AGENDA

REGIONAL TRANSPORTATION COUNCIL
Thursday, December 12, 2019
North Central Texas Council of Governments

1:00 pm  Full RTC Business Agenda
(NCTCOG Guest Secured Wireless Connection Password:  rangers!)

1:00 – 1:10  1. Opportunity for the Public to Speak on Today's Agenda: Consistent with HB 2840
☑ Information Minutes:  10
Item Summary: This item provides an opportunity for the public to speak on meeting agenda items. A Speaker Request Card is available at the main table. Please provide a Speaker Request Card to the North Central Texas Council of Governments designated staff person. For today’s meeting, public comments will be heard on all items.
Background: N/A

1:10 – 1:15  2. Approval of November 14, 2019, Minutes
☑ Action ☐ Possible Action ☐ Information Minutes:  5
Presenter: Andy Eads, RTC Chair
Item Summary: Approval of the November 14, 2019, minutes contained in Reference Item 2 will be requested.
Background: N/A

1:15 – 1:15  3. Consent Agenda (There are no items on the Consent Agenda)
☐ Action ☐ Possible Action ☐ Information Minutes:  0

1:15 – 1:35  4. Orientation to Agenda/Director of Transportation Report
☐ Action ☐ Possible Action ☑ Information Minutes:  20
Presenter: Michael Morris, NCTCOG

1. North Central Texas Council of Governments Awarded Outstanding Government Organization at Texas Energy Summit (Chris Klaus)
2. Air North Texas Partner Awards (Whitney Vandiver)
3. Regional Transportation Council (RTC) New Member Orientation Organized by Vercie Pruitt-Jenkins
4. Federal Update – Continuing Resolution with Highway Rescission Fix Approved
5. Community Development Block Grant Mitigation Funding – Notice of State Action Plan Comment Period
7. Feedback on Top Five RTC Policy Initiatives for 2020
8. Air Quality Funding Opportunities for Vehicles (www.nctcog.org/trans/quality/air/funding-and-resources/fundingvehicle)
Dallas-Fort Worth Clean Cities Events (www.dfwcleancities.org/dfw-clean-cities-meetings)

2020 RTC Meeting Schedule (Electronic Item 4.1)

November Public Meeting Minutes (Electronic Item 4.2)

December Online Input Opportunity Notice (Electronic Item 4.3)

Public Comments Report (Electronic Item 4.4)

Recent Correspondence (Electronic Item 4.5)

Recent News Articles (Electronic Item 4.6)

Recent Press Releases (Electronic Item 4.7)

Transportation Partners Progress Reports

High-Occupancy Vehicles Transportation Control Measures: Application of Managed Lanes and Substitution of Traffic Signal Progression

Action ☑️ Possible Action ☐ Information Minutes: 10

Presenter: Jenny Narvaez, NCTCOG

Item Summary: Staff will seek Regional Transportation Council (RTC) adoption of a Resolution Approving Transportation Control Measure Substitution of High Occupancy Vehicle Lanes and Associated Emissions Benefits with Traffic Signal Progression Improvements and Associated Benefits. A copy of this resolution is provided in Reference Item 5.1.

Background: High-Occupancy Vehicles (HOV) are currently listed in the State Implementation Plan (SIP) as Transportation Control Measures (TCM). Over time, increased congestion in these corridors has resulted from increased population, and vehicle miles traveled. As a result of traditional HOV lanes not meeting the needs of current demands, tolled managed lanes with HOV discounts are being built, providing congestion relief and associated air quality benefits.

Removal of TCMs from the SIP requires a substitution process, ensuring emissions benefits are equivalent. Traffic signal improvements, such as signal retiming and signal coordination, enhance traffic flow and thereby decrease vehicular emissions. The North Central Texas Council of Governments has identified corridors in the nonattainment area where recent traffic signal improvements were completed and will be used as substitute to HOVs. Electronic Item 5.2 provides further information on this effort.

November 11, 2019, began the 30-day public comment process. Staff continues coordination with the Environmental Protection Agency and the Texas Commission on Environmental Quality to ensure a successful substitution.

Performance Measure(s) Addressed:

☐ Safety ☐ Pavement and Bridge Condition

☐ Transit Asset ☑️ System Performance/Freight/CMAQ
6. **Hyperloop Certification Center Request for Proposals Status Report**
   - **Action**: □
   - **Possible Action**: □
   - **Information**: ✓
   - **Minutes**: 10
   - **Presenter**: Michael Morris, NCTCOG
   - **Item Summary**: Staff will provide a summary of the response to Virgin Hyperloop One (VHO) regarding its Request for Proposals for a Certification Center.
   - **Background**: The Regional Transportation Council (RTC) approved submittal of a response to the VHO Request for Proposals at its November 14, 2019, meeting. The submittal deadline is December 13, 2019. The RTC will be brought up to date on the project details, including corridor proposals submitted to the North Central Texas Council of Governments by the November 22, 2019, deadline.

   **Performance Measure(s) Addressed:**
   - Safety
   - Pavement and Bridge Condition
   - Transit Asset
   - System Performance/Freight/CMAQ

7. **Moving Ahead with Discussion Items: Local Option, Transit, Mega Developments, and the Path Forward with the Texas Department of Transportation**
   - **Action**: □
   - **Possible Action**: □
   - **Information**: ✓
   - **Minutes**: 10
   - **Presenter**: Michael Morris, NCTCOG
   - **Item Summary**: Staff will present items from the November 14, 2019, Regional Transportation Council (RTC) Workshop regarding local option, transit, and the path forward with the Texas Department of Transportation (TxDOT). In addition, updates to economic development initiatives for external and internal mega developments will be discussed.
   - **Background**: As the region matures, review of institutional relationships is critical. Staff will outline steps being taken to address an assortment of policy items from bringing funding tools back for TxDOT projects to advancing mega economic development projects.

   **Performance Measure(s) Addressed:**
   - Safety
   - Pavement and Bridge Condition
   - Transit Asset
   - System Performance/Freight/CMAQ

8. **2019 Metropolitan Planning Organization Milestone Policy (Round 2)**
   - **Action**: ✓
   - **Possible Action**: □
   - **Information**: □
   - **Minutes**: 10
   - **Presenter**: Christie Gotti, NCTCOG
   - **Item Summary**: Staff will introduce the Council to the second round of the Metropolitan Planning Organization (MPO) Milestone Policy and project list. In addition, staff will follow up with the Regional Transportation Council (RTC) on City of Dallas projects that were discussed at the November 14, 2019, meeting.
   - **Background**: The first MPO Milestone Policy was approved by the RTC in the 2015-2016 timeframe. A second round of projects have been identified by staff as Milestone Policy projects. These
projects were funded between 2006 and 2010 and have not begun construction. As with the first set of Milestone Policy projects, agencies will be asked to review their projects and provide: 1) a realistic, achievable project schedule, 2) a new policy board action that reconfirms the agency’s commitment to the project, and 3) a demonstration of the availability of local matching funds. Letters will be sent to all agencies with a project on the Milestone Policy list notifying them of the action needed and the deadline to provide the requested information. Details can be found in Electronic Item 8.1, and the Milestone Policy project list can be found in Electronic Item 8.2.

Performance Measure(s) Addressed:
- ☑ Safety
- ☑ Pavement and Bridge Condition
- ☑ Transit Asset
- ☑ System Performance/Freight/CMAQ

2:15 – 2:25  9. **Auto Occupancy Verification Technology**

**Action**
- ☑ Possible Action
- □ Information

**Minutes:** 10

**Presenter:** Natalie Bettger, NCTCOG

**Item Summary:** Staff will update the Council on the status of the High-Occupancy Vehicle (HOV) detection and verification technology utilizing the GoCarma App. At the time of the mail out, no action is anticipated but the item is listed as possible action as the project approaches implementation.

