corridor studies are particularly important, and
22 especially I-10.

23 So David, Eduardo.

24 MR. CALVO: Yeah, thank you, Caroline.

25 That was exactly my comment, just to make sure

1 that everybody understands the importance of these
2 corridor studies. They're tremendously important because
3 we all know locally how important I-10 is to us locally,
4 to the state and all that, but it is very important to
5 document and quantify the benefits and why I-10 is so
6 important.

7 You've heard me say many times here when I go
8 to Austin, you know, that we need to bring attention to
9 the importance of I-10. It's not only about I-35 which
10 gets a lot of the attention, and rightly so for the State
11 of Texas, but I-10 is very important.

12 So these studies really bring up and document
13 the importance of the corridor, because at the end of the
14 day these corridor studies identify projects. And at the
15 end of the day that's what we implement. Right?

16 And we need to compete for funding with the
17 rest of the state for projects. So again, here locally we
18 know how important it is and we can speak up and say
19 everything we want, but it has to be documented with good
20 information. And that's what we hope to get out of this
21 study.

22 So what I also want to encourage everybody is
23 to participate. You know, finally we get the chance to
24 get a study for I-10, so we have to take advantage of that
25 opportunity and participate and speak up for that.

1 Because, again, some of the studies that TxDOT has
2 conducted recently, Ports to Plains, Permian Basin, I-35,
3 and et cetera, I mean, those studies actually identified
4 the need for individual projects.

5 So again, this is more of like a call to action
6 for us locally here and everybody to support the study.

7 MS. MAYS: Cameron, go ahead.

8 MR. WALKER: Thank you.

9 On September 30, you held a workshop on the I-
10 20 corridor -- a well attended workshop. And what Eduardo
11 is describing was exactly what happened during that time.

12
13 We were able to prioritize into short, midrange
14 and long term project recommendations. Some of that
15 information was just shown to you by Cary, so we have had
16 direct involvement in the choices that we're all making in
17 the system improvements. It's been very good.

18 And lastly, I just wanted to compliment,
19 Caroline, you and your staff and all your consulting team
20 too for just the energy you bring to the table when you
21 bring what I call your road show out there. And it's just
22 been really good. Thank you very much.

23 MS. MAYS: Well, thank you for those comments.

24 I won't take any credit; it's the team. I want to
25 recognize Lorena and her team on the corridor studies.

1 They do an amazing job.

2 And to Eduardo's point, these corridor studies
3 make a difference. They influence decisions. They're
4 part of what TxDOT looks at, especially now that we're
5 doing end-to-end corridor studies, defining the entire
6 corridor needs and finding out where the guts are.

7 And then we hand that to the districts to be
8 able to take it to the next level, really being able to
9 tell the story. What we're trying to do with the corridor
10 studies -- we call it the next generation -- is tell the
11 story of the corridors. Not just about the traffic, about
12 the numbers. It's about why the corridor is important.

13 I don't think any of you ever saw GDP used in
14 corridor studies. We do now. We're looking at trade and
15 understanding why is I-10 important to not just this
16 region, but the entire State of Texas.

17 Some of the things you guys didn't see here was
18 population. This corridor supports a tremendous amount of
19 Texans and employment. And the sectors in this corridor,
20 as you see here, there's international trade, there's
21 energy sectors, there's agriculture, there's metropolitan
22 areas, there's seaports on the eastern side of this
23 corridor. So it's tremendously significant to Texas and
24 to the nation as a whole.

25 So we just wanted to emphasize that's really

1 your input and appreciate all of you that have been part
2 of this process, because this is what helps TxDOT make a
3 lot of decisions. And one of our commissioners,
4 Commissioner Ryan, has been very engaged in the I-10
5 corridor study. And I-20 is Commissioner Neal.

6 So you can kind of start seeing why these are
7 important because you've got decision-makers paying
8 attention to these corridor studies and the input and the
9 engagement, who is at the table. We get asked that all
10 the time. Who is at the table at these meetings, who is
11 providing us input? So it is really, really significant
12 and appreciate all of you that have been part of it.

13 But again, this doesn't stop here. We're
14 hoping and continuing to use these corridor studies to
15 influence and make decisions at TxDOT, but you're also
16 using that. A good example is the Border Master Plan.
17 The Border Master Plan is now being used by stakeholders
18 other than TxDOT to go and ask for funds.

19 You know, you mentioned Ports to Plains. We
20 did the corridor study for Ports to Plains and they went
21 and got an interstate designation. We didn't do that, we
22 gave them the tools to be able to do that.

23 So think about these corridor studies and all
24 the studies we do as tools to allow you all to go use the
25 data and the analysis to either seek funding or seek

1 decisions to be made at whatever level, binationally,
2 locally, statewide and the federal level.

3 So want to kind of chime in and let you guys
4 know that we appreciate you participating.

5 David, I know you're looking at me.

6 MR. CORONADO: Yeah, thank you, Caroline.

7 David Coronado, City of El Paso.

8 So the only thing that I'll say, I think, is
9 that these kinds of studies, I think it's critical and I
10 think you do a good job of that. I think it's critical
11 that you hear from the local communities. You know, we
12 can get lost in the numbers. Right?

13 El Paso is not the same as Laredo, Brownsville,
14 each community has its own dynamics. And when we have
15 here I-10, which is essentially the backbone of our city,
16 have issues that deal with international traffic with our
17 ports of entry. These are not just produce buyers
18 [inaudible] want guacamole and whatnot.

19 These are also essential industries, medical
20 devices, automotive industry. And so we really need to be
21 able to understand the issues that impact the border
22 crossings and how they tie with these miles and miles of
23 freeways in the context of the local setting.

24 And so having our presence from all the BTAC
25 members is critical to give you that input because you

1 can't solve it from a telescope back in Austin, right,
2 looking at the cities. Each city, like I said, has its
3 own unique dynamics.

4 We're working here closely with Eduardo, with
5 TTI, with the county on addressing our needs, and the
6 support we get from Austin from TxDOT goes a long way.
7 And I don't want to go into the details of our briefing,
8 but anyway, I just wanted to say that. I think that these
9 kind of studies we really need to work with you all and
10 participate. So thank you for the opportunity to do that.

11 SECY. SCOTT: So the great State of Texas has
12 TxDOT and it's a phenomenal group of people. One of them,
13 when they have a hole that happens -- and they did when
14 they gave a promotion to Caroline -- they had to fill her
15 shoes. And so they didn't just search here in Texas, they
16 went nationwide, and they brought in Juan Flores.

17 And Juan is one of the great additions to this
18 great State of Texas Department of Transportation as well
19 as just the state. So they stole him from Florida. He
20 brings a wealth of experience.

21 Welcome, and please visit with us, give us your
22 thoughts.

23 MR. FLORES: Well, I'm going to give you my
24 thoughts when I do my little spiel on freight. So just to
25 kind of highlight what everybody said, the gentleman was

1 talking about the regional component, so what I'm going to
2 be talking about is the freight planning.

3 So we've heard already about the corridor,
4 point-to-point destination, but on that corridor,
5 significant ports, railyards and other connectivity where
6 we have sometimes congestion points, right. So
7 understanding that component and what Claudia is doing on
8 the border plan.

9 And some of you know the border plan was the
10 Rodney Dangerfield, didn't get any respect. As it relates
11 to globalization and our working with our partners from
12 the Canadian side and our Mexican partners as it relates
13 to manufacturing, that has changed everything. And to
14 engage and understand it is what the freight plan is going
15 to be looking at.

16 So with that, I'll hold my comments, Secretary,
17 but I appreciate the intro here.

18 SECY. SCOTT: And so we'll get back on to the
19 schedule as it was drafted. So we're going to get the SB
20 1308 final draft report.

21 Francisco.

22 MS. MAYS: Yeah, and Secretary, as we're
23 getting to that agenda item, I don't want to forget to
24 introduce my data staff: Claudia, you guys know her very
25 well, and then Lorena spoke a little bit earlier, but also

1 you have Francisco, Eduardo, I have Tyler back here. Did
2 I miss any other folks?

3 You already know the district. We've got
4 Tomas, we've got Eddie, got Marty, got Jennifer. So a lot
5 of TxDOT support in here, so I just want you to know.

6 We have folks from Laredo District who are
7 here, I think they're in the back. But just want to let
8 you know that this is a TxDOT family thing.

9 All the three TxDOT border districts are fully
10 engaged in what you all do as a committee and your work
11 effort but also ensuring that, okay, we got the Border
12 Master Plan. They're the ones really taking it to the
13 next level on some of the projects. We're working with
14 Representative Morales on US 57, the corridor that
15 connects Eagle Pass to I-35. Again, the district is
16 taking that to the next level.

17 So I do want to acknowledge the TxDOT staff
18 that are here, but also the ones that are not here that
19 continue to support this effort. It's not just Austin.
20 We may bring the committee and get the committee together,
21 but the work and where the rubber meets the road is the
22 rest of TxDOT and the districts are a big part of that.

23 Mike and Francisco, you guys can take it over
24 now.

25 MR. ALMANZA: Thank you, Caroline.

1 So as noted during the recap, at the last
2 meeting we presented the preliminary findings with a
3 report. Senate Bill 1308 was introduced in the past
4 legislature by Senator Blanco, and it looks at the effects
5 of automated driving systems, connected driving systems,
6 and other emerging technologies in three areas:
7 congestion at the Texas-Mexico Border and the effects on
8 safety and the workforce in Texas.

9 After a long process we have completed the
10 report. We received comments from the working group which
11 led the study and we're very pleased and very proud of the
12 final product. So I will turn it over to Mike to speak
13 more about the study.

14 Thank you.

15 MR. WILLIAMSON: Thanks, Francisco.

16 My name is Mike Williamson with Cambridge
17 Systematics. I was the consultant project manager for
18 this study. And this is our third time meeting with you
19 here today, so we're happy to just kind of quickly walk
20 you through our final findings and give you kind of one
21 final chance to ask any questions or make any comments
22 that you have for us.

23 Next slide. So as Francisco mentioned, several
24 of you did provide us comments, along with our working
25 group, and so we're going to give you just a quick

1 snapshot of what some of those comments were so everybody
2 can understand the types of feedback that we got. Then
3 we'll briefly walk through the findings and give you a
4 chance to comment.

5 Next slide. As Francisco mentioned, this was a
6 quick project. We started just a little over a year ago.

7 You can see here we're right in the final stages.

8 We've finished all of our analysis, we've
9 finished our draft report, we've gone through several
10 versions, and we're here. Following any comments you have
11 for us today, we'll move into the executive briefings to
12 get the final product ready for submittal to the
13 Governor's Office and legislature later this year.

14 Next slide. We are very proud of the efforts
15 that we achieved in engaging many stakeholders, both in
16 Mexico and Texas and some of your peers and key technology
17 partners from around the country. As I mentioned, this is
18 our third time meeting with you. Our working group, which
19 really drove our study, we had our sixth and final meeting
20 with them last week where they gave us their final support
21 for the findings.

22 We also had six different meetings with the
23 binational regional steering committees, several statewide
24 listening sessions on each of the questions that the
25 legislation asks, as well as coordinating with lots of

1 different ongoing activities like the CAB task force and
2 one-on-one interviews with key stakeholders.

3 Next slide. We submitted the draft report for
4 comment in September to our working group, as well as to
5 BTAC, based on the critical component of the border here,
6 as well as the interest that you all expressed in our
7 first two times together.

8 Some of the key themes that came out of the
9 comments that we received just at a high level. We got a
10 request to really elaborate on the requirements within the
11 border environment to realize the benefits of automated
12 and connected driving systems can create, specifically the
13 recognition that we can't just add technology and have the
14 border work better. There needs to be integration with
15 all the different screening and security systems and tying
16 into all your pre-clearance programs. So we strengthened
17 that language in the document.

18 We also were requested in our safety
19 perspective, in our safety analysis, to add some
20 additional comments about safety needs at and around the
21 border. If you recall, I think at your last meeting you
22 heard detailed reports from several of the TxDOT district
23 safety engineers as it related to safety trends and crash
24 data along the border. And so we were able to incorporate
25 some additional information on that as well.

1 We also were asked to make sure to comment on
2 the fact that automated driving systems can actually be a
3 positive benefit for our trucking community, creating a
4 better quality of life and also helping deal with the
5 driver shortage. So we added some additional language for
6 that as well.

7 And then thanks to some comments from the El
8 Paso folks here, we also strengthened our language on the
9 possibility of automated driving system applications for
10 transit in a border community.

11 Next slide. For those of you who had a chance
12 to take a look at our report, this is kind of a snapshot
13 of what was in it. We start with an introduction that
14 gives you everything you need to know about the call for
15 the project. Then we have a chapter on each of the
16 questions that the legislation asked, looking at the
17 impacts of border congestion, looking at the impacts on
18 statewide safety, and looking at the impacts on workforce.

19 And we wrapped up with some key considerations
20 for all of you to consider as you move forward. If you
21 are comfortable and want to move in the direction of these
22 findings, we gave you some considerations on some of the
23 things that TxDOT and its partners could do to move
24 forward.

25 On the next slide, for each of the three

1 chapters, just a quick snapshot. We start out by setting
2 the stage of the issue of congestion at the border --
3 which I won't spend time on because I know you all live
4 and breathe that every day -- but really sets the stage
5 for all of the impacts, lost economic impacts, congestion
6 delay, greater cost for goods, and your infrastructure.

7 On the next slide we talk about how these
8 technologies can actually help improve and better manage
9 your border operations. Looks at connected driving
10 systems for greater access to actionable information, also
11 on how the CDS systems can also support effective
12 electronic data change for some of your screening systems,
13 advance notifications of the loads as they arrive.

14 Again, really just augmenting and complementing
15 a lot of the systems that you have in place today. The
16 fact that if you can remove a driver from some percentage
17 of the vehicles, that can help with some of your driver
18 inspection requirements.

19 We also looked at how the technologies have the
20 capacity to work with some of your other safety and
21 security programs and cutting down inspection time, and
22 really one of the key drivers for achieving these benefits
23 relates to the adoption rates and kind of when and where
24 do these technologies come online. And also a recognition
25 that in some of the high volume crossings, if you had an

1 AV only lane system in place, you could amplify those
2 delay reductions even more.

3 Next slide. And then you've seen these numbers
4 the last time we were together, the key findings which
5 really focuses on what can these technologies do to reduce
6 congestion. You can see on the right-hand side of the
7 slide the estimates by 2035, an average reduction in
8 congestion time for commercial motor vehicles of 17
9 percent, increasing to 38 percent by 2050. But you can
10 see at an aggressive level, if you actually saw greater
11 adoption, very optimistically you're looking at almost 70
12 percent reduction in delay at the border.

13 We also looked at the economic impacts. On the
14 bottom you can see by 2035, changes in GDP based on that
15 reduced congestion could be anywhere from \$200- to over
16 \$300 million. By 2050 those numbers could get as high as
17 \$1.8 billion in savings.

18 And for all of you who have participated in the
19 Border Transportation Plan, you know that there was lots
20 of discussion about the impacts that congestion has on
21 both lost opportunity as well as the ability to grow in
22 the future.

23 Any questions on the border component?

24 (No response.)

25 MR. WILLIAMSON: Okay. Moving on to the next

1 slide, we'll just have a couple of slides here on safety.

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So certainly driver and public safety is essential to the transportation system here in Texas. And we really focused on how automated and connected driving systems can help us improve our crash rates and support the road to zero that TxDOT has identified.

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So we're looking at kind of -- as you grow into the future, based on current trends, you're looking at a 27 percent increase in crashes or 63 percent by 2035 and 2050, respectively. Across the top you can see the types of causes for those crashes. And keep in mind, many of those items are things that an automated driving system can help reduce, and so that's some of the things that we focused on from a safety perspective.

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On the next slide you can see how we believe that the automated and connected driving systems can actually do that. Again, focusing on things like reducing or eliminating driver errors, increasing compliance with driver laws. Risky driver behavior, of course, is one of the key causes of many of our crashes.

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And then just the enhancing of communications, your ability to know what's going on on the roadway, the 360 degree view that these automated driving systems provide you kind of next to your vehicle, but also the

1 ability to share that information. On any crashes ahead,
2 you can reduce things like secondary crashes by helping
3 folks avoid those areas.