**Background:** The Regional Transportation Council’s (RTC) Tolled Managed Lane Policy includes provisions to explore a technology solution for the verification of auto occupancy rather than relying on manual enforcement. Currently, HOV drivers wishing to receive the discount must register their trip as an HOV trip in advance. Current enforcement is a manual process in which an officer verifies that a declared HOV has at least two occupants. This is a dangerous situation for the police officers, as well as a disruption to traffic flow when potential violators are pulled over on the side of the road. The North Central Texas Council of Governments (NCTCOG), with cooperation from the Texas Department of Transportation, North Texas Tollway Authority, and LBJE/NTE Mobility Partners, has contracted with a vendor, Carma Technology Corporation, to develop an occupancy verification technology solution to apply the HOV discount during peak periods. During the fall 2018, the RTC approved additional funding to continue the development and implementation of the technology in coordination with partner agencies. The technology will launch in January 2020. This update will provide an overview of the remaining tasks and project schedule. Additional information can be found in Electronic Item 9.

Performance Measure(s) Addressed:
- ☑ Safety
- □ Pavement and Bridge Condition
- □ Transit Asset
- ☑ System Performance/Freight/CMAQ
End of 2019 Ozone Season

- **Action:**  
- **Possible Action:**  
- **Information Minutes:** 10

**Presenter:** Jenny Narvaez, NCTCOG  
**Item Summary:** Staff will provide a summary of the 2019 ozone season activity for the Dallas-Fort Worth (DFW) region. The ozone season is from March 1 to November 30.

**Background:** The end of November concluded another ozone season for the DFW region. The region continues to work towards compliance for ozone National Ambient Air Quality Standards (NAAQS). Staff has been tracking the exceedance days at each monitor and will provide a summary of the 2019 ozone season data for the North Central Texas 9- and 10-county nonattainment areas.

As a reminder, the region remains in nonattainment for both the 2015 and 2008 NAAQS for ozone. The attainment dates for both standards are in 2021 and will rely on ozone data from 2018, 2019, and 2020. Staff will discuss upcoming milestones and possible outcomes related to the standards.

**Performance Measure(s) Addressed:**
- **Safety**  
- **Pavement and Bridge Condition**
- **Transit Asset**  
- **System Performance/Freight/CMAQ**

Unmanned Aircraft Systems Safety and Integration Task Force Update

- **Action:**  
- **Possible Action:**  
- **Information Minutes:** 10

**Presenter:** Ernest Huffman, NCTCOG  
**Item Summary:** Staff will provide an update on the status of the Unmanned Aircraft Systems (UAS) Safety and Integration Task Force and working groups.

**Background:** In October 2018, the North Central Texas Council of Governments initiated a UAS Safety and Integration Task Force to mitigate reckless UAS operations and promote the acceleration of safe and efficient integration of UAS into the Dallas-Fort Worth regional airspace. This Task Force focuses on education, training, legislation, public awareness, strategic planning and innovation. Both public and private sector partners participate on the Task Force and working groups, which serve to identify issues and recommend solutions. Staff will present Task Force goals, accomplishments, and upcoming initiatives. More information about the UAS Task Force is available at [www.nctcog.org/trans/plan/aviation/uas](http://www.nctcog.org/trans/plan/aviation/uas).

**Performance Measure(s) Addressed:**
- **Safety**  
- **Pavement and Bridge Condition**
- **Transit Asset**  
- **System Performance/Freight/CMAQ**
12. **Progress Reports**
   - Action
   - Possible Action
   - Information
   
   Item Summary: Progress Reports are provided in the items below.
   
   - RTC Attendance ([Electronic Item 12.1](#))
   - Local Motion ([Electronic Item 12.2](#))

13. **Other Business (Old or New):** This item provides an opportunity for members to bring items of interest before the group.

14. **Future Agenda Items:** This item provides an opportunity for members to bring items of future interest before the Council.

15. **Next Meeting:** The next meeting of the Regional Transportation Council is scheduled for **1:00 pm, Thursday, January 9, 2020**, at the North Central Texas Council of Governments.
The Regional Transportation Council (RTC) met on Thursday, November 14, 2019, at 1:00 pm in the Transportation Council Room of the North Central Texas Council of Governments. The following members or representatives were present: Tennell Atkins, Richard E. Aubin, Ceason Clemens (representing Mohamed Bur), Loyl C. Bussell, Dianne Costa, Theresa Daniel, Jeff Davis, Pat Deen, Rudy Durham, Andy Eads, Kevin Falconer, Gary Fickes, George Fuller, Rick Grady, Lane Grayson, Mojy Haddad, Roger Harmon, Ivan Hughes, Clay Lewis Jenkins, Ron Jensen, Jungus Jordan, Lee M. Kleinman, Mike Leyman, David Magness, Curtistene McCowan, William Meadows, Cary Moon, Barbara Odom-Wesley, Stan Pickett, John Ryan, Stephen Terrell, Jeremy Tompkins, T. Oscar Trevino Jr., William Tsao, Paul N. Wageman, Chad West, Devan Allen (representing B. Glen Whitley), Sheri Capehart (representing W. Jeff Williams), and Ann Zadeh.


1. **Opportunity for the Public to Speak on Today's Agenda: Consistent with HB 2840:** This item allows members of the public an opportunity to give input on agenda items. Speaker Request Cards were made available, and those interested in providing public input were asked to complete a card and provide to staff. Regional Transportation Council Chair Andy Eads asked if there were any public comments. No members of the public chose to speak at the meeting or provide written comments to staff.

2. **Approval of the October 10, 2019, Minutes:** The minutes of the October 10, 2019, meeting were approved as submitted in Reference Item 2. Jungus Jordan (M); Theresa Daniel (S). The motion passed unanimously.

3. **Consent Agenda:** The following items were included on the Consent Agenda.

   3.1. **2020 Incident Management Equipment Purchase Call for Projects:** Approval to host a new round of the Incident Management Equipment Purchase Call for Projects in 2020 was requested. Additional information was provided in Electronic Item 3.1.
3.2. **AirCheckTexas Funding:** Approval for the Regional Transportation Council (RTC) Chair to submit follow-up communication to the Texas Commission on Environmental Quality (TCEQ) regarding locally generated funds from the AirCheckTexas Program, provided in Electronic Item 3.2.2, was requested. Correspondence from the TCEQ was provided in Electronic Item 3.2.1 and additional details were provided in Electronic Item 3.2.3.

A motion was made to approve the items on the Consent Agenda. Theresa Daniel (M); Rick Grady (S). The motion passed unanimously.

4. **Orientation to the Agenda/Director of Transportation Report:** Sonya Landrum recognized Traffic Incident Management training instructors and regional Roadside Assistance Patrol Program staff as part of National Traffic Incident Response Awareness Week. Michael Morris recognized Scott Mahaffey for his years of service on the Regional Transportation Council (RTC). In addition, he recognized members that represented the RTC at recent events in the region. He noted that the Denton County Transportation Authority recently renamed the Old Town Station the Charles Emery Old Town Station. He also noted that North Central Texas Council of Governments (NCTCOG) staff member Tom Bamonte has been appointed to the Governor's Texas Connected and Automated Vehicle Task Force. Recent tornadoes in the region were discussed, along with the potential opportunity for transportation reinvestments within communities. He noted there may be an opportunity to not only repair infrastructure but advance transportation efforts within the communities and that the RTC may be able to partner with entities as they try to rebuild. Mr. Morris also discussed the recent Senate approval that prevented a $1.2 billion cut for public transit. He noted that the Request for Proposals for high-speed transportation service between Dallas and Fort Worth has been released. Information on current air quality funding opportunities for vehicles was provided at [www.nctcog.org/trans/quality/air/funding-and-resources/fundingvehicle](http://www.nctcog.org/trans/quality/air/funding-and-resources/fundingvehicle) and current Dallas-Fort Worth Clean Cities events were provided at [www.dfwcleancities.org/dfw-clean-cities-meetings](http://www.dfwcleancities.org/dfw-clean-cities-meetings). Electronic Item 4.1 contained a status report on ozone. The November public meeting notice was provided in Electronic Item 4.2, and October public meeting minutes were provided in Electronic Item 4.3. The Public Comments Report was included in Electronic Item 4.4. Recent correspondence was provided in Electronic Item 4.5, recent news articles in Electronic Item 4.6, recent press releases in Electronic Item 4.7. Transportation partners progress reports were distributed at the meeting.

5. **2019 Metropolitan Planning Organization Milestone Policy Update:** Christie Gotti provided an update on the projects that are part of the Metropolitan Planning Organization (MPO) Milestone Policy list. The policy was created to track projects that were funded ten or more years prior to the policy being approved. Agencies with projects in this subset that had not proceeded to construction were subsequently given an extension to the end of calendar year 2019. Details on the Milestone Policy were provided in Electronic Item 5.2. Since that time, staff has coordinated with agencies many times regarding their project deadlines. Of the original 57 projects on the list, four projects were canceled based on input from the implementing agencies. Two projects were canceled as a result of being on the Federal Highway Administration 10-Year Preliminary Engineering Audit list. The two projects were combined, and the single project will be discussed within this item. The majority, 46 projects, have let or are complete. One project previously on the list did not have a deadline but has been updated and will be presented through the next round of Milestone Policy project discussions. Two projects previously let prior to the deadline but must now be rebid and two
projects did not meet their deadline of the end of Fiscal Year (FY) 2019. Ms. Gotti provided an update on the five projects given an extension to the end of December 2019 and noted that all have or will soon go to construction. She also provided an update on projects that did not meet their FY2019 deadline or that had to be rebid. Details were outlined in Electronic Item 5.1. The first project, TIP Code 11258.9, is a City of Dallas rail crossing project first selected in 2004. Staff's original proposal, and the action approved by the Surface Transportation Technical Committee, was to remove the funding and return it to the regional pool. It is staff's understanding from the City that the project is at 60 percent design, is not environmentally cleared, and there is no railroad agreement. The City of Dallas has requested further discussion regarding a possible solution. Staff proposed that action be postponed on this project until the December 12, 2019, RTC meeting, at which time staff will present the next round of the MPO Milestone Policy projects. The second project, TIP Code 533, was funded federally in 1992 as part of a package with the Texas Department of Transportation, Garland, Dallas, and Dallas Area Rapid Transit. The project was later defederalized and funding was shifted so that excess local funding was combined on this project and the federal funding on others. All other projects are now under construction, except for the locally funded project. Staff proposed to continue monitoring the project for timely letting. The third project is TIP Code 633 and the final project is TIP Code 25043. For both projects, there was an issue with letting and staff proposed that the deadline for these projects be extended. The projects must be rebid and start by March 2020 or funding will be returned to the regional pool. Lee M. Kleinman noted that he believed it is important to maintain a program in which projects can be sunset if they are not progressing but added that he appreciates more time for the City of Dallas to come back and respond regarding TIP Code 11258.9. He noted that it is an important project to Dallas and committed that there will be an internal monitoring system for projects, including at the elected official level. A motion was made to approve the following proposals for projects: 1) TIP Code 533; monitor for timely letting, 2) TIP Code 633; project must be rebid by March 2020 or funding returned to regional pool, 3) TIP Code 25043; project must be rebid by March 2020 or funding returned to regional pool; and 4) TIP Code 11258.9; staff will work with the City of Dallas and project details brought back before the Council at the December 12, 2019, meeting. Lee M. Kleinman (M); Curtistene McCowan (S). The motion passed unanimously.

6. **Clean Fleets North Texas 2019 Funding Recommendations:** Chris Klaus presented funding recommendations for the Clean Fleets North Texas 2019 Call for Projects. Approximately $2 million in Environmental Protection Agency (EPA) National Clean Diesel Funding Assistance Program funds, including remaining 2017 funds not fully awarded and 2018 funds, were available for replacement of on-road diesel engines and non-road diesel equipment. Depending on the replacement type, from 25-45 percent of total project funding was available. In addition to the eligible organization type and the eligible proposed activities, potential applicants also had to adopt the Clean Fleet or similar type policy, and the minimum allowable subaward was $100,000. Scoring criteria for the eligible projects was 75 percent for cost per ton of nitrogen oxides reduced to maximize emissions reductions and 25 percent for subrecipient oversight to balance the project benefits with the administrative burden. An overview of the call for projects was provided in Electronic Item 6.1 and details of projects were provided in Electronic Item 6.2. Of the 11 activities received from the two applicants, 10 activities were determined to be eligible requesting approximately $1.2 million in recommended funding. Staff requested feedback from applicants regarding the call for projects, from which several entities indicated that the $100,000 grant minimum was difficult to reach and that the opening of the call for projects did not align with annual budgets. Feedback regarding elements determine by the EPA included funding percentages that were too low and eligible model years that were too
restrictive. In order to expend the remaining $700,000 that was not awarded to projects, staff proposed that the call for projects be reopened for 90 days. Based on feedback, it was proposed that the minimum allowable subaward be reduced to $50,000. In addition, staff will increase communication with entities regarding eligibility and the implementation timeframe. The schedule for this effort was reviewed. A motion was made to approve the funding recommendations of $929,608 to the City of Dallas and $325,000 to the City of Benbrook as outlined in Electronic Item 6.2. Also included in the action was approval to open an additional round of solicitation with 90 days to apply, reducing the minimum award threshold to $50,000, incorporation of additional funding if it becomes available, and use of the same scoring criteria. T. Oscar Trevino Jr. (M); Devan Allen (S). The motion passed unanimously.