4 From a findings perspective, first safety, and
5 again similar numbers that you all saw before on the next
6 slide. You can see we looked at this based on a reduction
7 in crash victims, lives saved, injuries prevented across
8 the top. So by 2050 we're looking at, on average, just
9 over 1,500 lives saved, over almost 72,000 injuries
10 prevented, and a 32 percent reduction in crash victims.

11 You can see the ranges on either side based on
12 whether we're a little below or a little above where we
13 would expect. And from a monetary or economic impact,
14 across the bottom we looked at it from GDP impacts,
15 societal cost savings and additional jobs that result from
16 preventing those crashes. You can see \$26 billion impact
17 on GDP, \$29 billion in societal cost savings, and almost
18 200,000 additional jobs, again tied to the elimination of
19 some of those lost wages, productivity losses, medical
20 expenses, et cetera, if we were to eliminate those deaths
21 and injuries.

22 Any questions on the safety component?

23 (No response.)

24 MR. WILLIAMSON: Okay. Our final element is on
25 transportation and workforce on the next slide. And this

1 is a little bit different than the first two.

2 But again, for this one we recognized early
3 on -- we did a literature search of the anticipated
4 impacts of technology, not just automated and connected
5 driving systems. So we also looked at some of the key
6 impacts that you expect to see as things automate in life.

7 We've seen a lot of that over our lifetimes,
8 whether it's containerization, just-in-time deliveries,
9 what smartphones did to us. Each of those things had an
10 impact on workforce and so that helped educate what we
11 would expect with automated and connected driving systems.

12 Our research indicated that that's certainly
13 complex. It's going to impact each industry a little bit
14 differently. In some cases you're going to see a shift in
15 types of jobs, retraining requirements. You could also
16 see new types of jobs, and of course, some jobs,
17 particularly some driver-operator jobs would likely go
18 away based on the market that we look at.

19 We also recognized that if you look back
20 historically, you can always predict some of what's going
21 to happen but there's always some unanticipated impacts
22 from technology advancements as well. So that's factored
23 into our analysis from our adoption rates.

24 Our findings, we did look -- the net impact to
25 the Texas economy and workforce is expected to be positive

1 based on these technologies. And there's a real focus
2 from all the stakeholders that we talked to that the
3 biggest challenge for Texas is to make sure we have the
4 right workforce, the trained workforce in place to
5 continue to be a leader in this, moving forward.

6 On the next slide you can see just how it
7 relates to some specific industries. As you recall from
8 our last presentation from workforce, we looked at the
9 commercial vehicle operations sector, passenger
10 transportation and vehicle operations, manufacturing and
11 maintenance, and secondary industries which would be those
12 industries that support kind of the multiplier effect of
13 some of the changes in jobs in these other three.

14 And we expect for commercial vehicle operations
15 that's going to be a positive benefit. Some retraining,
16 some changes in the type of job that you're doing, but
17 overall we're expecting it to be a positive impact.

18 Same goes for manufacturing and maintenance as
19 we develop these systems. We're going to need to have new
20 manufacturing capabilities, new manufacturing equipment,
21 and also the ability to maintain and repair those moving
22 forward.

23 And then the secondary industries, really look
24 at -- each new job that's created in the transportation
25 industry can result in as many as four, as a multiplier

1 effect. So any of those positive changes are going to
2 have a ripple effect throughout the economy.

3 On the passenger transportation side, that's
4 one of the places that we would expect to potentially see
5 a reduction in jobs. As you think of your rideshares and
6 transit operators where you may go in a driverless
7 environment, but even then from a transit operating
8 perspective you may have staff onboard for a security,
9 kind of transit ambassador position.

10 And on the next slide you can see the results
11 for this. Again, we're not expecting a net result in
12 jobs. We really see the advancement of automated and
13 connected driving systems as an opportunity.

14 Even though there's a great deal of uncertainty
15 as to when some of this might happen and having that
16 transportation workforce ready is kind of the key thing
17 moving forward. The numbers here look at what the net
18 impact would be for these advancements in technology into
19 the future, in addition to kind of what we would expect
20 that future to be without it.

21 So again, number of jobs is expected to be a
22 positive impact over where we'd be in 2050 without these
23 advancements. And the same thing with statewide GDP,
24 positive on average about 1.6 percent but up as high as
25 2.5, 2.6 percent.

1 Any questions on workforce summary? I know
2 you've seen most of these numbers before.

3 (No response.)

4 MR. WILLIAMSON: So to wrap up, we have a
5 couple of slides. On the next slide you can see, I
6 mentioned we had some considerations. We just have two
7 slides to quickly walk through on some of those, and we
8 did brief you about these last time as well.

9 But some of the things we need to keep in mind
10 as we move forward is developing a coordinated technology
11 program. So you have two more agenda items today that
12 look at technology implications for the state, some at the
13 border region, some just technology demonstrations
14 throughout the state. And of course, TxDOT has a robust
15 strategic planning program with their CAB task force. So
16 again, a lot of the foundation and framework is already in
17 place.

18 Monitoring and engaging with private
19 industry -- I think that's one of the reasons you're going
20 to hear from them today -- is we need to know what they're
21 doing, what their needs are, making sure that anything we
22 can do in the public sector to enhance that infrastructure
23 preparedness is something that we don't get caught off-
24 guard, as well as the workforce sharing requirements, as I
25 mentioned.

1 Continuing to incorporate technology into the
2 state's safety program, so certainly the strategic highway
3 safety plan has lots of different goals and objectives and
4 technology can help meet some of those. Assessing
5 compatibility with border improvements and future
6 technology investments, so really building on some of the
7 recommendations that came out of the BTMP as far as where
8 we can automate and incorporate different technologies
9 and then conducting demonstrations of these different
10 technologies within the border environment.

11 And that's something that at the start of the
12 study, Caroline, as you remember, we kind of got lots of
13 skepticism from the border community. By the end we had
14 some of our stakeholders asking, okay, so when is the
15 demonstration project going to happen. And so again,
16 there seems to be a strong interest in at least taking the
17 next step to figure out what the potential impacts could
18 be.

19 And then just our final few here, I mentioned
20 already promoting workforce training. Some of our
21 technology partners are already working with local
22 colleges and universities to make sure they have that in
23 place.

24 Advancing system integration and shared data,
25 so that big data component. These automated driving

1 systems and connected driving systems generate and use
2 huge amounts of data, so making sure our system
3 infrastructure can incorporate that and learn from it.

4 Supporting education and promotion, so making
5 sure folks know what's out there, what the capabilities
6 are, and to help with some of the fears that some folks
7 have about automation. Retaining legislative and
8 regulatory authority. I think we all know Texas is a
9 leader nationally in making an environment available for
10 these types of deployments and testing, and so that's a
11 real opportunity for us to continue in a leadership role.

12 And then just supporting testing and deployment
13 with all of our different folks who actually would like to
14 be engaged in that process.

15 Next slide. So I'll pause there, I only have
16 like one slide left, but are there any questions that you
17 all have on any of the summaries that we've shown here?

18 MS. MAYS: Eduardo.

19 MR. CALVO: Going back to the implementation at
20 the border crossings, can you expand a little bit on how
21 the interaction of autonomous connected vehicles would be
22 at the entrance and at the exit of the crossing itself? I
23 mean, you still need to have a driver drive the vehicle in
24 to the crossing and then take it out.

25 How is that interaction addressed here in the

1 study or in the findings, those savings that you are
2 looking at?

3 MS. MAYS: Mike, you can go ahead and then I'll
4 add, so go ahead.

5 MR. WILLIAMSON: Okay, great. I was just going
6 to say, I can't remember how much detail we got into with
7 BTAC, but I know with the BNRCs we went into a lot of
8 detail on the different use cases that we looked at. So
9 we just grabbed a variety of potential environments that
10 looked at how those different technologies interact.

11 We also broke down the approach, the queue, the
12 actual screening, and the departure as far as the time
13 associated with each of those. And you look at the
14 potential for these technologies to actually impact each
15 of those time segments.

16 In the most automated situation, if it was an
17 AV only lane or a driverless truck, the assumption is that
18 the connected driving system component would have
19 communicated all of the information ahead of time so that
20 when that load gets there you're aware it's coming. It's
21 already had that pre-trip inspection, load is sealed, you
22 have a set of check factors that would allow you to
23 determine whether or not there was any reason to believe
24 it might have been tampered with. And in that case that's
25 one scenario where maybe they slow down, maybe they don't

1 based on whether it's a dedicated lane or not.

2 For some of the others, the expectation is that
3 you're just providing that advance notice so that the time
4 that they have to stop is minimized. But if they're in
5 mixed traffic or if they're in a fast lane, they're going
6 to go through that same basic process that you do today.
7 We're just hoping that between the automated driving
8 component, which would hopefully help the traffic queue
9 operate a little bit more efficiently and prevent any
10 crashes, and then the connected driving system component
11 would have that shared information.

12 So we thought through the different components
13 and the time hits that would need to address that, but we
14 didn't get to the point of deciding what a pilot might
15 look like to actually test it.

16 I don't know if that answers your question, but
17 Caroline.

18 MS. MAYS: Yeah. So to your question, really
19 the study was much more broader than going very specific.
20 And I think what the team has done is set us up for kind
21 of the next step, assessing at each of the border
22 crossings what that would actually look like.

23 So let's take one of your bridges here,
24 Zaragoza, and what would that look like. Do you have like
25 fast lanes? That would be kind of the first one we would

1 look at because those area trusted traveler, trusted
2 shippers that are using those lanes.

3 And really what you eliminate from the
4 inspection process is the driver, because now the vehicle
5 will be driverless. The rest of the inspection will still
6 be able to take place on the actual vehicle but you can
7 speed it up, as was mentioned, whereby you're not
8 inspecting the driver anymore in those fast lanes.

9 So really the next step is, okay, we have met
10 the requirements and the charge for the study, what next?

11 And really being able to look at, okay, can we look at a
12 couple of border crossings and see what would it take to
13 be able to do that, and we would have several border
14 crossings that are very interested in this.

15 And then the pilot. You're going to hear from
16 the autonomous truck companies today. They are
17 interested -- not the two that will be here but the
18 industry is interested in it, because the border crossing
19 is a very controlled environment.

20 We're talking about drayage truckers picking up
21 and going to the same location pretty much the entire
22 trip. So if you can map that and be able to do that, it's
23 actually probably the best place to do autonomous trucks
24 with the inspection that CBP has now, which is very
25 technology focused, really can be done in that

1 environment.

2 So certainly we'll continue to have those
3 discussions once we submit this report to the governor and
4 to the legislators. Senator Blanco, his biggest focus was
5 really the border environment, how can we use autonomous
6 vehicles, trucks to address border delays and border
7 congestion.

8 MR. CALVO: If I can follow up on that, I think
9 that's a great answer. I still think that we really need
10 to see how that transition is seamless or as seamless as
11 possible between the accessing the queue and leaving the
12 queue.

13 But of course, anything that we do which
14 simplifies the crossing of vehicles is important, of
15 course. But at the same time, let's not lose focus on
16 other things that also expedite, like pre-inspection
17 programs, that hopefully at some point will prevent
18 vehicles from stopping at the border itself. You know, you
19 leave your origin, you don't stop, you cross the border at
20 20 miles per hour instead of two miles per hour, and
21 saving more time with that.

22 But on that followup with the pilot programs,
23 I'd be very interested in seeing that and participating
24 and making sure that that transition is seamless.

25 MS. MAYS: Yeah, no, absolutely. And you know,

1 like I mentioned, we have been trying to get this report
2 submitted by the end of this year. And then certainly
3 we're going to be following up those discussions with the
4 border communities and border crossings that are
5 interested in that, as well as with the technology
6 companies that are also very interested in figuring out
7 what's the next steps and what do we need to do as TxDOT
8 to help facilitate that.

9 We're in a facilitator role because whoever
10 owns the border crossing and the CBP and the autonomous
11 trucking companies have to come to an agreement and we'll
12 help to facilitate that. Or any followup studies that
13 need to be done, we can certainly follow up and do that so
14 that can take place.

15 And I want to mention something that DPS
16 mentioned at the last working group meeting, and I can't
17 remember exactly what Justin Crain said. Something to the
18 effect, we are the cutting edge on this study and what
19 Texas can do to really be the first to implement this and
20 moving forward. This is coming from DPS.

21 Like Mike mentioned, in the beginning there was
22 a lot of, you know, I'm not sure, really, you know. But
23 at the end of the study to hear that it really, really was
24 very impressive. But also it just showed us that
25 sometimes studies allow us to vet ideas, see the

1 possibilities, and moving forward so to a point now where
2 by now we're talking possibly doing a pilot on the Texas-
3 Mexico border of driverless trucks -- which can happen,
4 and I'm confident that we will be able to do that. To be
5 the first border crossing in North America to have
6 autonomous trucks running through it, it would be
7 impressive.

8 So I hope you all will continue to be part of
9 that dialogue. And let us know if you're interested in
10 moving forward and we'll facilitate those dialogues.
11 Because we need to address delays at border crossings, and
12 if this is one of the solutions in the toolbox at the
13 border, let's go for it.

14 We're not saying it's the tool. We're saying
15 that it's one of them. So yes, certainly we'll continue
16 to engage.

17 David.

18 MR. CORONADO: I'll be brief. David Coronado,
19 again for the record, with the City of El Paso.

20 So I think I gave you all some feedback in one
21 of the initial meetings that we had about how, at least in
22 my mind, I would see a solution like this implemented at
23 the border crossings. I think that automated vehicles and
24 these technologies are a great application for long haul
25 trips within the U.S. but the border crossings are a

1 complete different animal.

2 We know we have traffic. Right? We know
3 traffic with I-35, I-10, I-20, but then there's border
4 traffic and then there's Mexican traffic. And so when you
5 talk about automated vehicles on city streets, in my mind,
6 at least, in the City of Juarez, to me that's a difficult
7 concept to grasp.

8 I think that for sure we would be open to be in
9 one of those pilot programs. I think these kinds of
10 studies are good to sort of start talking about thinking
11 about these concepts, how we apply them and bring them
12 down to reality. But I think, to be quite honest, we've
13 got a long way ahead of us before we even begin talking
14 about automated vehicles at the border crossings.

15 We have a lot of congestion. We have
16 barricades, chainlink fences on the bridge itself, limited
17 lanes. And so when we want to introduce a new concept, I
18 feel like sometimes we're kind of hurting ourselves by
19 adding more and more layers.

20 I think it's probably best to consider
21 exploring a completely separate system that's automated.
22 Not using the existing lanes but a new facility, a new
23 crossing, and build it from the ground up that's
24 completely automated, that is designed for that purpose
25 alone. Just because there's so many conflicts within the

1 existing infrastructure that as a bridge operator, I have
2 a hard time sort of envisioning that.

3 But again, I'm all open to new ideas and
4 working with you all and exploring those, just wanted to
5 throw out there.

6 MS. MAYS: Yeah, and David, this is not going
7 to work at all existing border crossings as is today.
8 There's going to be needed retrofits and modification.
9 But I can tell you there are a couple of border
10 environments that today it will work, whereby the
11 warehousing is literally at the border crossing.

12 You're not going into a community, and then
13 you're bring it on the other side going straight to a
14 warehouse. You're not even going inside the community,
15 city streets, et cetera. So there are border environments
16 today that I could tell you if we wanted to do it
17 tomorrow, we can go do it because it does exist.

18 It's a very limited interaction with passenger
19 traffic, with local communities whereby the drayage is
20 just taking their truck from, let's say, the Mexican side
21 warehouse and crossing the border, going to the Texas side
22 to a warehouse without touching downtown or city streets,
23 et cetera. So we do have that.

24 But what I'm saying -- you're absolutely right.
25 It's not going to work on every single one of them. Some

1 of these border crossings, like yours and in some of the
2 other places, it's right smack in the middle of downtown.

3
4 That would be a little bit challenging,
5 although I can tell you you're going to hear later from
6 the autonomous truck folks it is impeccable. I've been
7 inside one of those trucks and I can tell you if I could
8 buy it tomorrow I would, so I don't have to drive because
9 that thing is smart. Okay? So the precision is
10 impeccable.