7. **Buy America Act Proposed Safety Equipment Exception**: Rebekah Hernandez discussed Buy America regulations and their effects on the purchase of incident management safety equipment. The Buy America Act was originally passed by Congress in the 1930's and since that time there have been several laws that have gone into effect that aim to protect American manufacturing jobs. Related to transportation, Buy America provisions have been in place many years and in 1978 Congress began placing domestic content restrictions on federally funded transportation projects. Unless a nationwide or project-specific waiver is granted, Buy America requires the use of United States iron or steel and the domestic production and assembly of manufactured goods. The laws and regulations governing Buy America for transportation differ according to the specific funding program and agency. Ms. Hernandez discussed an increased focus on safety initiatives both in Congress and in federal performance measures. In the State, the Texas Department of Transportation recently approved its vision zero safety goals. In addition, the Texas Senate recently released its interim charges and the first item was related to safety. There are also many ongoing safety initiatives by the North Central Texas Council of Governments (NCTCOG) that include the Traffic Incident Management Equipment call for projects and training for first responders. One of the trainings provided by NCTCOG is a photogrammetry training course that uses digital camera images and allows first responders and investigators to clear roadway incidents quicker and instead conduct their investigations from their office, which leads to improved mobility and safety. Although the Buy America Act was originally established to ensure domestic products are used, there have been some unintended challenges specifically related to the cameras used in photogrammetry and some of the eligible purchases for incident management equipment. Since items such as cameras are made up of complex components, it is challenging to determine and certify if the equipment and cameras can be certified Buy America compliant. As a potential solution, staff proposed an exception be created in the current statute for safety equipment. A draft letter to the North Texas Congressional Delegation was provided in Electronic Item 7 that outlines the issue and the potential solution. Lee M. Kleinman asked if staff has considered the possibility of creating Buy America credits that entities could receive for purchasing American manufactured products to be used for the purchase of other products, such as accident investigation equipment, that are more difficult to determine their Buy America compliance. It was suggested that the language in the draft letter be updated to include suggested creation of Buy America credits. A motion was made to approve a letter to the North Texas Congressional Delegation proposing an exception be added in Title 23 USC Section 313 for traffic incident management safety equipment, with flexibility included for staff to also request options for some type of credit system for purchasing American manufactured products that could be used for purchase of other products. Lee M. Kleinman (M); Theresa Daniel (S). The motion passed unanimously.
8. **Partnership with Dallas Fort Worth International Airport to Enable Electric Bus Purchase:** Chris Klaus presented a proposed funding partnership with the Dallas Fort Worth International Airport to support electric bus purchases. As the region continues to grow, there is also increasing demand at the airport. The airport predicts that by summer 2020, additional airside buses will be needed to support the growing number of daily flights and to move passengers from terminals to planes parked away from the gates. Buses are available in diesel and electric options, but the electric buses have a higher capital cost that is almost double the cost of diesel options. The Dallas Fort Worth International Airport requested funding assistance through air quality programs facilitated by the North Central Texas Council of Governments (NCTCOG). However, items such as Buy America constraints and scrappage requirements limit funding eligibility from traditional funding sources for the airport. Because of the regional significance of the air quality benefits of purchasing electric buses, NCTCOG staff proposed a funding partnership to assist the Dallas Fort Worth International Airport in the purchase of four electric buses, the associated infrastructure and equipment, and the temporary lease of airport buses prior to delivery of the purchased vehicles at a cost of approximately $3.5 million. Recent correspondence to the airport was provided in Electronic Item 8.1. Air quality benefits of electric buses include avoiding an increase in ozone forming pollutants, assisting the airport in maintaining compliance with general air quality conformity as it expands, reducing passenger and employee exposure to exhaust emissions from diesel buses, and sustaining the airport's carbon-neutral accreditation. Staff proposed that up to $3.5 million in Regional Toll Revenue funds from Dallas County and regional accounts be provided to the Dallas Fort Worth International Airport to support the purchase of electric airside buses, associated infrastructure, and equipment. Mr. Klaus reviewed the timeline for this effort and noted that with approval the anticipated delivery of the electric buses would be fall 2020. Additional details on the proposed partnership was provided in Electronic Item 8.2. Staff and members discussed other options to fund the buses such as providing federal funding for another airport project, with the airport using its local funds for the purchase of the electric buses. Bill Meadows, Chair of the Dallas Fort Worth International Airport Board, expressed his appreciation for the long history of partnership with the Regional Transportation Council (RTC) and the importance that the airport maintain its carbon neutral accreditation since it is the largest carbon neutral airport in the world and the first in the United States. A motion was made to recommend Regional Transportation Council approval of up to $3.5 million in Regional Toll Revenue funds from the Dallas County and regional accounts to be provided to the Dallas Fort Worth International Airport to support the purchase of electric airside buses, associated infrastructure, and equipment. The action included flexibility to fund this project or another project that would allow the airport to move local funds to purchase the electric buses. In addition, a recommendation to authorize staff to administratively amend the 2020-2022 Transportation Improvement Program and other planning/administrative documents, as needed, to incorporate this effort was included. Lee M. Kleinman (M); Gary Fickes (S). The motion passed unanimously.

9. **High-Occupancy Vehicle Transportation Control Measures: Application of Managed Lanes and Substitution of Traffic Signal Progression:** Jenny Narvaez presented information on Transportation Control Measure (TCM) substitutions. In the 1990s, several interim high-occupancy vehicle (HOV) lanes were added in the region to alleviate congestion. Some of these interim projects were published in the region’s state air quality plan, the State Implementation Plan (SIP), as TCMs. Since that time, interim HOV lanes have evolved into managed lanes in response to changing conditions. Although the managed lanes do provide emissions benefits, they are no longer interim projects and the SIP documents must be updated appropriately. Removal of the projects from the SIP
requires that the projects be substituted with projects that yield equivalent air quality benefits. Ms. Narvaez noted that three interim HOV lanes are included as Transportation Control Measures in two of the region's SIPs. Staff proposed that the three projects be removed as TCMs from the SIPs and substituted with other projects that achieve equivalent or greater emission benefits. Interim projects proposed to be substituted out of the SIPs are IH 35E between IH635 and SH 121, IH 635E between Coit Rd. and Greenville Ave., and IH 635W between Luna Rd and US 75. Potential traffic signalization projects proposed to be substituted in place of the three interim projects were highlighted. Details were provided in Electronic Item 9. Ms. Narvaez noted that not all projects will be used, and staff will work to select projects in proximity to the interim HOV projects and for which substitution measures will achieve equivalent or greater emissions reductions for the nitrogen oxides and volatile organic compound emissions contributed by the three interim projects to be replaced. The schedule for the effort was reviewed, with action to be requested at the December 12, 2019, Regional Transportation Council meeting.

10. **Follow Up to Regional Transportation Council Workshop:** Michael Morris highlighted topics discussed at the Regional Transportation Council (RTC) Workshop held prior to the meeting which included the strategic visioning process, potential topics the RTC may wish to discuss in the coming months, and institutional questions as the region is matured. Historical partnerships were also discussed, as well as innovative funding, tolling, borrowing, public-private partnerships, and the importance of statewide formula allocation. Finally, the importance of having projects shovel ready for the next funding opportunity was highlighted. RTC Chair Andy Eads reiterated the importance of having shovel-ready projects, something he believes the region has been successful in doing through its flexibility and spirit of trust. In addition, he noted it is important that the RTC is mindful of the upcoming legislative session, refine its talking points, prepare for the issues at hand, and work on the legislative agenda outside of the legislative session. Ann Zadeh mentioned discussion during the work session about the Chair's initiative to bring together the transportation authorities in the region and the importance of this initiative.

11. **Hyperloop Certification Center Initiative and Reaffirmation of High-Speed Rail from Dallas to Houston:** Michael Morris provided information on the Virgin Hyperloop One Request for Proposals and a draft resolution, provided in Reference Item 11, supporting high-speed rail and a possible partnership with Virgin Hyperloop One. An update on rail service from Houston to Dallas was provided. Efforts are moving on the Finding of No Significant Impact, safety protocol with the Federal Railroad Administration, and right of entry for construction of the facility. He noted the proposed resolution will reaffirm the Regional Transportation Council's (RTC) support for high-speed rail by Texas Central Railway from Houston to Dallas. High-speed rail is the only technology contemplated for this Houston to Dallas corridor. For the Dallas, Arlington, Fort Worth corridor, the project is now in the Request for Proposals phase. This corridor includes the three-station concept. The third corridor is from Fort Worth to Laredo. The final round of stakeholder meetings is scheduled, and the final report is expected in 60 days regarding the conceptional engineering routes to bring fast rail from Fort Worth through Waco, Temple-Killeen, Austin, San Antonio, Laredo, and on to Monterey, Mexico. Other efforts include a proposal for a hyperloop certification center. A Request for Proposals from Virgin Hyperloop One was released on November 4 with the deadline for the conceptual proposal due December 13, 2019. If approved by the RTC, the region will be competing with others in the United States to be the location for the certification center. Phase A of the conceptual proposal (Phase 1) is submission of intent and non-disclosure elements. Part B includes credentials, ideas, and partnership details. If an entity is shortlisted by Virgin Hyperloop One, Phase 2 will include...
submit of a detailed proposal by February 28, 2020. From those submissions, finalists will be determined in Phase 3 and negotiations are anticipated in mid-2020, followed by announcement of the winner. Construction is anticipated to begin in 2021. Mr. Morris reviewed the sections of the proposed resolution. Section 1 reaffirms the RTC’s support of Texas Central Railway for high-speed passenger rail initiatives from Dallas to Houston. Section 2 approves North Central Texas Council of Governments (NCTCOG) staff to respond to the Request for Proposals for a Hyperloop Certification Center by Virgin Hyperloop One, reach out to partners such as the Dallas Regional Chamber, and pursue support from the State of Texas. He noted the Dallas Regional Chamber has indicated it is available to provide assistance but NCTCOG would be the lead. He added it is unclear whether the region would work through the district engineers or directly with the State regarding this effort. Lee M. Kleinman asked if NCTCOG is still interested in suggestions from cities or counties in the region and if the Request for Proposals will be provided to entities. Mr. Morris noted the deadline for entities to submit potential locations is November 22 and a copy of various sections from the Request for Proposals identifying certification track alignment needs will be provided to members. Mr. Kleinman also asked if staff believed there would be more than one site suggestion submitted as part of the Request for Proposals. Mr. Morris noted as many sites that meet the requirements will be included. Barbara Odom Wesley noted there is no mention of funding in the resolution or presentation. Mr. Morris noted it is too early in the process and the RTC should assume some funding will be included. No funding is being committed at this time. A motion was made to approve Regional Transportation Council Resolution R19-05, Resolution of Support for the Hyperloop Certification Center Initiative and Reaffirmation of High-Speed Rail from Dallas to Houston, provided in Reference Item 11. Theresa Daniel (M); Gary Fickes (S). The motion passed unanimously.

12. **Top Five Regional Transportation Council Policy Initiatives for 2020:** Michael Morris highlighted the proposed top five Regional Transportation Council (RTC) policy initiatives for 2020. The first initiative is the importance of the partnership between local, State, and federal elected officials. The second initiative is whether the review of revised institutional structures is business as usual. He noted it may be important to develop policy questions on institutional structures for hyperloop, autonomous vehicles, transit, and others. Metropolitan Planning Organization (MPO) efforts to communicate, delegate and implement is the third policy initiative. In addition, taking advantage of Texas interim legislative charges and new federal legislation will also be important in the coming year. Staff will be reviewing interim charges and bring back homework assignments to the RTC at a future meeting. The last initiative is connecting the Dallas-Fort Worth region with the rest of the State and nation. RTC Chair Andy Eads asked that members with additional topics or areas of focus contact staff. Chair Eads also asked if staff formally or informally communicates the RTC’s legislative agendas with other MPOs across the state. Mr. Morris noted that the RTC’s legislative positions are communicated to the statewide MPO group through the Assistant Director of Transportation, as well as transportation advocacy groups within the region. He noted that staff will likely begin legislative efforts earlier, hold workshops, and potentially invite other MPOs to the region. Staff will map interim charges and interested members can begin to advocate for the region. Chair Eads noted that he believes the region is high performing in this area and should take a leadership position if necessary.

13. **Progress Reports:** Regional Transportation Council attendance was provided in Electronic Item 13.1, Surface Transportation Technical Committee attendance and minutes in Electronic Item 13.2, and the current Local Motion in Electronic Item 13.3.
14. **Other Business (Old or New):** There was no discussion on this item.

15. **Future Agenda Items:** There was no discussion on this item.

16. **Next Meeting:** The next meeting of the Regional Transportation Council is scheduled for 1:00 pm, Thursday, December 12, 2019, at the North Central Texas Council of Governments.

    The meeting adjourned at 2:40 pm.
| Regional Transportation Council  
| 2020 Schedule of Meetings  
<table>
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Dates are subject to change.

¹ This meeting date may be rescheduled for a different date in August or September to coincide with the annual Irving Transportation Investment Summit.

² The 2020 Texas Municipal League Annual Conference and Exhibition is scheduled for October 14-16 at the City of Grapevine and does not conflict with the RTC meeting schedule.

³ The 2020 National League of Cities City Summit is scheduled for November 18-21 and does not conflict with the RTC meeting schedule.
Regional Transportation Council
PUBLIC MEETING

Hyperloop: Where Are We Building It?

HOV Transportation Control Measures: Application of Managed Lanes & Substitution

Alternative Fuel Corridors

Trail of the Month Video Series

Meeting Date and Location

The North Central Texas Council of Governments (NCTCOG) held a public meeting Monday, November 11, 2019, at 6:00 pm at the North Central Texas Council of Governments (Arlington); Chris Klaus, Senior Program Manager, moderated the meeting, attended by 8 people.

Public Meeting Purpose and Topics

The public meeting was held in accordance with the NCTCOG Transportation Department Public Participation Plan, which became effective June 1, 1994, as approved by the Regional Transportation Council (RTC), the transportation policy board for the metropolitan planning organization, and amended on November 8, 2018. Staff presented information about:

1. Hyperloop: Where Are We Building It? – presented by Clint Hail
2. HOV Transportation Control Measures: Application of Managed Lanes & Substitution – presented by Vivek Thimmavajjhala
3. Alternative Fuel Corridors – presented by Bethany Hyatt
4. “Trail of the Month” Video Series – presented by Matt Fall

The public meeting was held to educate, inform and seek comments from the public. Comments were solicited from those present who wished to speak for the record. The presentations made at the meeting are available at www.nctcog.org/input, and a video recording was posted at www.nctcog.org/video.

Each person who attended the public meeting received a packet with a meeting agenda, a sheet on which to submit written comments and copies of the presentations.

Summary of Presentations


Hyperloop technology is one piece of a larger ecosystem of transportation innovation. Multiple projects, including high-speed rail, automated vehicles and Uber Elevates, are taking place in the region. NCTCOG staff recently issued a Request for Proposals (RFPs) for a high-speed
transportation study based on recommendations made in Mobility 2025. Additionally, AECOM is leading a study on a hyperloop route from Fort Worth to Laredo.

Hyperloop technology involves taking a pod and putting it in a vacuum-sealed tube and shooting it at high speeds. The RTC was briefed on it’s infrastructure back in October and will discuss Virgin Hyperloop One’s RFP for a certification facility in November.

**HOV Transportation Control Measures: Application of Managed Lanes & Substitution presentation:**

High-occupancy vehicle (HOV) lanes were added in the 1990’s as a temporary option to alleviate congestion, and the emission benefits of these lanes were included in the region’s State Implementation Plan (SIP).

Due to changing conditions, interim HOV lanes eventually evolved into Managed Lanes. Because of this evolution, NCTCOG is proposing the following three HOV lanes be removed as Transportation Control Measures (TCMs) from the SIP:

- IH 35E corridor between IH 635 and SH 121
- IH 635E corridor between Coit Road and Greenville Avenue
- IH 635W corridor between Luna Road, IH 35E and US 75

Additionally, removing them requires substituting alternate TCM projects that achieve equivalent emissions benefits. Staff is proposing 7 traffic signalization projects be used as substitutes:

- Parker Road (Midway Road to Preston Road)
- Park Boulevard (Midway Road to Coit Road)
- Custer Road (Legacy Drive to SH 121 Northbound)
- Coit Road (Legacy Drive to SH 121 Northbound)
- Spring Creek Parkway/Shiloh Road (Custer Road to Plano Parkway)
- Plano Parkway (Dublin Road to Marsh Lane)
- SH 121 (Spring Creek Parkway to Hardin Road)

The RTC will take action on the HOV TCM substitution in January 2020.