11 So again, all we want to do is continue to
12 investigate this and see what the possibility is and the
13 pilot, and they're running these trucks on Texas roadways,
14 including I-10. As we spoke today, they probably ran a
15 couple down already. So it's here.

16 So how do we embrace it and be open to it, and
17 see if we test it on one, two, three border crossings in a
18 different environment and see what it allows, David, to
19 look at what are the issues? What are the challenges?

20 What do we need to do moving forward to
21 facilitate that, working with CBP, working with Eduardo,
22 GSA and everybody else and see, okay, should we design
23 some of these lanes differently? Should we facilitate
24 more fast lanes whereby you have these dedicated lanes
25 that these ADs can use?

1 So it will allow us to think differently about
2 how we design and operate border crossings in the future,
3 so that's why I'm just like, let's be open to
4 possibilities and say it would not work in the border
5 environment. Because I can tell you the autonomous truck
6 folks are very excited about it and some border
7 communities are very excited about the possibility.
8 They're already having actually preliminary discussions
9 about this. So we'll continue dialogue with you and
10 moving forward.

11 MR. VALE: Sam Vale. I can say that all of
12 these things are very valuable looks at the future. I
13 think that we need to know that where we can go coast to
14 coast and the railroads and the seaports and all of the
15 different transportation modes are in harmony, then we can
16 worry about some of these other things.

17 I think, Caroline, you remember a little
18 discussion last night with Claudia about the Mexican
19 customs brokers system, how that works, where they can do
20 their business, and why they do certain things because
21 it's in the best interest of their businesses. So all of
22 these are very valuable looks at the future. I do think
23 that we need a greater emphasis on the multi-modality that
24 you're now bringing, Caroline, through you and the others
25 to the table because it is extremely important.

1 But I can tell you that on any given day you
2 don't have an idea, or the Mexican or the U.S. customs
3 systems crashes, and that changes everything. So we've
4 got a lot to address to be able to make it work like in an
5 ideal atmosphere, and there's a lot of interests there
6 that are going to be disturbed.

7 So it's just like when we build highways, many
8 times we don't discuss with the people that make the
9 decisions. And it's not us, it's the state legislators,
10 it's the congressmen, it's the senators, it's the public
11 officials. And they've got to be shown why they should
12 have tax money being spent to make something go coast to
13 coast or somewhere else.

14 So we've got a very good look at the future,
15 what you're bringing to the table is the future. We
16 couldn't even get pre-inspection stations 20 miles away
17 from the border on either side so that if there was any
18 delays, that took place there. I think El Paso has been
19 trying to cross like train railcars, special bridges for
20 that for many years -- I mean, I heard that 15 years ago.

21 So we are all needing to do these things but we
22 need to get to be also sensitive to the influencers of the
23 world and how we get funded for what we need. And it's
24 guys like you and others that make the decisions because
25 you've got your constituents supporting you; otherwise, it

1 gets very difficult.

2 In an ideal world, we can do all of this. Now
3 you throw in the human element and it's just a bigger,
4 more complex situation. But I would never say don't try
5 to do it, but I do say be realistic when you start talking
6 about when is it going to happen.

7 MR. GIESBRECHT: Jake Giesbrecht from Presidio.

8 And this is very interesting to us in Presidio
9 because we've been looking at this sort of program for a
10 while, especially on the rail. We can do the multimodal
11 truck and rail. We're in the designing phase of that
12 program right now. And I would really encourage the
13 people who are looking at this to look at that aspect of
14 the truck-rail project, the multimodal in Presidio.

15 SECY. SCOTT: One more, I'm sorry.

16 MR. VARGAS: Michael Vargas, City of Pharr.

17 I just wanted to echo Mr. Coronado's point. At
18 the Pharr port of entry, the international bridge, we're
19 not connected to an interstate system. We're waiting on
20 IBTC to become a reality.

21 So a lot of these multimodal thoughts, I guess,
22 there are several questions because they're going to be
23 passing through downtown Pharr or whatnot if this IBTC is
24 not expected. So I just have questions and I'm sure other
25 entities have questions that are not connected to an

1 interstate system, where Pharr international bridge is a
2 consequential port of entry for our border.

3 SECY. SCOTT: Let's take a ten-minute break, if
4 that's okay. We'll start back up at 10:20.

5 (Whereupon, at 10:10 a.m., a brief recess was
6 taken.)

7 MS. MAYS: We will reconvene again. Hopefully
8 everybody had a great time. It seems that was more fun
9 than the meeting. Everyone wants to visit with each
10 other, so that's really the whole point of these meetings
11 is the relationship building and networking.

12 So we're going to jump into the next agenda
13 item, Secretary.

14 SECY. SCOTT: Juan, take it over.

15 MR. FLORES: Secretary, thank you very much.

16 Good morning, everybody. Any stragglers
17 outside, you might want to come in now. This is the time
18 to listen in.

19 I want to preface a little bit before I jump
20 into this freight plan, and I appreciate everybody's
21 patience with this, because, you know -- planning for
22 planning sake and what we've been doing from the state
23 level, pretty comprehensive. Right? You heard of the
24 corridors we're doing with Cary and our team and Lorena,
25 and of course, Claudia on the border component. Right?

1 And then I'm pitch hitting for Sherry Pifer, our freight
2 manager for the agency, who has done this.

3 Now, I know we have some committee members that
4 have been involved in this, but this is the third go-
5 round. Caroline Mays has really done this for the past
6 three iterations. That's really some comprehensive
7 freight planning. Comprehensive freight planning, it's
8 never really been done before.

9 And I want to say this because several years
10 ago this was not even on the DOT'S or the federal focus.
11 Right? It's a nice thing to have but what are we going to
12 do with it. But now moving forward with supply chain
13 logistics, working with all the modes of transportation,
14 it's really changed everything. Right?

15 So we talk about the Infrastructure and
16 Investment Jobs Act as it relates to really highlighting
17 this. Before these freight plans used to be on a five-
18 year turnaround, now it's going down to four. Why is it
19 going?

20 Next slide. Because of what's happening in
21 supply chain logistics as it relates to warehouse and
22 distribution. I'm going to talk about what's happening
23 with emergence of China and some of the challenges they're
24 facing as it relates to no go, right, shutting down, and
25 we see brisk movement coming back to the North American

1 Hemisphere, and more specifically to Mexico. Right?

2 So as it relates to some of the items we're
3 going to be talking about, the 2050 vision, of course, the
4 multimodal goods mobility component, and then the draft
5 recommendations. Next slide.

6 The Texas Freight Mobility Plan, it looks at a
7 multitude of different kinds of things here. The business
8 insight, so this is kind of a business-led initiative as
9 it relates to going and working with the industry as it
10 relates to what's moving in the state. Is it rebar, is it
11 containers, working with our ports, working with our
12 railroads. And this is a big change for us because of the
13 international component that the state has been facing for
14 the past several years.

15 Next slide. These are some of the slides that
16 we presented at the last freight committee. It kind of
17 looks at some of the tangible components as it relates to
18 working with our residents and what that means to freight
19 planning, the business component, and then, of course, the
20 visitors that come to the state.

21 Next slide. But as it relates to economic
22 freight transportation and logistics industry, this is a
23 big time. You heard Mike talk about this a little bit as
24 it relates to the jobs and the job development, you know,
25 is it warehousing, is it ports, is it airports. Supply

1 chain management has become a very critical component of
2 the state and how we develop our goods movement.

3 Next slide. Some notable external trends
4 impacting the state. We see a lot of the competition as
5 it relates to looking at the 2020 freight plan and the
6 various components of technology.

7 So I want to focus on technology because we
8 looked at -- I used to work at a port. And when we're
9 talking about port connectivity, you know, what's coming
10 in and out of the port as it relates to working with the
11 terminal operators, working with the trucking industry. A
12 trucking component needs to make three turnarounds to get
13 in and out of the port, so there's a level of productivity
14 that freight is really highlighting and pushing on this
15 freight plan.

16 MS. MAYS: Juan, if you can just pause here for
17 a second. I want the committee to soak up this slide, you
18 know, because there's a lot on here but the big one is
19 international trade. You've got USMCA, you've got
20 nearshoring, you've got Texas being the top exporting
21 state for the last 20 years in a row, \$376 billion in
22 2021, so I didn't want you guys to kind of miss some of
23 these numbers, and then e-commerce \$81.3 billion.

24 So I just want you all to kind of think about
25 this in the context of your role as BTAC, but from a

1 statewide perspective and the trade and the border and the
2 impact it has on the state for economic impact, really in
3 the dollars and cents when you really look at that.

4 So I just wanted to kind of pause real quick
5 and get some reactions from you all, because the freight
6 plan Juan mentioned is an overarching statewide plan that
7 takes all the modes, including border. Border gets rolled
8 into the freight plan because that's now what is the
9 statewide goods movement from the border perspective.

10 So I didn't want you all to miss this, because
11 your input to the freight plan is important. I know some
12 of you are part of the Freight Advisory Committee, but
13 those of you that are not, just kind of wanted to
14 highlight that.

15 MR. CALVO: Caroline, to that point, I mean,
16 these are astounding numbers. I mean, they're huge, and
17 similar to when we completed the Border Master Plan, but
18 the numbers are so big that I think we lose perspective. I
19 think it would be helpful to make some comparisons, to say
20 what does this mean?

21 Because, again, you talk about \$376 billion in
22 international trade -- it's a lot of money but what does
23 that mean, right, or some of the other figures. I think
24 we understand it because we have been part of the
25 development team, right. But for the target audiences,

1 whether it's elected officials at the state or in Congress
2 or whatever it is, what does this mean? I mean, the
3 numbers are so big.

4 MS. MAYS: Texas is big so the numbers are
5 going to be big for Texas. But to your point, I think
6 this is much more of a summary. But this is broken down
7 certainly to a little bit more granular level in terms of
8 the number of jobs created, you know, as you saw on the
9 previous slide, one in what, six jobs?

10 Can you go to the previous slide?

11 Yeah, one in every eight jobs in the State of
12 Texas is generated by freight transportation and
13 logistics, and that includes border. So just think about
14 that. That's how we break it down to a much more granular
15 level. You see here \$59.8 billion in wages, you know a
16 million jobs tied to freight and goods movement in the
17 state.

18 So yeah, we do try to break this down and you
19 look at the economic impact, 2.2 million full-time jobs in
20 the state, dollars and cents that are related to this.
21 \$161 billion in wage income, so these are people in real
22 jobs. People are making money and making a living out of
23 this.

24 And then you look at tax revenue, people
25 understand that, elected officials understand that. Gross

1 state product, elected officials, other people understand
2 that because that's what's making the state stay
3 economically competitive.

4 So yeah, to your point, absolutely. You know,
5 we have numbers broken down for the border, by the border
6 crossing, how much trade moves across the border every
7 minute so people can understand that.

8 MR. FLORES: Just to expand on that a little
9 bit, and it's a very good question. This is why,
10 Eduardo -- and I'm glad you mentioned this because it
11 comes from the granular side too. Working with our MPOs,
12 we'll be spotting those projects that have to be
13 prioritized.

14 And I mentioned how the freight plan, working
15 with the ports section, working with the rail section,
16 pretty much prioritized all those projects into the
17 freight plan but it kind of happens on the granular level.

18 Work happens on the MPO level as it relates to those
19 project prioritizations.

20 Then, of course, working with the districts --
21 Luis, raise your hand here from the district of Laredo --
22 the design, so we prioritize these projects and then we
23 kind of put them in the queue and then get them ready for
24 funding and design and how they implement within the
25 district. Statewide perspective as well, too, so from

1 soup to nuts.

2 MR. CALVO: And then I think the important
3 thing also is all of us are sort of like ambassadors of
4 these documents. Right? So we need to understand it so
5 that we can communicate this, right, because this is
6 important.

7 It's huge. But sometimes I even get lost in
8 the numbers, like, man, this is so big, what does it mean?
9 You lose complete perspective.

10 MS. MAYS: Yeah, and you're absolutely right.
11 When you take from the border, now you're statewide, we're
12 talking about the entire state's economy. So yeah, the
13 numbers are going to be staggering, but to your point,
14 yes.

15 And I'll tell you, to your comment as to how
16 you guys can be an ambassador, a number of years ago it
17 was, I think -- Senator Garcia mentioned, Caroline, this
18 is so big. The numbers are so big, give me a 30-second
19 elevator speech.

20 And we created the one in every eight jobs was
21 the result of what Senator Garcia used to ask, drill this
22 down to statements that I can use and my people can relate
23 to. So that's what we're trying to do in the plan really
24 to be able to help you all be ambassadors, be champions of
25 the message. I mentioned earlier a lot of this plan we

1 developed it so you guys can go help sell it and use it
2 for your own purposes.

3 Juan, sorry for hijacking.

4 MR. FLORES: Having Caroline's insight -- as
5 many of you know, this is her baby, so as it relates to
6 the freight plan.

7 Let's go to slide 7, I think, TxDOT addressing
8 goods mobility. I wanted to focus on this one. And
9 there's a lot going on here, but as it relates to some of
10 the areas, the asset preservation, and I think this where
11 the rubber hits the road as it relates to trucks, big
12 trucks coming into our region.

13 Trucks really hitting up the asset. Then it
14 becomes a maintenance issue as it relates to how we work
15 with the districts, how we put monies away for the upgrade
16 of the network. So this is a big component, resilience
17 and sustainability, as well as access as well.

18 Next slide. A robust planning system, this is
19 critical as it relates to what we're looking at, enhanced
20 commodity through data. You know, data will justify the
21 investment working with our data folks, looking at these
22 focused priorities, advance project prioritization,
23 industry clusters and supply chains.

24 Supply chain logistics keeps on changing,
25 looking at the regions, looking at the clusters around the

1 state and what's changing is something very insightful
2 that we have to do. And if you listened to what I
3 mentioned earlier from a five-year freight plan to a four-
4 year prioritization, our state is changing, right. The
5 regions are changing, and these are things that we have to
6 really look at.

7 Is it commodities coming into the various
8 states? Potentially. Is it how trucks are moving
9 differently into different ports that are less congested?
10 Might have to take a look at those items, as Caroline
11 mentioned. Highway 57 to Piedras Negras and Eagle Pass
12 and how they're experiencing challenges there too.

13 Next slide.

14 MS. MAYS: Just quickly, too, Juan, I don't
15 want to miss this. If you can go back to the next slide.
16 I apologize.

17 The bottom of that is really the robust
18 engagement that took place to get the plan that is being
19 presented to you today. Thirteen regional working groups,
20 four supply chain working group meetings, eight Freight
21 Advisory Committee meetings, some of you have been a part
22 of, and then email blasts, phone calls, social media.

23 So I want to share this because it's a critical
24 part of what we do as TxDOT to develop these plans is to
25 reach out, to engage, to get input. So that when we take

1 this in front of the Commission, they know that it was
2 developed with a very comprehensive and robust stakeholder
3 engagement throughout the state.

4 So I didn't want to miss that. Sorry, Juan.

5 MR. FLORES: And just to elaborate on that one,
6 I'll highlight the last one on the left, and conducted
7 in-depth truck crash hot spots analysis. Because of the
8 trucking patterns, 82 percent of freight movement is still
9 by truck, that go-go gadget arm as it relates to a hub, a
10 spoke.

11 But this is critical because the trucking
12 patterns have changed, so it becomes a safety issue. And
13 that's always been a priority for the state as it relates
14 to looking at challenges.

15 SECY. SCOTT: I don't know if any introduction
16 is needed. Right? This is the greatest seat in the world
17 because the mayor was here first, everybody knew him, now
18 the senior senator from the State of Texas is here,
19 everybody knows you.

20 Senator John Cornyn. Thank you for being here.

21 SENATOR CORNYN: Thank you, John, for letting
22 me drop in. It's good to see y'all again. I heard you
23 were here and so I was in town and wanted to drop by.

24 We had to call an audible this morning. We
25 were planning to go into Marfa. We've designated the

1 Blackwell School there as a national park site of historic
2 significance. And unfortunately, the ceiling was too low
3 to land, so we diverted here a little earlier than we
4 planned to.

5 But to John's point, we are always happy to
6 work with the Border Trade Advisory Committee, TxDOT
7 Border Trade Alliance, all the various organizations that
8 are committed to making sure that our border region
9 remains a vibrant part of our economy and that we provide
10 the support at the federal level that will provide
11 infrastructure and things that are necessary for these
12 fast-growing communities.

13 Obviously there's a lot of things -- and I'm
14 going to be quiet here in a moment and listen to anything
15 anybody wants to tell me in terms of their priorities.
16 But things that I've made a note of that I know we've
17 talked about in the past are things like the Donation
18 Acceptance Program Extension Act which allows donations to
19 be made on a collaborative basis at the ports of entry
20 that has proven to be a very productive program. Of
21 course, foreign trade zones, we had a little bit of a
22 kerfuffle at the federal level when it came to the
23 reauthorization of some of these foreign trade zones, but
24 I know Texas has more than almost any other state and
25 those are really important.

1 And then the Customs and Trade Partnership
2 Against Terrorism program, which is a pilot program for
3 fast-tracking lane access, and then of course, the various
4 presidential permits for ports of entry bridge projects,
5 and then, of course, then finally NADBank which has been a
6 central component of border development and infrastructure
7 on both sides of the border.

8 So thanks for letting me drop by since I was in
9 the neighborhood and I heard you and I wanted to come see
10 you and say hello. And my office continues to be open to
11 you for anything and everything that you could possibly
12 need. I've been in the Senate now for a little while, and
13 the good news about being there a while is you kind of
14 figure out how things work and how to be more productive.

15 The last thing I'll just put on your radar
16 screen is I just saw, John, how much Governor Abbott said
17 the state surplus was going to be. Well, I had to wonder
18 whether some of that was excess COVID funds or funds that
19 could not be used for things other than certain detailed
20 categories.

21 And Alex Padilla, the junior senator from
22 California, and I introduced a bill that passed 100 to
23 zero in the Senate -- now we're still waiting on the
24 House -- that would allow on a voluntary basis, this is
25 not mandatory, but up to 30 percent of those excess COVID

1 funds to be used for infrastructure and disaster relief.
2 And we're hopeful we're going to get that attached to one
3 of these must pass bills like the omnibus appropriations
4 bills in December. The current continuing resolution runs
5 out on December 16.

6 So if any of you have special influence on
7 Speaker Pelosi or Steny Hoyer, or the White House --
8 actually we worked with the White House on that and that's
9 why it passed 100 to zero in the Senate -- that could
10 potentially free up a lot of funds. Again, not on a
11 mandatory basis but on a voluntary basis to deal with
12 infrastructure projects and disaster relief.

13 We've had a number of places, I'm thinking
14 about Dallas and others where we've had some natural
15 disasters. And the good thing about it is -- I've
16 noticed, maybe you've noticed this too, when Congress
17 appropriates money, sometimes it takes years to actually
18 get to the intended beneficiary, because first it's got to
19 go to Austin and then get processed however that process
20 occurs. And then finally, maybe two years later, it
21 finally gets to the intended beneficiary.

22 The good news about the funds I'm talking
23 about, COVID funds, is it's already in the hands of the
24 counties and the cities, above 500,000, who were direct
25 beneficiaries, and of course, the State of Texas. And you

1 can tell Governor Abbott that I talked about this, but
2 it's up to him and up to our leaders at the state and the
3 county and the city levels who are the recipients of those
4 funds to decide how or if to use those funds for
5 infrastructure and disaster relief if we're able to get
6 this passed by the House and by the Senate and on the
7 president's desk before the end of the year.

8 So thanks for letting me come by.

9 SECY. SCOTT: Any questions?

10 SENATOR CORNYN: Sure. As long as they're
11 friendly questions, softballs, or as my staff likes to
12 say, true or false.

13 MR. VARGAS: Hi, Senator Cornyn. Michael
14 Vargas, City of Pharr.

15 On the Flex Act, which is, I think, what you're
16 talking about, is it only entities above 500,000, or is it
17 any entity that has any COVID excess funds?

18 SENATOR CORNYN: Well, it would qualify any
19 jurisdiction that has any COVID funds that are currently
20 restricted to COVID relief. Of course, sometimes it's
21 hard to know where the COVID problem starts. We know
22 where it started in terms of treatment and testing and
23 things like that, but there are a lot of consequences of
24 COVID that are economic and more sort of attenuated, but
25 it would apply to any jurisdiction.

1 I mentioned the 500,000 number for the counties
2 and cities because they were the direct recipients from
3 the federal government, as you'll remember, in the last
4 tranche of funds that came. And of course, prior to that
5 they all came to the State of Texas and then had to be
6 distributed from there. And we heard from a lot of local
7 jurisdictions that they'd like for us to bypass Austin
8 with some of the money and get the money directly to some
9 of the counties and cities.

10 Well, I don't want to interrupt your program
11 here any more. Thank you for letting me come by. It's
12 great to see all of you, and look forward to learning
13 more.

14 MR. CORONADO: If I may? Sorry to interrupt.
15 David Coronado with the City of El Paso. I sit on BTAC to
16 represent the city and we met with our mayor this morning
17 just a little while ago.

18 Welcome to El Paso. I wish you had flown in
19 last night. We had a great reception with the Secretary
20 of State and the rest of the BTAC members.

21 You mentioned the DAP, the Donations Acceptance
22 Program. The City of El Paso was one of the first five
23 pilot programs in the U.S. to apply for that, got selected
24 and we've had it since. And so the city, actually, since
25 2014-15, we've actually donated, I think, \$12-, \$13

1 million to CBP to assist with overtime to assist with
2 additional officers, reduce wait times.

3 And we do that with our bridge revenues, so
4 it's not a tax on the rest of the population. It's a
5 user-funded program. So I think those kinds of programs
6 are just logical, make sense to have to help the system.

7 And I wish you could stay with us a little bit
8 longer, we have a briefing. But in El Paso we're right
9 now pursuing a project that we might need -- I'm pretty
10 sure we will need a presidential permit and support with
11 that. We've talked to the State Department already, so
12 looking forward to working with you and your office on
13 that project in the future.

14 So again, welcome to El Paso and happy to see
15 you here with us.

16 SENATOR CORNYN: Well, thank you very much.
17 You know, in a perfect world the federal government would
18 step up and fund federal responsibilities and you wouldn't
19 have to have this donation program, but unfortunately, we
20 don't live in a perfect world.

21 So in the meantime we've been able to do this,
22 as you said, on a pilot basis. And it looks like a lot of
23 the border communities are using this very successfully to
24 move trade and traffic across our international bridges
25 which, of course, was the goal.

1 I had a chance to visit with the mayor and talk
2 about some of the other issues that y'all are dealing with
3 here in El Paso. I reminded him that I lived in El Paso
4 as a young boy when my dad was stationed at Fort Bliss, so
5 I consider this part of my home territory here in El Paso.

6 So anything we can do from my office to
7 continue to be of assistance to you, we want to do.
8 That's the reason I'm where I am, to represent 29 million
9 Texans to the best of my ability, but we need your help.
10 And one of the things I'm particularly proud of in Texas
11 is the strong leadership we have at the local level, and
12 it's been my pleasure to get to know those leaders and
13 work with them on many different issues, and we look
14 forward to continuing to work with you in the future.

15 So thanks for letting me come by. Good to see
16 you.

17 SECY. SCOTT: Juan, we're not going to let
18 Caroline ask any more questions of you. If you want to
19 start back up, thank you.

20 MR. FLORES: It's great to be interrupted by
21 Senator, let me tell you.

22 Let me just go back to what Caroline mentioned
23 as relates to this slide. You know, the supply chain
24 workshop, that's a big one because if you're familiar with
25 the department and how we work and how we plan, we're

1 working with the local partners. But as it relates to
2 supply chain, that's a bit of a different focus. Right?

3 And because we're working with year or two-year
4 turnaround times, that gives us a better idea of how to
5 plan for the future. So having those dialogues that the
6 state had was invaluable.

7 I also wanted to kind of mention the in-depth
8 crash hot spot analysis. You know, if you've ever seen
9 those heat maps, it kind of gives you a good depiction of
10 where congestion, where the problems are happening. And
11 it might be a safety issue and sometimes it might be an
12 infrastructure issue as it relates to they're not designed
13 right.

14 You know, turning radius for a truck not there,
15 we need it, right, because trucks are diverting, trucks
16 are going to different areas, right. So we have to kind
17 of look at those areas and kind of sync that and work with
18 our districts, right. Because as many of you mentioned,
19 it doesn't happen in Austin and we have to engage the
20 district offices to focus on prioritizing of those
21 projects and get the funding right.

22 Next slide. This one has a lot going on as it
23 relates to the federal requirements, you know, looking at
24 the critical rural freight facilities. I know this has
25 always been a real sensitive issue as it relates to urban

1 and rural.

2 The freight plan, as many of you know,
3 encompasses the rural area and developing areas. And if
4 you're looking at supply chain logistics and
5 transportation, it's going to the rural areas. Why?
6 Because there's available land, right? So we're always
7 constantly looking at those components.

8 And also, too, the two-for-one deal, the state,
9 Caroline and her team really kind of focused it to another
10 degree as it relates to highlighting some of these areas
11 as it relates case studies, safety analysis, commodity
12 forecast, modal profiles and analysis, and then supply
13 chain, which we mentioned to you before.

14 Next slide. You know, this one, in a perfect
15 world all the modes would be equal in status, right. And
16 for the most part, the way this country was designed, our
17 interstate system, we're looking at the modes of
18 transportation, right. It's still a trucking industry,
19 right?

20 I would honestly say the day you see a waterway
21 going into your local Walmart, it will [inaudible]
22 equality, right. And looking at how we focus on
23 prioritizing that funding is critical.

24 Some of the things I wanted to focus on here
25 was nearly 4 billion tons of trade traveled across Texas's

1 multimodal network in 2019. Trucks carried more freight
2 than any other mode in Texas in terms of both the tonnage
3 and value, 1.7 billion, which encompasses about 43 percent
4 of what's moved in the state.

5 Next slide. Then we start drilling down a
6 little bit more as it relates to a summary of freight
7 transportation assets. And you can see here the challenge
8 sometimes with the freight planning -- and because this is
9 our third iteration -- is working with the other modes of
10 transportation.

11 The big one is FHWA, but when you're looking at
12 the other modes of transportation, FRA, rail, NARAD,
13 maritime, FTA as it relates to access, this is something
14 that we also take into consideration as it relates to
15 connectivity. It's one thing to have a warehouse and the
16 logistics industry, but it's another thing to get people
17 there. So if you listened to what Mike said as it relates
18 to connecting that from a technology standpoint, that's
19 the added value that the study actually highlights as
20 well, too.

21 Next slide. You know, looking at the current
22 Texas multimodal trade network, there's a couple of
23 components here that I want to kind of highlight. There
24 is an issue of technology that was mentioned before and
25 some folks pushed back as it relates to we're not ready.

1 Right?

2 And I would push back on that one too as it
3 relates to we might not be ready, but the industry is
4 ready. You know, later you'll hear about the pilot
5 programs that are happening in the state. There's over a
6 dozen trucking pilot studies happening in the state right
7 now. What does that mean for our commerce, what does that
8 mean for our connectivity, what is happening.

9 The technology of the trucking industry is
10 amazing. You know, you might say, well, a truck driver --
11 then you go into a cab and you work for a company like
12 Schneider Logistics, another advisor, their center of
13 technology, rapid eye movement, there is equipment in the
14 truck now in the cab that can sense when somebody is
15 falling asleep and the dispatcher gives a call and says to
16 wake up, pull over.

17 Hard brakes, hard turns, that is being
18 measured. It's all metrics. At the end of the year or
19 six months, maybe, the truck driver will be brought in and
20 be evaluated how he or she performs. So it's getting into
21 the minute and granular component as it relates to supply
22 chain logistics.

23 Next slide. Mobility, congestion, system
24 operations, safety, asset management -- I talked about the
25 asset management a little bit -- and the resiliency of

1 funding. Why don't you take that one in a little bit and
2 soak it up and see if anything is there that you see.

3 Connectivity, you know, I was talking the
4 gentleman, Mike, a little earlier as it relates to what
5 the freight plan encompasses too is not what's built out
6 but what needs to be built. Right?

7 I mentioned with the Representative, we visited
8 Piedras Negras and Eagle Pass and what that relationship
9 was that there's a lot of people commuting on Highway 57.

10 But it's not just trucks, it's also people that are using
11 that corridor to go to school, right, going to the
12 university, going to the city to buy merchandise, right.

13 So it becomes not only a freight corridor but
14 as it relates to goods movement and people. Right? So
15 the state is constantly looking at these trouble points
16 and remeasuring all these components.

17 Next slide. This kind of gives you a nice
18 little synopsis as it relates to the border projects that
19 we're looking at, 53 in total. If you look at the UTP,
20 and some of you already have a link to that, looking at
21 the fully funded projects -- 32 -- and six partially
22 funded and unfunded projects. Right? And this is
23 constantly being evaluated.

24 We do an intensive ten-year evaluation of where
25 we need to spend around the state. Twenty-five districts,

1 each one has different focuses as it relates to is it
2 border trade, is it ag, is it the neighboring state, New
3 Mexico, that's bringing in some sort of commerce? And
4 we're constantly always working within the districts to
5 better measure that.

6 Next slide. This kind of gives you a nice
7 little synopsis of where we are, discuss final draft plan
8 with the Freight Advisory Committee on November 5. So
9 we'll be making our final decision there as it relates to
10 any more comments.

11 And then we go in December presenting and
12 discussing the final plan to the Commission and approval
13 by the Commission -- a nice Christmas gift, I like to
14 say -- and then some public comment 30 days with our
15 federal partners. And this is the other component that
16 many are very familiar with, but working with our federal
17 partners as relates to getting the okay for these federal
18 funds.

19 It takes two to tango and this is something
20 we're constantly working with our federal counterparts on,
21 both on the FRA, both on the NARAD, on the truck size and
22 weights, these sorts of issues we're constantly looking
23 at. And then bring the revisions to the Commission for
24 comments in January, and hopefully submit it to FHWA for
25 the 60-day review in February.

1 That is kind of a quick analysis of the freight
2 plan. I do want to kind of highlight where Caroline has
3 really brought this program and where it's going in the
4 future. I can tell you, working in other state agencies,
5 this is one of the more comprehensive programs in the
6 country.

7 If you look at the way states were organized as
8 it relates to the highway, the bit T, right, the other
9 modes of transportation were a lot more challenging, as it
10 relates to FRA. Well, that's a Class 1 issue, right, it's
11 a Class 2, it's a short line issue. Working with the
12 ports, well, that's a county-based operation. Right?

13 If you look at what's happening on the
14 productivity of a facility at the railroad, at railyards,
15 a port, amazing. It's just amazing.

16 Actually, a lot of the ports -- you heard about
17 the challenges of the ports on the West Coast, but there
18 was actually a lot of productivity that was happening at
19 the ports as it relates to working with the terminal
20 operators, working with the trucking industry, the drayage
21 folks that the task force for supply chain management
22 actually highlighted. They put that in the freight plan.

23 Nobody has ever been able to do that.

24 So these comprehensive freight plans are
25 something that's going to really change the whole dynamic

1 of the state, right, as it relates to how we build, where
2 we grow, what we should be looking at in the future, all
3 modes of transportation, which is not an easy thing to do.

4 It's not an easy thing to do because, you know,
5 we're working with our rail partners, which by the way, is
6 one of the biggest users of the trucking industry as it
7 relates to containerization, where they're stacking. Have
8 you seen that? That's a [inaudible] right there.

9 Caroline, please.

10 MS. MAYS: Yeah. I know we're running short of
11 time and so want to stay on schedule, but I wanted to give
12 the committee a chance to provide any input, feedback on
13 what you heard Juan present. You know, any comments, any
14 feedback?

15 One thing I wanted to mention to you all, we
16 will be going in front of Commission presentation in
17 November, in front of Commission to present the freight
18 plan as we've done in previous cycles, and then hoping to
19 have Commission adopt the plan in January. And this plan
20 has to go to the feds to meet federal requirements.