**Alternative Fuel Corridors presentation:**

This presentation covers several air quality emphasis areas, including high-emitting vehicles and equipment as well as energy and fuel use.

Section 1413 of the Fixing America’s Surface Transportation Act requires the US Department of Transportation to designate corridors to improve mobility using certain alternative fuels, such as hydrogen, propane and natural gas. The benefits of corridor designation include accelerated public interest and improved user experience. Eligible corridors must be within five miles of the highway, publicly accessible and within the maximum distance between charging stations. In coordination with the Texas Department of Transportation, NCTCOG submitted designated corridor nominations in 2016, 2017 and 2018. Nominations for 2019 opened on October 30.
As of July 2019, there are 13,809 registered electric vehicles (EVs) in North Texas. Additionally, there are many incentives available for those ready to purchase an alternative fuel vehicle. For more information, visit www.nctcog.org/aqfunding.


The “Trail of the Month” video series is an outreach initiative intended to make the public aware of the many great trail systems in the Dallas-Fort Worth region. The videos highlight the benefits of the regional system, including access to job centers and schools, regional connectivity and community enhancement. They also feature various interviews with local government leaders and staff, trail users and community organizations.

For more information on the “Trail of the Month” video series, visit www.nctcog.org/bikeweb.

**ORAL COMMENTS RECEIVED AT MEETING**

**Hyperloop: Where Are We Building It?**

Gary Hennessey, Citizen

*Comment:* You’ve issued a Request for Proposals for the Dallas to Fort Worth high-speed transportation study. We already have the Trinity Railway Express (TRE) in that corridor. Why would we add another mode of transportation in that area?

*Summary of response by Clint Hail:* The study is following up on something that has been recommended for a long time.

*Summary of response by Dan Kessler:* You have to look at the corridor as part of a system. We just finished a feasibility study. People who would most likely use high-speed transportation are not the same people using the TRE. There is a difference between commuter traffic and inner-city traffic.

**Alternative Fuel Corridors**

Gary Hennessey, Citizen

*Question:* How many of the light-duty motor vehicle incentives are left?

*Summary of response by Bethany Hyatt:* There are more than 1,000 remaining.

*Summary of response by Chris Klaus:* The incentives are anticipated to go pretty quickly. Stuff is out there. We have a funding page that discusses all our funding opportunities. It’s a one-stop shop at www.nctcog.org/aqfunding.

**COMMENTS SUBMITTED BY WEBSITE, EMAIL & SOCIAL MEDIA**

No comments received via website, email or social media.
WHAT DO YOU THINK?
TELL US.

Information will be posted online at www.nctcoq.org/input for public review and comment Dec. 9, 2019 - Jan. 7, 2020. To request printed copies of the information, call 817-608-2365 or email cbaylor@nctcoq.org.

Proposed Modifications to the List of Funded Projects
A comprehensive list of funded transportation projects through 2022 is maintained in the Transportation Improvement Program (TIP). Projects with committed funds from federal, state and local sources are included in the TIP. To maintain an accurate project listing, this document is updated on a regular basis and posted online for review and comment.

DFW Airport Electric Bus Partnership
The Dallas-Fort Worth International Airport has identified a need for additional airside buses to shuttle passengers from the ramp to the terminal. The buses needed are available in a zero-emission electric platform, but costs to purchase electric buses are substantially higher than the cost of purchasing diesel airside buses. Since this initiative supports efforts to attain federal ozone standards, NCTCOG staff has proposed a strategic funding partnership to assist the airport in purchasing electric rather than diesel buses. More information is posted online.

Auto Occupancy Verification Technology
The Regional Transportation Council’s current Tolled Managed Lane Policy includes a provision for peak-period carpool discounts but requests an exploration of automated occupancy verification technology. NCTCOG with cooperation from regional partners has contracted with Carma Technology Corporation to develop an occupancy verification technology solution. The technology will launch in January 2020. Staff will provide information related to the launch.

Hyperloop Certification Center Initiative and Reaffirmation of High-Speed Rail from Dallas to Houston
Staff will provide a status report on hyperloop technology in the Dallas-Fort Worth region.

RESOURCES AND INFORMATION
- Electric Vehicle Incentives: www.dfwcleancities.org/evnt
- TERP Funding: www.terpgrants.org
- Clean Fleets North Texas 2019 Calls for Projects: www.nctcoq.org/aqfunding

Submit comments and questions to NCTCOG:
Email: transinfo@nctcoq.org
Website: www.nctcoq.org/input
Fax: 817-640-3028
Phone: 817-695-9240
Mail: P.O. Box 5888
Arlington, TX 76005-5888

For special accommodations due to a disability or for language translation, call 817-608-2365 or email cbaylor@nctcoq.org.
Reasonable accommodations will be made. Para ajustes especiales por discapacidad o para interpretación de idiomas, llame al 817-608-2365 o por email: cbaylor@nctcoq.org. Se harán las adaptaciones razonables.
PUBLIC COMMENTS REPORT

WRITTEN COMMENTS SUBMITTED BY WEBSITE, EMAIL & SOCIAL MEDIA

Purpose

The public comments report is in accordance with the NCTCOG Transportation Department Public Participation Process, which became effective June 1, 1994, as approved by the Regional Transportation Council (RTC), the transportation policy board for the Metropolitan Planning Organization (MPO) and amended on November 8, 2018.

This report is a compilation of general public comments submitted by members of the public from Sunday, October 20, through Tuesday, November 19. Comments and questions are submitted for the record and can be submitted via Facebook, Twitter, fax, email and online.

This month, bicycle and pedestrian comments related to the Trail of the Month video featuring the Cotton Belt Trail were in the majority.

Bicycle & Pedestrian

Twitter –

1. Cotton Belt Trail will connect Plano, check it out. – LegacyConnect (@LegacyConnectMe)

Facebook –

1. Check out the fourth video in our new Trail of the Month series about multi-use trails in the region! The Cotton Belt Trail plays a vital role in the off-street connection between North Richland Hills, Hurst, Colleyville, and Grapevine. Stay tuned for more!

Resources:
North Richland Hills
https://www.nrhtx.com/235/Parks-Trails

Hurst
https://www.hursttx.gov/about-us/dep...

Colleyville
http://www.colleyvilleparksandrec.com/

Grapevine
https://gograpevine.com/ – NCTCOG Transportation Department

Keep up the good work, forging ahead. So glad to finally see Carrollton being included or at least close to some of the longer trails. – Raynard Andrews

Great video! – Laura Bergstrom

Where’s a good place to park in Grapevine? – Howard Maher

Hi, Howard! There are numerous parking lots along the trail. Additionally, there are parks, schools and commercial parking lots nearby. We recommend taking TexRail and getting off at the station near Downtown Grapevine or organizing a group ride so that parking isn't as big of an issue! You can you use this interactive map to locate bikeways and parks, many of which have parking lots: http://nctcoggis.maps.arcgis.com/.../webapp.../index.html.... – NCTCOG Transportation Department

2. Perfect weather this weekend for enjoying the trail system! – North Richland Hills City Hall
3. We love the Cotton Belt Trail 🚴‍♂️ 🚴‍♀️ – Kevin Mitchell
4. Check out your community hike and bike trail! – Keep Grapevine Beautiful

5. Let’s get on board Carrollton "Connection". Don't let the trail development leave us out! – Raynard Andrews
Funding

Twitter –

1. Some of the misperceptions passed around the @CAMPOTexas Policy Board are mystifying. There is a general perception that @HGACmpo & @NCTCOGtrans have succeeded at bringing greater funding to their regions than ATX. This is not true when you look at @TXDOT spending per capita. – Jay Blazek Crossley (@JayCrossley)

Here is a previous post I did about the misperceptions about the Austin region that seem to weirdly dominate regional discussions. It is bizarre that our @CAMPOTexas decision makers are so uninformed about some basic facts of our transportation system.