21 Like the Border Master Plan, the freight plan
22 must, one, meet the requirements for freight planning
23 purposes but also funding. There's funding attached to
24 the freight plan that we have to make sure we get it
25 submitted and approved on time, so just for your

1 awareness, that's kind of the timeline moving forward.

2 So if you guys have any comments, feedback.
3 Like I mentioned, some of you sit on the Freight Advisory
4 Committee so you're kind of entrenched in this work
5 effort.

6 MR. CALVO: Caroline, yeah, and Juan, to me one
7 of the most telling slides is the one that's titled
8 Multimodal Trade Transportation where you're showing
9 between 2019 and 2050 population growing 63 percent, the
10 three arrows to the right, but then the growth in tonnage,
11 96 percent, and the value of goods 144 percent. So the
12 population growth by itself is tremendous.

13 The state is going to grow, but the stuff
14 that's going to be moving within the state -- and we can
15 get into the weeds on how that was estimated, but these
16 are some of the statistics that are very easy to read and
17 to understand. I mean, it's a good thing but it's a real
18 challenge.

19 MS. MAYS: But to your point, Eduardo,
20 population drives freight demand. Okay, we're eating
21 guacamole every day, we're eating steak, we're eating all
22 of the stuff. We're clothing ourselves, we're building
23 homes, we're ordering computers.

24 Population, industry creates freight demand and
25 here we wanted to show that population is growing at 63

1 percent, but goods is going to grow by 96 percent, so you
2 know, just think about that. And you know, the volume of
3 goods is outpacing population growth. So that means each
4 household, each person is consuming more freight today and
5 they're going to consume more freight in the future, so
6 you just think about that, we're going to have 50 million
7 people in 2050.

8 So being able to show that, and to your point,
9 this is what we're trying to share and show that there's a
10 correlation between population and goods movement because
11 of the demand that creates and we didn't really show
12 industry here. Industry is also generating a lot of
13 freight.

14 The more industry we're bringing here, you're
15 hearing about Teslas and the Samsungs and the TI
16 expanding, all of that means there's going to be more
17 trucks going into those facilities, into Toyota and all of
18 this manufacturing. There's going to be more trucks going
19 in there, taking rail, taking trucks, getting the cars
20 out, et cetera.

21 So all of that is what's going to create a lot
22 of what we see here. And really the trend, I can tell
23 you, having been involved in this for the last several
24 years, it's not going down. It's consistent and the pace
25 is actually increasing.

1 As we've seen from some of the data that we
2 have now and our projections really showing that we're
3 trending upward, there's not going to be any slowing down.

4 And I can tell you these numbers don't have the
5 nearshoring prominent in here, so that could be another
6 game changer in a few years when we look at these numbers
7 and we add that in. We're going to see really much bigger
8 numbers here than we see right now.

9 SECY. SCOTT: I know we're tight for time, but
10 one really quick question on the water. So population,
11 we're supposed to almost add 30 million Texans between the
12 same period of time, right, 30 years. The water only goes
13 up 100 million tons. Is that just the capacity?

14 MS. MAYS: There's several things. It's not
15 necessarily a capacity issue but it's more the types of
16 commodities that are moved by water, and that's really
17 what drives a lot of the different modes. Certain
18 commodities don't move by water, they come in bulk.

19 Let's say stuff coming from China, for
20 instance, they come to the port and then they end up being
21 moved by truck or rail, you know, or other modes. So,
22 Secretary, it's not capacity. I think we have a ton of
23 capacity in our ports and waterway system in Texas.

24 The GIWW, which is the Intracoastal Waterway,
25 there's a lot of capacity there. Of course there are

1 needs there that are being addressed today, and so I think
2 our seaports and waterways are well positioned to really
3 be able to move bulk.

4 MR. FLORES: Secretary, if you've ever seen a
5 port brochure, and one of things they always say, we have
6 access to I-10, I-35 and the corridor. And that's that
7 connectivity component we talk about as it relates to it's
8 going to go on the corridor to its final destination.

9 Eduardo made a good point about the maintenance
10 issue, the truck size and weight. And by our federal
11 component, trucks are not supposed to weigh over 80,000
12 pounds. So as it relates to the tonnage that's moving,
13 this becomes a very district-focused issue as relates to
14 maintenance of the asset, maintenance of the asset.

15 I love it. Economic development, come on,
16 bring it on. But as it relates to the wear and the tear
17 of the asset of the districts on the roadway, that becomes
18 a challenge that we as a state have to focus as relates to
19 do we prioritize a maintenance program as it relates to
20 the outer years, or these multimodal projects. Right?

21 We want to offset congestion, offset this
22 tonnage, not on our roads but utilizing the other modes of
23 transportation, shipping, rail. Rail is optimal, right.
24 We're utilizing the assets that come 15 to 25 percent of
25 anywhere you are in the state.

1 So partnerships with the railroads and the
2 funding is there, having these relationships with the
3 railroads with the class runs, and most particularly the
4 short lines that kind of have that connectivity,
5 invaluable moving forward.

6 SECY. SCOTT: State Representative Ortega is
7 here. I was going to see if we could get her to come up
8 and say a word. Sorry for putting you on the spot.

9 REPRESENTATIVE ORTEGA: Again, if I can assist
10 you in any way, I sit in the House Transportation
11 Committee, and I really enjoy being part of the
12 transportation. It's challenging, but what I can see you
13 all doing is helping progress transportation in the
14 future.

15 So thank you for being here.

16 (Applause.)

17 SECY. SCOTT: And so the next agenda item is
18 the El Paso region is going to give us a border related
19 update on technology projects.

20 MR. TREVINO: Good morning, everyone. Tomas
21 Trevino, El Paso District Engineer, and I'll be doing a
22 presentation on technology-based projects here in El Paso.

23 Before I begin, however, I'd like to just
24 acknowledge the relationship we have with the City of El
25 Paso and David Coronado and his group, and of course, the

1 El Paso MPO. It's truly a pleasure to work with these
2 gentlemen. We all have a single focus in mind, and that's
3 to provide the best transportation service we can to the
4 people of El Paso and the El Paso region.

5 So with that, we've been tasked with our
6 executive director to innovate new solutions to our
7 transportation problems. And I've got four projects that
8 we've implemented here in El Paso that I think do just
9 that.

10 Next slide. So I'm going to start off with our
11 wrong-way driver projects. So every year we have about
12 240 wrong-way driver accidents across the state. El Paso
13 is no different; since 2017, we've seen about 83.

14 Many of these accidents go unreported. A lot
15 of the drivers turn around without having an incident or
16 accident, and so we know that we have more than the 83
17 we've actually documented.

18 Next slide. So here's a map of the accidents
19 that we have had and we have mapped. And as you can see,
20 it's not contained to one specific section or one specific
21 roadway.

22 So we've taken pretty much a holistic approach
23 to identifying the need for wrong-way driver
24 countermeasures. One thing we've done here -- next slide,
25 please -- we've actually taken a tiered approach to our

1 countermeasures. So the level one countermeasure is
2 simply providing oversized signs, improving pavement
3 markings, and wrong-way driver arrows at the actual
4 intersections in order to warn the drivers that they're
5 going the wrong way.

6 Next slide. The next countermeasure is a step
7 up. We'll have all the level one countermeasures along
8 with converting some of the static signs to LED flashing
9 signs, again, all in an attempt to capture the attention
10 of the wrong-way drivers and hopefully have them turn
11 around before they actually enter the arterial roadway.

12 Next slide. So the next level is level three
13 and we actually have two level three initiatives. One is
14 for rural areas and these actually have a wrong-way driver
15 detection system. And these activate the wrong way LEDs
16 on some of these signs, all in an attempt to have them
17 turn around.

18 This is what we would use for a rural
19 intersection -- next slide, please. And this is what we
20 would use in an urban intersection where we actually have
21 the detection system tied into our TransVista center there
22 at the El Paso District, and they would alert 9-1-1 and
23 appropriate first responders.

24 Next slide. So we have implemented some of
25 these projects; a lot of these projects are under

1 construction now. We have under construction right now 49
2 projects that will receive either level two or level three
3 treatment. We only have one of them completed so far, and
4 that's on US 54.

5 Next slide. We are actively engaging and
6 providing at least a level one service wrong-way driver
7 system to at least 100 intersections throughout the City
8 of El Paso and in some of our rural intersections.

9 Next slide. So another initiative we have is
10 the end of queue system, and this is one project that we
11 have completed. And so looking at a heat map of incidents
12 and accidents on I-10, the one section that stood out is
13 the CBP checkpoint that we have at Sierra Blanca.

14 A lot of those incidents and accidents were due
15 to trucks queuing onto I-10 just based on the inspection
16 station. So in order to forewarn the traveling public, we
17 installed an end of queue system, and this end of queue
18 system works by detecting a queue that's spilling over
19 into I-10. And in order to forewarn the traveling public,
20 we've installed DMSs letting them know that there's slow
21 traffic ahead or stopped traffic ahead, whatever the case
22 may be.

23 Next slide. This is an actual aerial of the
24 location of the CBP checkpoint. And as you can see, the
25 geometry of the roadway tends to bend around the mountain

1 and we're actually warning the traveling public on the
2 other side of the mountain before they ever get to the
3 stopped condition.

4 Next slide. Another project we're very excited
5 about is a port of entry project, ITS project, that we're
6 doing in conjunction with the City of El Paso. So this
7 project is actually a \$32 million job; \$14 million of that
8 is actually on what we call on-system which are state
9 roadways; \$18 million of those are on off-system which is
10 City of El Paso streets. And again, to provide the region
11 a holistic system that works in unison, we have to do both
12 on-system roadways and off-system roadways in order to do
13 that.

14 So we just let the project for on-system border
15 port of entry ITS last month for a project cost of about
16 \$14 million. And this project includes DMSs, static signs
17 with embedded DMSs, CCTV, and BCIS, which is a border
18 crossing information system.

19 Next slide. So the thought is to provide the
20 traveling public real-time crossing wait so that they can
21 make a decision as to which port of entry they could
22 utilize, whether it's Zaragoza, Americas or Stanton. And
23 as you can see, we have the Zaragoza and Americas entries
24 broken up into cars and trucks.

25 Next slide. And so, along with the overhead

1 cantilever signs that we have, we'll have some large
2 static signs that provide, again, real-time data for the
3 traveling public. We'll also be able to tell them when
4 the ports of entry are closed.

5 Next slide. And if you can just scroll through
6 this, this is our plan to install these port of entry DMSs
7 along I-10 and along 54 and along Interstate 110 headed
8 toward the BOTA port of entry. And as you can see, it
9 uses existing DMSs along with embedded static DMS, all in
10 an effort to inform the traveling public.

11 Next slide. Finally, the last one I'd like to
12 just show you is the full color dynamic message signs that
13 we've got installed in the City of El Paso. So why do
14 full color DMSs? And the reason is that 94 percent of
15 study subjects preferred graphical messages versus text
16 messages. Secondly, it improves recognition among non-
17 English speaking travelers.

18 Next slide. So currently we have 99 DMSs
19 throughout the city. Sixty-six of those are just amber
20 DMSs which is your standard DMS, 37 of those are actually
21 full color.

22 Next slide. So in the next couple of years
23 we're going to install 38 more full color DMSs for a total
24 of 75 full color DMSs throughout the city. And you'll see
25 messages like this that will inform and give you more

1 information on the road conditions ahead, actually give
2 you travel times for the different roadways so you can
3 make good decisions while you're traveling, and again,
4 give you more information on existing road conditions.

5 Some of those are actually in place and are
6 working. We continue to work with our partners at SwRI
7 and Traffic Division to get more of these signs in place
8 and up and running, but we are actively using the ones we
9 have in place now.

10 So with that, I'm going to turn it over to
11 David Coronado with the City of El Paso.

12 MR. CORONADO: Thank you, Tomas. David
13 Coronado, again, for the record.

14 So we have a briefing that we wanted to give
15 you all, and Secretary, a little bit of context. It's
16 about the City of El Paso, what we do, the role we play,
17 and then like Tomas said, our projects that we have right
18 now that are active.

19 So go to the next slide, please. So just for
20 context, El Paso and Juarez, we are by no means a small
21 port of entry. We're ranked second in personal vehicle
22 crossings, second in pedestrian crossings, and third in
23 cargo crossings, and so we compete with Laredo, with Otay
24 Mesa, San Isidro any given year.

25 2021 we had almost basically a full recovery

1 from the pandemic and we exceeded \$80 billion in trade in
2 volumes and the value of commodities that go back and
3 forth between El Paso and Juarez. In a normal year -- you
4 know, 2020 and 2021 were not normal years -- but we
5 usually exceed 10 million vehicles in a given year. We
6 exceed 7 million pedestrians also in a given year.

7 Cargo, though, did do quite nicely post-COVID.

8 Once the industry was able to recover we adjusted
9 operations to be able to manage the connections both in El
10 Paso and Juarez.

11 Within our region we have six border crossings
12 here: two downtown which we own, the City of El Paso owns
13 those two, one on the east side at Zaragoza, we also own
14 that one. And then there's three others that the city
15 does not own, that's Bridge of the Americas owned by the
16 Water Commission, Santa Teresa in New Mexico, of course,
17 and the Tornillo-Guadalupe which is owned by the county
18 outside the city limits. And so out of the six, we own
19 three border crossings.

20 Go to the next slide. And before I go into
21 this, a couple of side note comments. So there's some
22 goody bags we left for all of you BTAC members. Again,
23 welcome to El Paso, wanted to make a good impression.

24 And then if I may ask the staff of
25 international bridges to stand up, I know that I'm putting

1 you on the spot. There's a few of them here. I'm just a
2 spokesperson, but they are the ones that do the work.
3 They're the ones that work on all these projects, they're
4 the ones that make it happen.

5 (Applause.)

6 MR. CORONADO: So just wanted to recognize
7 them. They're the ones that work with us.

8 And then we also invited several members of the
9 Bridges Steering Committee that work with us. We talk
10 about that committee quite often in our meetings, we show
11 them off. And there's a few slides here in a second, but
12 we invited them. There's a few of them here so thank you
13 all for coming.

14 We wanted you all to sort of hear from them
15 also and see them. They're the ones that also make these
16 projects happen working with us. The city cannot do it
17 alone.

18 So having said that, so again, a little bit of
19 context. Here we have data going back to 2000 in
20 crossings for El Paso and Juarez and how multiple events
21 shock the system. Like I said this morning earlier about
22 there's traffic, there's bridge traffic, and all kinds of
23 events impact international bridge crossings.

24 This is just going back to 2000. You see 9/11
25 had a drastic shift, or created a drastic shift, in the

1 way that people moved and the way that people were
2 processed. If y'all were around back then, that
3 completely changed the system for everybody. People
4 decided to stop driving, and you'll see that sharp
5 decline. And instead of driving they would walk across to
6 avoid wait times in vehicles.

7 And so then we have the Great Recession,
8 another event that also impacted greatly for the medium to
9 long term. For several years it changed and it had a
10 negative effect in crossings.

11 And then we have COVID, another external factor
12 that impacted crossings. With COVID, it's been a few
13 months, we have now recovered fully on vehicle crossings.

14 You see that now we're actually exceeding the baseline
15 pre-COVID levels when it comes to crossings for vehicles.

16
17 Pedestrian crossings, though, we have not
18 recovered. We're about 50-40 percent recovery, not quite
19 there yet. We believe that COVID is going to be one of
20 those factors that for the long term it changes the way --
21 and it has already -- that people behave and how they
22 cross between our two cities. Don't know what the other
23 communities are seeing, but that's what we have here in El
24 Paso.

25 And if we go to the next slide. Cargo, again,

1 like I said, recovered quite nicely within a few months
2 after the pandemic, once the industry was able to recover.
3 And even then, right now we're actually exceeding record
4 levels, not only in dollar and quantity values but also in
5 crossings within the El Paso District, which again is
6 positive for the industry.

7 It shows that there's growth and demand. We
8 all know about supply shortages, and so El Paso is doing
9 its part and Juarez doing its part.

10 Go to the next slide. A little bit about the
11 projects. So we talked about the P-3 and the BAP, you
12 know, like I said, the city has had the program active
13 since 2014 when we got picked for a pilot program.

14 And then here we have the actual number of
15 hours that we helped CBP add more lanes, open more lanes,
16 reduce wait times. All that is funded by bridge users
17 when they pay the tolls, so it's a user-funded fee. You
18 pay to get out of the U.S., but then you benefit to get in
19 with reduced wait times.

20 You see that during COVID and the COVID
21 restrictions we cut back because they were just no
22 longer needed during that time or not a good use or wise
23 use of dollars. But we continued supporting CBP on the
24 cargo environment. Like I said, cargo continued to grow,
25 cargo recovered, and so we had that program remain active.

1 We also have, and Tomas referred to this -- to
2 the ITS. We have a really strong CIP also funded by the
3 bridge users that allows us to make improvements at the
4 bridges and to help commuters back and forth.

5 Go to the next slide. And so like I said, our
6 BSC, Bridges Steering Committee, there's many members that
7 are here present. We have a wide range of associations
8 with the industry. Somebody was talking about making sure
9 that we engage the industry, get their feedback, which I
10 completely agree with.

11 We have transportistas, train companies, we
12 have maquiladora associations, industry stakeholders,
13 nonprofits, UTEP researchers. We have TTI, the MPO, and
14 on down the list, and we have groups from both the U.S.
15 and Mexico. We meet with them monthly, talk about
16 projects, talk about priorities that essentially engage in
17 how we work and get those projects on the CIP implemented
18 on the ground.

19 Go to the next slide. And so one example of
20 that, one application is cooperation with Roberto
21 Fernandez, who is here right now sitting in front of me.
22 We work with Fideicomiso de Puentes. They own the
23 bridges, the second half on the Mexican side.

24 We work with them quite a bit. We went out
25 there early this spring to look at their EMC. We're right

1 now working with them to implement our ITS and make sure
2 that both systems are compatible, both in El Paso and in
3 Juarez, and that they talk to each other and that the
4 users benefit, both in El Paso and in Juarez, from these
5 investments.

6 Not only do we have that project that's right
7 now being led by the city and by TxDOT, but they have
8 their own ITS. And so we need to make sure that our
9 systems are compatible, that the data's being shared,
10 camera feeds, those kinds of things, again, all of it for
11 the benefit of the bridge users, and of course, our
12 operations as well.

13 Next slide. And so this is the ITS that
14 Director Trevino was talking about. He already discussed
15 it quite a bit, so I won't go into too much detail. The
16 project itself is for Bridge of the Americas and Ysleta
17 Zaragoza to address the needs for vehicle and cargo
18 traffic. And again, the idea is to work with the
19 stakeholders, with CBP, with TTI, with El Paso for this
20 implementation.

21 And what this means to users -- it's all kinds
22 of technology for us as bridge operators and for the
23 highway system -- if we go to the next slide, what it
24 means to the actual end-user is essentially improved
25 customer service. They have access to real-time traffic

1 conditions at the ports, they have access to wait time
2 data. And they get alerts, and so via a website, via text
3 alerts, via our DMSs.

4 And so as an example, last week on Friday we
5 had a terrible incident. We had a shooting at the port of
6 entry, at one of our bridges downtown, completely
7 unrelated to traffic or bridge traffic conditions -- a
8 random domestic violence case that ended up shutting down
9 the bridge, one of our bridges. Everybody was safe, the
10 person got arrested and taken to the hospital for medical
11 attention. But that incident itself completely changed
12 the dynamics for that one evening for operations and for
13 the customers.

14 So once this is completely live, it's going to
15 help with incidents like that that we just could not
16 foresee happening to alert bridge users this bridge is
17 closed, go to this one or go to that one. So that they
18 know what to expect before they get in the car, or if
19 they're already in their vehicle on the way, they can
20 react and adjust their trip accordingly.

21 Go to the next slide. And so like I said, we
22 have a website. We have also programs for automated
23 transactions that you can prepay and get the benefit from
24 reduced fees. It's a really great website also.

25 So at the second to last meeting I mentioned an

1 application that we were working on for a construction
2 project at Ysleta Zaragoza for pedestrians. We applied,
3 we received a letter of support from TxDOT, which was
4 great, from the TxDOT office. It was a great application.

5 We actually received the award for that grant
6 application, \$12 million with a match from the city of
7 \$3-. So it will be a \$15 million project, dedicated
8 drop-off area for pedestrians, protection from the
9 elements, shade canopies, crosswalk improvements, signage,
10 public bathrooms. We're also going to be adding a public
11 park component.

12 And so again, all these improvements can help
13 someone make it across, which is about a half mile walk
14 from the U.S. to Juarez. It's a pretty long walk, no
15 improvements, you're exposed to the elements.

16 So again, there's a lot of funding
17 opportunities out there that we're pursuing to complement
18 or supplement our CIP which has limited funding.

19 And then next slide, I believe this is the last
20 slide. Yeah, this is my last slide.

21 So we heard from Lina Ortega. We get a lot of
22 help also from Senator Blanco at the state delegation,
23 federal delegation as well, 16 and 23 Districts. And
24 they're the ones that help us with our projects.

25 The Bridges Steering Committee has been

1 instrumental. So without all these entities and
2 partnerships, the city could not do it alone.

3 So anyway, with that I will pass it back to
4 Eduardo, unless there's any questions.

5 MS. MAYS: Not really a question, David, but I
6 wanted to just commend you all on the Binational Steering
7 Committee. I know during the Border Master Plan that was
8 really shown as the model for the border regions to
9 engage. And essentially what we're doing, what we
10 mentioned earlier, the Texas-Mexico Task Border Force
11 really emulating that but on a border-wide, statewide
12 level. So I just wanted to commend you all for that
13 effort.

14 MR. CORONADO: Thank you, Caroline. I know we
15 talk about it a lot, probably way too much, but we're just
16 really proud of it. It's a committee that we started in
17 2015 and it's continued since.

18 We've done a lot of good work with them and
19 we're just getting started. It's been several years
20 working with the bridges and the team that we have. On
21 the committee, we're just getting started.

22 Just right now it made me think that I missed
23 something else. So Sam Vale has a really good memory,
24 because the city has been talking about this Freight
25 Shuttle concept for the last 10, 12, 15 years. And I'll

1 give you an update at the next meeting.

2 Right now it's still in the works, but we are
3 now engaging with Freight Shuttle. And if you Google it,
4 Google Freight Shuttle Express, you'll see their website.

5 We'll have a briefing at the next BTAC.

6 We're working with them right now to have an
7 MOU between the City of El Paso, City of Juarez and
8 Freight Shuttle to explore the project, to work on
9 presidential permit requirements -- that's what I
10 mentioned right now to Senator Cornyn -- to look at right-
11 of-way permit requirements, presidential permit, working
12 with the stakeholders, working with the BSC, with CBP.
13 And that's an elevated cargo mover, fully automated,
14 electric.

15 We're exploring that asset as a three-way
16 effort between the City of Juarez, City of El Paso and
17 Freight Shuttle, hoping that we can get the MOU approved
18 with the city council in the first meeting in November.
19 And so by the next BTAC, I hope to have good news on that
20 front. And we'll work with your office, Caroline, so you
21 have that item at the next meeting and give you more
22 details. So that's just a preview of that.

23 So, Sam, we're working on it still but now we
24 have actual progress. So thanks for bringing it up.

25 MS. MAYS: Thank you. And one last thing, the

1 RAISE grant. I want to commend you again for doing that
2 and really focusing on pedestrian safety at the border.

3 And for the other border regions, that's a big
4 challenge. You know, we covered that in the Border Master
5 Plan, but also our own leadership. The border regions
6 have fairly significant pedestrian safety issues, so just
7 encourage the other border regions to think about that.
8 The southern border has the most pedestrians.

9 I grew up on the northern border, I grew up in
10 Canada. We never walked across the border, we always
11 drove. But on the southern border there's a significant
12 amount of pedestrians and we kind of ignore that a little
13 bit.

14 We walked -- we were in Eagle Pass a couple of
15 months ago and I didn't have my Global Entry at that
16 point. The line was very long so we walked, and saw
17 firsthand what a pedestrian experiences walking across the
18 border. The Laredo one is easy. Laredo is very
19 controlled.

20 But when we did Eagle Pass, I said, Wow, OMG,
21 this is what people experience. It's like 110 degrees and
22 we're walking. There's no pedestrian path to even get to
23 the CBP facility. We're crossing traffic, you know, we're
24 crossing traffic as a pedestrian.

25 I'm like really there's something wrong with

1 this. So we really need to rethink how we do that better
2 on our end definitely, working with the city. We provide
3 a lot of support because we felt that was really, really
4 important. So just wanted to mention that as well, David.

5 Eduardo, I've taken a lot of your time. Go
6 ahead.

7 MR. CALVO: I know the time is limited, so I'm
8 going to go super fast. So this is a presentation that is
9 more geared for geeks. We're going to talk a little bit
10 about since we were told to present something that has to
11 do with technology, but it's really cool. It's the new
12 travel demand model that the MPO is developing, but with a
13 twist.

14 So in general, travel demand models, it's a
15 tool that allows us to understand travel within a region.

16 All MPOs need to have a travel demand model of some type
17 to analyze current and future congestion. The inputs are
18 socioeconomic, population employment numbers, then you
19 have transportation network attributes, existing and
20 current, that means our roadway network, transit, et
21 cetera.

22 And we use a lot of historical data as well,
23 traffic counts, travel time, a location-based system which
24 is something that we've been using more recently. You
25 establish a base here for validation, then you do your

1 forecasts for the region. You forecast travel out there
2 in the future. And again, MPOs use this to meet the
3 federal transportation and air quality requirements from
4 federal law.

5 So our latest one is our 2050 travel demand
6 model. Just to show you, this is the El Paso MPO region.

7 What you see there in pale dots are the 2017 data which
8 is our base here. Every dot represents 100 people or 100
9 jobs.

10 And our forecast for 2050 are what you see
11 there in the brighter colors. So you see where the growth
12 is, it's going to be in the outskirts. Our forecast is
13 that we're going to continue our sprawling trends, which
14 are, you know, not very desirable but that's what it is.

15 And then, of course, based on that we run our
16 projects in the FTP. We look at congestion and try to
17 anticipate where the congestion is and address it and so
18 on. So that's sort of like the usual process. And then,
19 of course, by that we identify and these are currently our
20 priority projects that you see there in blue.

21 In this map we're getting into the meat of the
22 presentation. You see the yellow dots which represent the
23 international crossings, from Santa Teresa to the west in
24 the State of New Mexico, going to the ones within the City
25 of El Paso, up to Zaragoza. And I know that the folks

1 from El Paso County are going to give me a hard time
2 because the Tornillo-Guadalupe bridge is not shown in this
3 map, but we'll talk about that.

4 But in all of this so far, what's missing? So
5 far in the analysis of our travel demand modeling we don't
6 see Ciudad Juarez here. So what we need to do is really
7 incorporate into our travel demand model the true
8 binational region, right.

9 So from the data from the Border Master Plan we
10 know that El Paso and Ciudad Juarez are the largest cities
11 along the U.S. Texas border respectively, close to almost
12 3 million people in 2019, the largest number of crossings,
13 et cetera. So it is tremendously important. But one of
14 the things that we need to emphasize which makes us
15 different from other regions is that we are big, but we're
16 very compact.

17 The origin-destination pattern -- most of the
18 trips, either people trips or truck trips originate within
19 Ciudad Juarez. Unlike other regions where a lot of the
20 trips originate from points south, in Laredo and the
21 Valley you have a lot of trips coming in from Monterrey,
22 from Mexico City and so on. But ours are within the
23 region, so we have a lot of people, trucks going back and
24 forth, back and forth. So that makes our region a little
25 bit different from the others.

1 So we have to look at, truly, our binational
2 mobility plan. This is a little bit dated but it still
3 shows the plan, the improvements that we're looking at on
4 the U.S. side, but also incorporates the ones on the
5 Mexican side, working very closely with our counterparts
6 in Ciudad Juarez, with the city and with the counterpart
7 of the MPO.

8 All right. So here's the geeky part. Now in
9 this map you see both the network on the El Paso side and
10 in Ciudad Juarez, so this is truly integrating a model
11 that works as one. Clearly the crossings and the red dot
12 that you see there in the middle, that's assuming if we do
13 the analysis and we have only one crossing, that makes it
14 easy. There's no choice, right, everybody has to go
15 there. But the reality is that we do have several other
16 crossings, which means that we have a choice.

17 So the macro level, which is where we look at
18 the region, clearly gives us what is the overall demand
19 for crossing. But the choices that we make when we have
20 multiple border crossings really have to do with what goes
21 on in each individual crossing, right? So you're going to
22 be selecting the one that minimizes your travel time or
23 the one that makes it more reliable for you, so it has a
24 lot to do with how you see choice.

25 But then one of the innovations that we're also

1 adding here is up to the macro level that tells us how
2 people travel within the entire region, we're going to be
3 looking at a micro simulation model of each individual
4 border crossing. And for this we have been working
5 closely, again, with several agencies. But we've got to
6 give kudos also to the Consul that has made it happen to
7 be able for us to work with UTEP and get travel surveys at
8 the bridges, and also working together with CBP in terms
9 of obtaining some data that we are going to use for these
10 micro simulations.

11 The geeky part is that what's interesting is
12 that now we have a move from the macro to the micro level,
13 and the interesting thing is that this is going to allow
14 us to test different scenarios. Of course, you see the
15 integration of the roadway network for our macro level,
16 but we also have integrating the transit network on both
17 sides. And the region is disaggregated into smaller areas
18 interestingly, and the really the cool thing is that we're
19 able to do the same level of analysis on the Ciudad Juarez
20 side. So it makes for a very robust model.

21 So some of the things that we will do is to
22 complete the micro simulation of each individual crossing
23 so that we can test different options, right. This is one
24 of the very preliminary ones that we've done. And again,
25 we are in the middle of putting the models together so we

1 don't have a lot of results, but I hope that we can bring
2 back some of this later on.

3 So there are some preliminary numbers for the
4 Bridge of the Americas, for the Zaragoza crossing, and
5 also for the Paseo del Norte crossing. This is all going
6 northbound.

7 One of the interesting things here is that when
8 we look at some of the preliminary results of a
9 validation, when we use our travel demand model, you see
10 there -- you can't see very closely, but the level of
11 error that we have from a model compared to real numbers
12 is relatively small. On the right you will see what we
13 use right now, which comes out of a statewide model where
14 the border crossings are being used as external stations
15 to feed traffic. Well, you see there a 7 percent error
16 compared to like 37 percent, so that's pretty significant.

17 So after we complete this, we expect to have a much
18 closer level of certainty of our traffic volumes.

19 So one of the things that this will allow us to
20 do is start testing for what-if scenarios. And this is
21 one constant that has been floating around for a long
22 time, a crossing in the vicinity of Yarborough, right? So
23 what happens?

24 If it's just a pedestrian crossing, we'll be
25 able to analyze and compare to what if we made it just for

1 a SENTRI lane, for a dedicated commuter lane. And for
2 that we can run the simulations and get some of the
3 analysis. But that's something that we would expect, how
4 does a share change between the different crossings.

5 Looking at southbound, which is also very
6 important for us, it's not just northbound -- and here
7 this is a shot of the Bridge of the Americas. What if we
8 can test, for example, doing a dedicated commuter lane or
9 a SENTRI southbound? You know, what happens? Right?

10 I mean, so what is really cool about this is
11 that once we have the tools we'll be able to run and test
12 different scenarios at the macro level, but also at the
13 micro level. So that thinking about automated vehicles,
14 right -- what we were talking about earlier, well, what is
15 the impact? And we'll be able to micro simulate this and
16 inform the process much better.

17 So with that, I'm going to stop right there
18 because I know that we're short on time. But we'll be
19 able to come back and report better results to this
20 committee, and of course, before at other opportunities.