Innovative Vehicles & Technology

Twitter –

1. #ahem #autopilot #driverassistance @Tesla – N TX Tesla Owners (@NTXTeslaOwners)

Good news: US traffic fatalities fall again.

Facebook –


![Map of Texas Hyperloop routes]

So, what's the plan if the electricity running the maglev rail line goes out and you are now stuck inside a tube? They gonna cut you out before you suffocate?

(Keep in mind, the next vehicle is coming behind you on the same track at 700 mph. So, better think quickly.) – Dallas May

The portions like DFW Airport to Dallas will be interesting being so short at the speeds proposed. Not even one passenger has ever been on a Hyperloop, but it’s good to see research and development being done. These are proposed routes for High-Speed Rail lines and mass transportation options are badly needed. ETA - Enthusiasts of Transit Association – Curtis Garrison

Twitter –

1. Why is the unelected, unaccountable @NCTCOGtrans refusing to contribute to the expansion of @KlydeWarrenPark unless it includes a building in the middle of it, instead of a park? – Wylie H Dallas (@Wylie_H_Dallas)

   it isn’t a ‘park’ anyway, but a outdoor upscale entertainment center. many people think it’s great. but the potential for even more commercialization in form of an office bldg is beyond offensive. sooooo dallas. – casscounty (@aurielambert)

   I always love the arcane way in which the cog chooses to fund a project. I believe reading tea leaves is a mandatory skill set to work there. – Philip Goss (@gosspl)

2. This all seems incredibly irresponsible. Why can’t we just have an expansion of the park? Why is @NCTCOG forcing @cityofdallas to build this structure as a prerequisite to obtaining funding? – Wylie H Dallas (@Wylie_H_Dallas)
NCTCOG said it wants the building to set a legal precedent, but would not elaborate as to why the precedent is needed specifically. – Lori Brown (@LoriBrownFox4)

Would you not agree that such a statement from @NCTCOGtrans is preposterous and implausible on its face? – Wylie H Dallas (@Wylie_H_Dallas)

Safety

Email –

1. Zainab Sajjad

Hello,

Please put a sign cautioning cars regarding the oncoming traffic from Hwy on the service lane of the Renner road exit from N. President George Bush Hwy. My daily commute includes crossing the junction of N. President George bush Hwy and Renner road. The traffic coming onto the service lane from N. President George Bush Hwy is coming at a fast speed directly into the service lane which comes as a shock to those driving on the service lane as there is no sign cautioning either for those driving on the service lane or the cars coming from the highway about the merging traffic. There should be at least a lower speed speed limit sign for the cars taking an exit. I witness cars nearly colliding every day there and I always tell myself to be careful but despite being careful I was almost a part of a dangerous accident today.
Facebook –

1. "Ahead" a very important word for everyone operating a motor vehicle or bike. Use your eyes and Look Ahead, use a-Head to THINK ahead and use a helmet to protect a-head. Now go ahead and Share The Road NOT The Lane. – Raynard Andrews

Transit

Twitter –

1. My current read: Human Transit by Jarrett Walker. Thank you Elizabeth Espino for the book gift! @TrinityMetro @CityofFortWorth @TarrantTransit @FTWChamber @fwhcc @fwmbcc @trtcmobility @NCTCOGtrans @TarrantCountyTX – Sal Espino (@SAL_FW)
Facebook –

1. Have you tried The Dash yet? No? There’s still time to catch a complimentary ride! You have until October 31. And beginning Nov. 1, rides are only $2 one way or $5 for a day pass. Learn more here: https://ridetrinitymetro.org/dashanddiscover. – NCTCOG Transportation Department

It’s great! – Tarrant Transit Alliance

Plus, for everyone reading this post, The Dash also connects to both the TRE and TEXRail at Central Station in downtown Fort Worth! – Paul McManus
That it does! – NCTCOG Transportation Department

Complimentary rides on the Dash have been extended through Dec. 31, 2019. – Juanity Martinez

2. We LOVE The Dash!!!

For more posts about Road Transit like this and updates, info and access to private discussions, join our Facebook group @ETA - Road Transit – ETA – Enthusiasts of Transit Association

Other

Twitter –

1. Heads up for Dallas County residents – UTA University Dems (@UTACollegeDems)
Facebook –

1. Good news! US traffic fatalities fall again.


The bad news is that death rates increased for people walking and biking. Most of these deaths occur on major roads that provide nowhere safe to travel or cross if you’re not in a car.

We need to ramp up safety improvement funds for people walking and biking. Everyone deserves to get home safely.


Well the death rate can drop simply because you can only die once. If the rate of new reckless and careless drivers is slower than the death rate they almost weed themselves out. It’s a shame that people can't be responsible enough to respect cyclists and other drivers to the point that "technology" is required to compensate for incompentence.
Humm that gives me another thought about our current administration. – Raynard Andrews

How did NTX fair? Seems our area is increasing in population over national averages. – Elizabeth Corazon
October 28, 2019

Mr. Michael Morris  
Director of Transportation  
North Central Texas Council of Governments  
P.O. Box 5888  
Arlington, Texas 76005-5888

Re: Dallas Area Rapid Transit (DART) – Transit Asset Management (TAM) Plan

Dear Mr. Morris:

In accordance with the Federal Transit Administration (FTA) requests for transit agencies to share their Transit Asset Management (TAM) Plan with their Metropolitan Planning Office, we have enclosed the latest DART TAM Plan. This plan was revised in 2019 to provide an update on the assets owned by DART, their condition, and the processes DART follows to maintain a State of Good Repair.

This plan is in full compliance with the Federal Transit Administration Regulations for Transit Asset Management - Regulations (CFR) Title 49, Parts 625 and 630.

If you need further information, please feel free to contact Mr. Darryl Spencer, Senior AVP Engineering at 214-828-6013 or DSpencer@dart.org.

Sincerely,

[Signature]

Gary C. Thomas  
President/Executive Director

Enclosure  DART TAM Plan

c:  DART Executive Management Team
November 11, 2019

Colonel Kenneth N. Reed
Commander, Fort Worth District
U.S. Army Corps of Engineers
819 Taylor Street
Fort Worth, Texas 76102

RE: Letter Requesting Support for Integrated Long-Range Planning of Regional Transportation and Stormwater Management Together as a System of Improvements, Resulting in Flood Prevention vs. Flood Response; a partnership of the U.S. Army Corps of Engineers with the North Central Texas Council of Governments

Dear Colonel Reed:

The North Central Texas Council of Governments (NCTCOG) appreciates the opportunity to submit this letter requesting support from the U.S. Army Corps of Engineers (USACE) for Integrated Long-Range Planning of Regional Transportation and Stormwater Management Together as a System of Improvements. Recent flood events in Texas have brought to the attention of the State the need for more comprehensive planning in urban areas. This is particularly important in the upstream portions of the Trinity watershed where urban growth and development is expected to continue and where unmanaged growth will have strong negative consequences on downstream cities like Dallas and Fort Worth. The North Central Texas region has a distinct window of opportunity to proactively engage in comprehensive efforts that integrate its transportation, environmental and stormwater needs in order to address the health, safety, welfare concerns of the region while helping local governments manage their growth and development in a cost effective manner. This proposal is to integrate regional transportation (e.g. policy, planning, engineering), regional stormwater management and environmental planning through establishment of a working group of partners and stakeholders to carry out a comprehensive effort in Wise, and portions of Dallas, Denton, Ellis, Johnson, Parker, and Tarrant counties. Please see project location map in Attachment 1.