21 So with that, I'm going to turn it over to
22 Secretary.

23 COMMISSIONER HOLGUIN: Thank you. First of
24 all, I just want to welcome everyone again to El Paso.
25 I'm the county commissioner for Precinct 3 here in El Paso

1 County.

2 And Secretary Scott, and of course, Caroline
3 and all of your TxDOT staff, Representative Morales and
4 all of the BTAC members that were able to join us, it's
5 our absolute pleasure to host you here in El Paso. And I
6 hope it's not the last time that we get that opportunity.

7 And I just wanted to thank you, Mr. Secretary,
8 for giving the County of El Paso just a few minutes to
9 really speak about some of the projects that we're very
10 excited about. Transportation, mobility, infrastructure,
11 economic development, these are all priorities for the
12 county and we have several of our staff members here. We
13 have our public works director, Norma Rivera Palacios, who
14 is in the back; our director of infrastructure, Fernie
15 Hernandez; our assistant director of planning and
16 development, Sal Alonzo.

17 And I'll actually be turning it over to Michael
18 Hernandez, who is our director of economic development,
19 for this short presentation.

20 MR. HERNANDEZ: I won't take too much time. My
21 name is Michael Hernandez. I'm the director of economic
22 development for El Paso County. It's my privilege to be
23 with you today.

24 We just wanted to share with you briefly that
25 El Paso County continues to work through its program of

1 work for improving roadways in the area. That's to help
2 anticipate the more fully operational Tornillo port of
3 entry that's coming our way pretty soon. And the updates
4 to share with you from our Mexican counterparts is the
5 roadway that will allow more commercial traffic to flow
6 into the area through that port of entry should be
7 completed in April 2023.

8 That's something that we've been looking
9 forward to for a long time. I think it allows more
10 capacity in the area, and we do think of our bridge as
11 part of a system of network bridges in the area with a lot
12 of value.

13 As I mentioned just a little while ago, we do
14 have a variety of projects. And my colleague, Sal Alonzo,
15 who helps lead planning, will talk through some of those
16 notable projects.

17 MR. ALONZO: Good morning, everybody. Sal
18 Alonzo, associate director of planning and development for
19 El Paso County. Thank you again for having us present
20 this morning; we appreciate your time.

21 Just to go over some projects that the county
22 has taken a lead on. I would say it's at least seven
23 years since I've been with the county, we've been
24 spearheading a lot of major transportation projects, but
25 that also includes multimodal projects.

1 A couple of these projects that have been
2 completed as of today, I want to emphasize. Some of these
3 projects that we did we were able to partner up with local
4 communities and other agencies -- one of them being the
5 Aguilera Highway project which was the direct connect from
6 I-10 down to Alameda, and that tied into the Tornillo port
7 of entry. So that was a partnership between us and TxDOT.

8 Other projects that we also partnered up with
9 was Hueco Tanks. Again, that was a partnership between
10 us, TxDOT and the City of Socorro. Other projects that we
11 also partnered up was the Eastlake Phase 2 Boulevard which
12 was a major reconstruction of an existing roadway and the
13 expansion of the existing portion of the Eastlake. And
14 that was another project hat we partnered up with the
15 Horizon City and the county.

16 As you can see, we have completed several of
17 these projects along the way, but also, other projects
18 that I also want to mention are projects that we have
19 identified at the Fabens Airport. The airport is very
20 close proximity to the Tornillo port of entry. So we have
21 been doing a lot of projects at the airport, including
22 enhancements, the rehab of the runways, we're currently
23 working on some T-hangar designs, and here in the near
24 future also some T-hangars.

25 That's a partnership that we have with TxDOT

1 Aviation, but also our partners at UTEP as far as what
2 we're doing at the airport. We're really excited about
3 future projects coming down the pipeline at the airport,
4 but I did want to take some time to identify those other
5 projects that have been completed up to date.

6 Next slide, please. Here's a list of ongoing
7 projects, whether we're under construction or under
8 design. Again, countywide we have several projects. We
9 do also have some other projects designed with partnership
10 with the City of El Paso, and that would be the Mottwood
11 extension.

12 But along the way we identified several other
13 projects within the area that would help TxDOT and other
14 agencies relieve congestion in the area. As you know, the
15 part of East El Paso is growing and it's not slowing down.

16 So we just want to make sure that at least we get ahead
17 of it to provide additional connectivity for the area and
18 for the community.

19 Just to identify again the aviation design
20 projects that I spoke earlier about the airport hangar
21 design, and then soon we'll be under construction for
22 those hangars.

23 Other multimodal projects that we're very proud
24 of here is also the countywide passenger shelters, which
25 we've also received federal dollars on that. We recently

1 had a groundbreaking of our first passenger shelter for
2 this area. There have never been any shelters previously,
3 so we're very proud of that project.

4 But alongside with that we have several
5 trails/sidewalks projects within the county, some in these
6 areas close to the port of entry, which includes the
7 Fabens sidewalks and the Tornillo shared-use path and the
8 Paseo del Norte Trail Phase 1 and 2 that are on the
9 horizon.

10 Next slide, please. Let me turn this over back
11 to Mike. Thank you.

12 MR. HERNANDEZ: So I'll be wrapping up shortly,
13 but we want to mention that the most acute growth is
14 happening in far east El Paso County, which includes the
15 unincorporated parts of El Paso as well as those smaller
16 municipalities. We play a key role in helping to activate
17 infrastructure for those places that are most in need,
18 including Tornillo, which is now -- the port of entry is
19 going to be coming online.

20 Some of the things that we are thinking about
21 is committing to long-term help for making sure that
22 Tornillo's port of entry, once it becomes more fully
23 active with commercial traffic going across, has the
24 capability for economic development projects to include
25 warehousing and cold storage facilities. We are even

1 looking to convene meetings with property owners to have
2 those conversations about how they can best acclimate
3 their properties to make sure that that port of entry is a
4 good fit for industry.

5 We also have convened meetings with
6 stakeholders, including CBP, about innovations that we can
7 pursue together. One thing they shared with us is that
8 basically we can consider the port of entry right now in
9 terms of commercial traffic as a blank canvas that we can
10 grow in a way that's meaningful to industries. And so
11 we're listening pretty closely to what those business
12 partners are looking for in terms of the end use of the
13 port of entry.

14 Next slide, please. And as Mr. Coronado
15 mentioned earlier, our region is the third highest when it
16 comes to cargo goods coming across at the U.S.-Mexico
17 Border. So it's a key time for us to not only think about
18 helping to increase capability for the region, but also
19 think about those nearshoring opportunities. We worked
20 with our partners at the Border Trade Alliance to
21 understand those opportunities that are coming into Mexico
22 and how we can allow more crossings to be marketed to
23 those manufacturers so we can get those goods shipped
24 across in a pretty expedited way.

25 Next slide, please. I'm happy to take any

1 questions you might have.

2 MR. HOLGUIN: Thank you, Michael. Thank you,
3 Sal.

4 And thank you, Mr. Secretary, for giving us a
5 few minutes to brief the BTAC committee.

6 SECY. SCOTT: Well, y'all's hospitality
7 entitles you to anything you want. Thank y'all.

8 So I think now we're going to go over to the
9 autonomous demonstration. Thank you.

10 MS. MAYS: I guess I want to say we saved the
11 best for last based on the SB 1308 comments and
12 presentation we heard earlier. So Zeke, I'll let you take
13 it on with the team.

14 Great to see you all here, Dan online and
15 certainly we have -- I can't speak, sorry. I'll just
16 welcome you guys. Zeke, go ahead.

17 MR. REYNA: Thank you so much and thank you for
18 letting us join you today virtually. I got stuck here in
19 Austin having to take care of a couple of meetings, and I
20 really appreciate you enabling us to do this hybrid
21 option.

22 So with that, I know we're a little bit behind,
23 so I'm just going to dive into it. We're going to give
24 you a little bit of an update today on CAV in Texas,
25 connected automated vehicles, where they are, what's going

1 on. And then we have two guests with us today that work
2 in the AV freight sphere, and they're going to give you a
3 little bit of a presentation on what they've got going on.

4 So with that, let me share my screen. I'm
5 going to run through this a little quickly and I want to
6 make sure we have plenty of time for Q&A because I imagine
7 there will be a few.

8 All right. So just so everybody is aware,
9 there are CV operations going on in 20 of the 25 TxDOT
10 districts right now. They're ongoing right now or there's
11 been some form of pilot or deployment, and it ranges from
12 all modes of AV operations.

13 We've got AV freight across the state, and I'll
14 dive into that a little bit. We've got delivery robots
15 that have taken off in urban cores and college campuses,
16 as well as taking place at our ports, at our inland and
17 offshore, onshore ports, as well as in the air. So drones
18 and aerial taxis, they are what's coming next and we're
19 preparing for it.

20 So we have four laws in Texas that are kind of
21 the backbone of CAV operations. The ones that really
22 started off were back in 2017; there was Senate Bill 2205
23 and HB 1791. They were the AV and the CV bills
24 respectively that kind of laid the groundwork for
25 operations here.

1 Back in 2019 we passed the personal delivery
2 device law that, again, kind of created what the rules of
3 play were here. And in this last session there was House
4 Bill 1326, which I know we talked a little bit about
5 before, and that one helped remove some of the components
6 from a standard vehicle that aren't necessarily needed in
7 a connected automated vehicle. So all of these come
8 together to really let the AV community know that we
9 encourage their testing and deployment across the state.
10 We want them to come here and be part of it.

11 So Governor Greg Abbott in July 2019 asked
12 TxDOT, through a press release, to form a connected and
13 automated vehicle task force. We had well over, at that
14 time, 125, now we're over 200 members reach out and want
15 to be part of this. So we immediately formed a smaller
16 group of stakeholders that were what we call the voting
17 body. And this was meant to be representative of each of
18 the spectrum of CAV that are ongoing here in Texas, and
19 you can see on the top there who the voting members were.

20 We also, right when we all went home in March
21 of '20, formed five subcommittees. Each of these would
22 dive into respective areas that were kind of unique to the
23 different parts of the industry. And then we followed
24 that up by forming a sixth subcommittee, a future
25 workforce and economic opportunity one, as the CAV

1 industry really started taking off here.

2 So one of the biggest here in Texas is
3 automated freight. At any point in time we have upwards
4 of eleven different AV freight carriers that are operating
5 here in Texas or have operated here, and these are just
6 kind of examples of some of those trucks you may see out
7 on the roadways when you're out and about.

8 Where are they happening? Largely on our
9 interstates. They are taking place on east-west routes
10 and north-south, either all in state or we've had some
11 runs that are going across -- especially up on I-40, that
12 are crossing over from New Mexico into Oklahoma City.

13 The big place where we see the most is on
14 Interstate 45. Companies are making runs from the DFW
15 area down to Houston, including both Kodiak and Aurora who
16 way are on with us today.

17 For the border, where we've seen the most
18 traffic is going to and from El Paso, both on 20 and 10.
19 Both TuSimple, Aurora and Kodiak have made runs out that
20 way, and I think we probably anticipate seeing that number
21 continue to grow.

22 They're also starting to make longer runs.
23 Kodiak announced not too long ago they did a run where
24 they started in Texas, they went west all the way to the
25 coast, and they came back through Texas and went all the

1 way out to Jacksonville, for a total of 5,600 miles.
2 TuSimple has been making runs, and they recently did one
3 from Tucson through Texas and then up to Oklahoma City.

4 So we're starting to see more of this. They're
5 starting to take place on Interstate 10. The sunny
6 climate of Interstate 10 allows these companies to be able
7 to go coast to coast.

8 And we anticipate that this, again, will
9 continue to be part of the trend, especially if California
10 opens up to testing of vehicles, level four testing of
11 vehicles over 10,000 pounds. We really anticipate seeing
12 these trucks go all the way from coast to coast, and Texas
13 being a central part of that.

14 We also have another one in Texas that's really
15 taken off and that's delivery robots. There's two
16 different types, but they both do the same thing. They
17 tend to deliver food or smaller products in urban cores or
18 on college campuses. There's two different types: we
19 have personal delivery devices and we have neighborhood
20 electric vehicles.

21 When you think neighborhood electric vehicles,
22 you may have seen commercials for Nuro working with
23 Domino's out in the Houston area. Those are a little bit
24 larger.

25 There's three real differences. The

1 neighborhood electric vehicles can go on road, on
2 neighborhood roads. They can go a little bit faster; they
3 can go up to 25 miles an hour. And they have VINs, so
4 they're registered vehicles. So you will see those
5 vehicles on the road and they have to meet certain safety
6 standards.

7 Just a quick note, we're starting to see an
8 influx of these coming in from China, and in China they
9 don't put VINs on these. So they're not able to get
10 registered in the U.S., and there's been some
11 conversations of if there's ways to try to get these to
12 meet minimum safety standards. It's a whole lot easier to
13 buy a fleet of these than a fleet of AV vehicles.

14 They are deploying, as I mentioned, on college
15 campuses and in urban cores. And some of these companies
16 are getting really aggressive about wanting to expand
17 across the whole state, so you may see these in your
18 backyard sometime soon.

19 As far as passenger vehicles, the big one
20 that's taken off so far that just launched is Lyft. Lyft
21 is working with Ford Argo to do passenger vehicle
22 operations in Austin. They are looking to expand.

23 And there's another company that's going to
24 come in. I don't believe they've officially announced it
25 yet, so I can't say who it is. But they're going to be in

1 at least three to four cities here in Texas in the very
2 near future as well.

3 So you'll start seeing these on the roadways.
4 You can always tell what these vehicles are because they
5 have little stack on top of their car that has their
6 radars and lidars and all their equipment for mapping and
7 for making sure that they move as safe as possible.

8 So we've been working with these companies for
9 several years now. We've had a lot of lessons learned
10 that have come out of this. One, communication is key.
11 We visit with these companies multiple times a month,
12 sometimes multiple times a day, just learning what's going
13 on with them.

14 Then we're constantly sharing information about
15 what works, what doesn't work, what do we need to do on
16 our roads, what are they seeing, are there maintenance
17 opportunities that we need to be aware about. And that
18 communication is constantly changing as data in that world
19 really takes off.

20 Connections are vital. If we don't have --
21 when these companies come in, they learned right away that
22 they need to not only connect with us and DPS but with the
23 local communities as well. And we have a really good
24 network of being able to connect them with officials from
25 across the state.

1 And then collaboration, as you've heard about
2 the Senate Bill 1308 report, the CAV task forces have
3 three subcommittees that have been very active in helping
4 share information on that. We're working on communication
5 and education plans for not only just the general public
6 but for education at the school level, K through 12.
7 We're starting to see some of these companies working with
8 community colleges and universities to create training and
9 internship programs where people can go in and immediately
10 take off into a career in this world.

11 And then we're also working together on a pilot
12 for freight pre-inspection, which would allow these
13 vehicles to be inspected ahead of time at their origin and
14 at their destination and not have to go through the weigh
15 station. So we're excited to see where this goes.

16 I'm going to go ahead and stop here just so we
17 can move on and give everybody a chance to talk. So with
18 that, I will go ahead and turn it over to Dan Goff.

19 Dan Goff is with Kodiak Robotics and has been
20 working here in Texas for, gee, at least a few years now.
21 He's vice chair of our Freight Subcommittee and has been
22 a great partner for TxDOT.

23 So, Dan, the floor is yours, sir.

24 MR. GOFF: Great. Well, thanks so much and
25 thank you so much for inviting me to be here today and to

1 present virtually. Sorry I wasn't able to be there in
2 person. I am going to try to get my screen all shared and
3 everything, but while I'm doing that, I'll introduce
4 myself.

5 So again, I'm Daniel Goff. I'm the head of
6 external affairs for Kodiak Robotics. We are, as Zeke
7 mentioned, we are one of the autonomous -- we are a
8 developer of long haul autonomous trucks.

9 We're about four and a half years old and we're
10 based in Mountain View, California. But about three and a
11 half years ago, in July of 2019, we were trying to figure
12 out where to base our operations, and working with TxDOT
13 and others, we decided that Texas was the right place for
14 us to base our fleet and operations. So we've actually
15 had an operations center just south of Dallas in Lancaster
16 for over three years at this point.

17 So I'm going to show a quick video and
18 hopefully you'll be able to hear it too.

19 (A brief video was shown.)

20 MR. GOFF: I'm hearing that my audio is not
21 working, so I think you get the point and move on from
22 here.

23 So at Kodiak, our sort of motto that we live by
24 is: Safety first and always. You see our truck here,
25 this is from one of our driverless tests on a test track.

1 But we're currently operating in Texas with a safety
2 driver behind the wheel at all times and really
3 prioritizing safety in everything that we do.

4 And I think that's something that's pretty
5 consistent across this industry -- I think you'll hear
6 from Jeremiah in a few minutes -- but we understand that
7 this technology is going to potentially be uncomfortable
8 or scary for people. And it's on us to make sure that we
9 are prioritizing safety and telling the story of how we're
10 going to make the roads safer and more efficient and
11 driving a little bit better for everybody.

12 As Zeke mentioned -- and I'll try to go quickly
13 here -- our focus is really on kind of those long haul
14 routes. We currently deliver freight out of our Dallas
15 office from Dallas to Houston, San Antonio, Austin,
16 Oklahoma City. And then as Zeke mentioned, done some
17 pilot routes cross-country, some pilots to Florida, some
18 pilots to Atlanta.

19 And while we're operating, we focus our
20 autonomous vehicle technology on the highway driving and
21 the safety driver who is behind the wheel focuses on the
22 first and last mile, and so we think by doing that we get
23 a couple of things. One, the highway driving is simpler
24 for the vehicles to accomplish for all the reasons that
25 you can imagine. You know, you don't have pedestrians and

1 you don't have bikers and kids running across the street
2 and all these things that really make driving in
3 communities really difficult.

4 So you can simplify that driving problem. And
5 also, you can help create jobs for drivers in their
6 communities, so local driving jobs. And we think we're
7 going to be able to actually create more jobs in the
8 trucking industry by focusing on those long haul routes.

9 So this is kind of our route map that you can
10 see and some of our partners. Actually, just this morning
11 we announced our partnership with IKEA. We're actually
12 delivering IKEA furniture from IKEA's distribution center
13 just outside the Port of Houston up to an IKEA store in
14 Frisco, just outside of Dallas.

15 But I think it's important to understand that
16 these trucks are really on the road every day actually
17 delivering freight for companies that rely upon us and
18 rely upon the service we provide. We've delivered, over
19 the last three years, about 2,220 loads. I've got to
20 update the slide because it's changing every day and it's
21 hard to remember to keep this one up to date. And most of
22 that is in the last year, year and a half really since
23 we've really picked up operations with our fleet.

24 So you know, this is a real thing. If you're
25 driving around, particularly on the Texas triangle, you

1 are quite likely to see a Kodiak truck or one from one of
2 our competitors. These trucks are actually being used in
3 commerce on a daily basis. A lot of that has come from
4 the work that Zeke and the CAV Task Force has done, and
5 the work that we've also done with Texas DPS to prepare
6 law enforcement for the commercialization of this
7 technology.

8 And I think it's also important that Jeremiah
9 and I have worked together closely, and really the
10 industry works together really closely in Houston, Dallas,
11 and throughout the state to kind of help tell the story
12 and make sure people understand what we're doing and are
13 comfortable with this technology.

14 So one more thing I think just is kind of
15 interesting to see is I think this technology tends to be
16 a lot more advanced than people think. So we expect our
17 system, which we call the Kodiak Driver, to be able to
18 handle everything that happens on the road. I'm not
19 saying it happens every time and that's why we have a
20 safety driver.

21 We're not sort of claiming that we're ready to
22 operate driverlessly -- I think that's something that's
23 coming in the next couple of years -- but everything from
24 weird vehicles on the road to pedestrians on the side of
25 the highway, construction, bad weather, these are all

1 issues that today's technology can handle with a very high
2 level of responsibility. So this is the technology that's
3 really coming and really going to, we think, change the
4 way freight works over the next few years.

5 So I think I've already gone over my allotted
6 time, especially with the video that unfortunately
7 couldn't get the audio to work, but what can you do? But
8 with that, I'd love to turn it over to Jeremiah and talk
9 about Aurora and some of the work that we all do together.

10 MR. REYNA: Go ahead, Jeremiah, if you want to
11 introduce yourself while the video is getting loaded up
12 for your presentations.

13 MR. KUNTZ: Great, Zeke. Thank you very much.

14 So, Jeremiah Kuntz. I'm with Aurora and I do
15 government relations for Texas and kind of the southern
16 region of the U.S. along the Gulf Coast. So I'll run real
17 quickly through my presentation. I know we're way over on
18 time, so I'll try and get us somewhat caught up.

19 Go ahead next slide. At Aurora, our mission is
20 to deliver the benefits of self-driving technology safely,
21 quickly and broadly. We've talked about the number of
22 deaths that occur on the Texas highways, Ending the
23 Streak, and we believe that autonomous technology is a
24 critical element to Ending the Streak, and so it's
25 something that we take very seriously.

1 As you've seen in Dan's presentation as well,
2 safety is a critical part of all of our missions in the
3 autonomous vehicle space. Without that, it really doesn't
4 make sense to do this. That's the whole point of the
5 technology is to increase safety on Texas highways.

6 Next slide. So a little bit about Aurora, and
7 I don't want to dwell too much on this, we are a startup
8 company but we're not small. We've got over 1,800
9 employees. We've got locations around the country doing
10 various things in our development cycle.

11 Our operations, similar to Dan, are centered
12 here in Texas. We've got our headquarters for our
13 operations in the Metroplex, the DFW Metroplex, and so
14 that's why you see that here. Our headquarters is
15 actually in Pittsburgh for our corporate headquarters.

16 Next slide. I'm going to talk a little bit
17 about the technology itself to hopefully give everybody a
18 quick understanding. And I know we're running quick on
19 this so it's hard to dive deep into how the technology
20 works, but our technology is combining the self-driving
21 software, hardware and then also a suite of additional
22 things, maps, upward support and other data services, and
23 our technology works across a broad variety of vehicle
24 types. We talk mainly about trucking because that's the
25 first product that we're developing, but we will also have

1 passenger mobility, and then ultimately, local goods
2 movement.

3 Next slide. So you can see here, this is how
4 the technology works from a perception standpoint. So a
5 human driver is perceiving the world around it as you're
6 navigating on the highways.

7 Our technology is doing the same thing. We
8 refer to our technology as the Aurora Driver, which is
9 that driving software that's actually making those
10 decisions. But it's getting all kinds of inputs, it's
11 getting GPS, it's getting encoders, lidar camera, radar,
12 hardware.

13 All of that is feeding into that system. It's
14 telling the vehicle where it is. The maps are then
15 telling it, hey, here's the environment that you're
16 traveling down. And then our perception is letting it
17 know what's going on around that's constantly changing,
18 pedestrians, other vehicles that are operating on the
19 roadway, all of that. And then it feeds into a plan of
20 action for the vehicle, and then ultimately the control,
21 which is drive by wire, that makes those decisions and
22 actually moves the vehicle.

23 Next. So we've talked a little bit about this
24 being a level four technology. What does that mean? The
25 best analogy we can give is it's kind of like running a

1 railroad.

2 There's a terminal at either end and the maps
3 themselves are the rail line. If you don't have a map
4 that maps out a specific route, that vehicle cannot travel
5 on it. We call that our operational domain. So if we map
6 out I-45, that's where that vehicle is going to operate;
7 it can't veer off and take a detour and go 500 miles
8 around.

9 So that is a limiting factor that a lot of
10 people don't really understand about the technology that's
11 level four is you have to lay those tracks for the vehicle
12 to be able to follow it in order for it to work properly.

13 So that takes a lot of headroom, the front-end loading of
14 those maps. So you've got to collect the data, annotate
15 it, then do QA on that and then constantly be updating it
16 as things change.

17 We talk about the construction zones that occur
18 on Texas highways. There's always construction going, so
19 our maps are having to constantly evolve to take into
20 consideration all those new routes, lane changes and
21 everything.

22 Next. Hopefully this will play, I don't know
23 if it's playing or not. Well, maybe it didn't play. All
24 right.

25 So I guess my video didn't play, but I was

1 going to have a video here to kind of show you what our
2 technology looks like. Down in the bottom here you can
3 see the lidar camera image which shows the green line
4 going out in front of it, and then up above it was a
5 camera shot.

6 One of the things that I always like to talk
7 about when it's automated is that most of the vehicles
8 that are on that highway with that truck are passing that
9 vehicle, and that's because our vehicles operate at 65
10 miles an hour. They're currently programmed for a 65 mile
11 an hour speed limit. They don't speed, they don't cut
12 people off. They constantly maintain a safe stopping
13 distance, which is what that green bar represents.

14 If a vehicle gets inside that green bar, our
15 vehicles slow down. If somebody is going to be merging on
16 to the highway, our vehicles slow down and are courteous
17 to let those vehicles merge. So it is an extremely safe
18 driver as it's operating on the highway.

19 Next. Here you can see the thing that we have
20 in our technology stack is that our technology can be
21 utilized on both our heavy trucks as well as on our ride-
22 hailing product. And so as we are learning how to operate
23 in the different operational domains, on the highways, on
24 the frontage roads, all of those kind of things, those
25 learnings can be transposed and used in our ride-hailing

1 product.

2 So everything our truck learns how it can
3 operate, that can be shared with our ride-hailing product.

4 And everything the ride-hailing product learns on how to
5 operate on smaller local streets, then the truck will be
6 able to utilize as well in the technology.

7 Next slide. Here you can see where we're
8 currently operating in Texas and you can see our partners
9 that we have as well for moving freight. Currently we are
10 operating between our two terminals along I-45.

11 Our first terminal is in Palmer, Texas, and
12 then we run along I-45 down to Houston to our terminal
13 that's down there. And then you can see along the I-20
14 and I-10 corridors, we have a terminal in Aleta and then
15 one in El Paso here that we have operations between, and
16 those trucks just circle. So they don't continue to go,
17 they go from terminal to terminal.

18 We always get the question, where are you going
19 to fuel up if there's no driver. Well, they fuel up when
20 they get to the terminal. So they fuel up before they
21 leave, when they arrive they're refueled and then sent
22 back on the route.

23 Next slide. Here are some of the benefits.
24 You know, we talk a lot about what are the benefits that
25 we can derive from our autonomous vehicles. So the

1 biggest benefit that you see is that human driver has
2 limitations on hours of operation.

3 An autonomous vehicle does not have those
4 limitations. They don't get tired, they don't drink and
5 drive. So there's definitely safety elements that come
6 with that.

7 It also has increased fuel efficiency that can
8 be realized. Our vehicles are seeing approximately a 10
9 percent increase in fuel efficiency, which to the
10 commercial carrier operations for our business partners is
11 huge. That's big dollars for them if you can get fuel
12 efficiency. The pedal is very steady on our vehicles so
13 they're not going in and out of speeds, and then they are
14 also driving at that 65 mile an hour speed limit which
15 increases that fuel efficiency as well.

16 You can also see we've talked a lot about the
17 driver shortage that is occurring in the commercial driver
18 space. There's approximately 80,000 driver shortage
19 currently that is expected to grow to approximately
20 150,000 driver shortage in the next few years.

21 These trucks can augment and displace some of
22 that shortage. We understand that it's not going to take
23 the place of every commercial vehicle driver that is on
24 the roadway today. Those jobs are not just going to go
25 away overnight.

1 And then you can see we can speed up services
2 in the supply chain. We deliver on time consistently, so
3 on all of our routes we've maintained 100 percent on-time
4 delivery for all of our shipments.

5 With that, I am done. I was trying to get
6 through there as quickly as possible.

7 MR. REYNA: So thank you, Jeremiah, appreciate
8 it.

9 So we get a lot of questions from the public
10 about these technologies. And the top two questions that
11 we get are safety and from a planning perspective, what do
12 you need from the transportation infrastructure.

13 Dan, I was wondering if you could talk a little
14 bit about Kodiak's perspective on safety and what you guys
15 are doing to help ensure that your vehicles are safe as
16 possible on the roadways.

17 MR. GOFF: Sure. So I think that the way that
18 we think about safety kind of falls into a couple of
19 different buckets. The first is we think about
20 operational safety. We think about having safety in the
21 way that we run our operations. We think about making
22 sure that our trucks are among the best maintained, best
23 taken-care-of vehicles on the road, and I think that kind
24 of shows when you see them.

25 You know, we've had people get in trucks that

1 we've had for a few years and say, my God, this vehicle
2 has 100,000 miles on it, it looks brand new. And that's
3 because we understand that we can't be taking any sort of
4 risks in terms of the condition of the underlying vehicle.

5 We also think a lot about operating safety with
6 our test systems. So we tell our safety drivers to take
7 control of the truck any time -- our threshold is any time
8 you're uncomfortable with the way the system is behaving,
9 and that happens less and less these days. Again, we've
10 been testing on roads for several years now.

11 But we do most of our testing actually using
12 very detailed computer simulations and that helps us to
13 keep the overall safety of the vehicle. When we test out
14 new features, new ideas, we do that in simulation to make
15 sure we know how the vehicle is going to behave before we
16 put it out on the road. We also do testing at test
17 tracks, which you'll see.

18 In the long run, we and Aurora and all the
19 companies in this industry are looking to build what in
20 the industry is known as a safety case, which is
21 essentially a proof -- and our engineers don't like the
22 word proof, proof feels like a mathematical thing, but I'm
23 not an engineer and none of them are on this call. So
24 it's a proof that we're safer than the average human
25 driver.

1 And how do you prove such a thing? It's really
2 complicated. And that's one of the real sort of
3 challenges for this industry, but it's about benchmarking
4 your vehicle against what a normal human would do across a
5 wide range of circumstances. In computer simulations it
6 means having enough on-road miles that you've tested to
7 have a sense of how the vehicle behaves in simulation.

8 But I think that the overall sort of rule is
9 safe driving behavior. As Jeremiah said, our vehicles
10 don't speed. They don't drive distracted. They don't
11 drink and drive.

12 They don't have a bad day and start cutting
13 people off or anything like that. And I think that a lot
14 of the dangers of driving come from those kinds of
15 situations, where people are either speeding or getting
16 aggressive and not choosing to take safe driving
17 behaviors.

18 MS. MAYS: Zeke, in the interest of time, I
19 think we're going to wrap up here. We're almost half an
20 hour late. Quickly, any committee members have comments,
21 questions? This is probably one topic that we may circle
22 back the next BTAC meeting or future BTAC meetings to give
23 a little bit more time for the discussion. Any comments
24 from BTAC members?

25 (No response.)

1 MS. MAYS: Okay. Zeke, thank you. Dan and
2 Jeremiah, we really appreciate you guys being here today.
3 Sorry, we had a lot of unexpected events at the meeting
4 today so we're running a little bit late, but appreciate
5 your time.

6 I'll turn it over to the Secretary.

7 SECY. SCOTT: Well, and I think we're looking
8 at the first week of February. Is that right?

9 MS. MAYS: Yeah, for the next BTAC meeting, end
10 of January, first week of February. And I just found out
11 for those of you that follow the Transportation Forum, I
12 think it's that same week. So we may coordinate the dates
13 so that if you're in Austin, then you can stay one
14 additional day for the BTAC meeting so then that way
15 you're not having to make two or three trips to Austin.

16 SECY. SCOTT: Then I don't know if anybody has
17 any final comments, but my final comment is this has been
18 phenomenal coming to El Paso for the sole purpose of
19 having this meeting, and I think it puts it into proper
20 perspective. Thank all of y'all for being here, and thank
21 you, Caroline, and all your team.

22 And so with that, we're adjourned.

23 MS. MAYS: Motion.

24 SECY. SCOTT: Oh, motion and second?

25 (Motion and second made by BTAC members.)

1 SECY. SCOTT: There we go; now we're adjourned.
2 (Whereupon, at 11:28 a.m. MDT, the meeting was
3 adjourned.)

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C E R T I F I C A T E

MEETING OF: TxDOT Border Trade Advisory Committee
LOCATION: Austin, Texas
DATE: October 18, 2022

I do hereby certify that the foregoing pages, numbers 1 through 154, inclusive, are the true, accurate, and complete transcript prepared from the verbal recording made by electronic recording by Nancy H. King before the Texas Department of Transportation.

DATE: October 26, 2022

/s/ Nancy H. King
(Transcriber)

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