NCTCOG will serve as the official sponsor on behalf of communities and member governments within the North Central Texas region for the above referenced partnership. NCTCOG has a long-standing history of Regional Transportation planning in this area and will leverage those efforts to continue forward with this broadened scope.
NCTCOG represents a 16-county area including over 230 member governments. The North Central Texas region is currently the 4th largest region in the United States, with a current population of over 7.5 million. By 2060, the region is expected to double in population, making us one of the fastest and significantly growing regions in the country. NCTCOG interacts very actively with our member governments on a wide variety of topics in order to help our communities work together to meet common goals. Regional transportation planning (down to a granularity/level of collector roadways) and watershed management are both areas that emerged as important priorities dating back to the origination of the agency in 1966. NCTCOG also has a strong history of partnerships with the U.S. Army Corps of Engineers through our Common Vision program and would like to expand upon that history. For your reference, the Common Vision program is described in more detail below.

A broadly stated request has been submitted annually since 2016 in the form of a Letter of Intent for an Upper Trinity Regional Comprehensive Watershed Management Plan, a partnership of the U.S. Army Corps of Engineers with the North Central Texas Council of Governments. This letter notes that there are many efforts and dollars spent in the North Central Texas region today towards much needed flood mitigation, however, it is recognized that a more cost effective approach to addressing flooding is flood prevention. With all of the growth, development, and urbanization associated with the doubling of the population, exerting efforts and some funds towards building upon flood prevention techniques through proactive watershed management practices is needed.

This project provides a specific scope for us to undertake that endeavor. NCTCOG will also leverage its long standing relationships and partnerships with other federal, state, and regional agencies including the Federal Emergency Management Agency (FEMA), Texas Water Development Board (TWDB), Texas Floodplain Managers Association (TFMA), Tarrant Regional Water District (TRWD), and the Trinity River Authority (TRA). These partners understand that flooding continues to occur across the state with increased development. They also understand that much flooding occurs outside of the FEMA Flood Insurance Rate Map (FIRM) shaded areas and that streams need to be identified, preserved, and protected before development and urbanization takes place. Furthermore, many of the runoff flows utilized in FIRM mapping process have not been updated and were established decades ago when the land use in the region was generally farmland, thus providing a false sense of security to those utilizing those maps as a development guide. As NCTCOG has worked through regional watershed management policy guidelines with our counties, they have identified specific challenges to policy implementation primarily relating to available resources of expertise and regional data. To address this challenge of limited resources, NCTCOG will conduct this project in conjunction with the long-range planning of transportation infrastructure to reduce flooding, as well as achieve implementation through the resources of our member governments. Through discussions with our congressional leaders, we have garnered strong and passionate support to create a national model for flood prevention through this regional long-range planning. Project assistance from the USACE will be critical in our efforts to succeed in this venture.
NCTCOG proposes a watershed approach to flood management and water quality improvements that is customized to urban area development, with better means and methods that utilize and are defined by the advanced technologies available today. With an understanding of the growth that is imminent in our region, and an understanding of the cost effectiveness of prevention over mitigation or response, data and analysis need to begin along with improved local regulations.

A proposed work scope to accomplish these goals is included in Attachment 2. It includes proposed funding, the importance of data, partnerships with USACE and FEMA, considers future land use, organizational responsibility, identification of stakeholders, and project products.

NCTCOG has developed numerous long standing programs associated with promotion of all of these concepts in our 50-year history. Through these programs, NCTCOG has developed the foundation to accomplish these objectives. In order to make further progress towards these goals, however, NCTCOG and the North Central Texas region needs assistance. The technical support provided by the USACE to assist in furthering these objectives, and others that should be developed, is needed to move forward in gaining wide-spread regional implementation. Nationally, other regions will continue to grow and NCTCOG would like to establish a program in the North Central Texas region that can be used as a valuable, replicable template that can be implemented in other areas as well.

The Common Vision program is a great example of an important and unique flood prevention program that was developed in our region almost 30 years ago as a partnership between 9 cities, several counties, water districts, the USACE, and NCTCOG. The Common Vision program includes a Corridor Development Certificate (CDC) process, regional criteria, and operational procedures. This effort was driven by an Environmental Impact Statement (EIS) and a Record of Decision released in the late 1980's for the Upper Trinity Watershed that indicated the impact of development in the watershed, if not managed, would have a significant effect on flows and water surface elevations throughout the Trinity River Corridor. The effectiveness of this long standing collaborative effort and partnership was recently evident in the very heavy May-June 2015 flooding event in this region. The CDC process limits valley storage loss in the Trinity River Corridor and controls velocities, thus limiting water surface elevation increases. However, the effort within this program is focused entirely along defined segments of the Trinity Corridor, and does not reach out into the great expanse of our region that contributes ever increasing flow to this corridor. As predicted in the EIS, development resultant from high population growth rates has triggered increased flood risk. Past efforts at predicting growth estimates for our region were included in Common Vision models developed in the 1990s, however, growth has occurred at a much more rapid rate than originally predicted. Because of the increased urbanization, much of the floodplain mapping for the region, which was prepared in the 1970's and 1980's, does not accurately reflect current flood risk. This increased risk not only affects developments which were designed based on older floodplain maps, but also the federal levee projects in Dallas and Fort Worth.
Challenges to come with the growth and increasingly dense Land Use Plans adopted by well over 100 cities in our region are evidenced through the collaborative 2014 update to the Common Vision hydrology model. This new growth, without proper planning, will likely result in significant worsening of flooding conditions. It is critical that we develop technical information and tools that will be useful to the planning community and regulatory community in enacting management strategies, rules and regulations to manage the growth in such a way that it does not adversely impact communities. There is no North Central Texas regional storm water/water quality management authority. The NTCOG member governments which have and will form around this initiative are and will be the only viable storm water/water quality management organizations for the Dallas/Fort Worth area.

NCTCOG requests that this partnership effort begins with a target of $10,000,000. NCTCOG Regional Transportation Council is proposing to participate with a $3,000,000 commitment. In addition, we are pursuing revenue with other partners. We look forward to discussions with you to determine how we can move forward to achieve this regional goal.

Thank you for your consideration.
Sincerely,

Edith Marvin, P.E., CFM
Director of Environment & Development
North Central Texas Council of Governments

Attachments (2)

cc: Mike Eastland, Executive Director, NCTCOG
Michael Morris, Director of Transportation, NCTCOG
Jerry Cotter, Chief of Water Resources, USACE, Ft Worth District
Kathy Spillane, Chief, Civil Programs & Project Management Branch USACE, Ft Worth
Project Location Map

WHERE: Proposed Study Area
Project Scope of Work

Elements within this project scope to be developed:

- Secure funding and agreements needed in order to undertake the regional project;
- Inventory available regional data including the projected spread of population and resulting future impervious surfaces; special areas of habitat and high and unique ecological value for preservation and enhancement; and stormwater management structures, roadways, and utilities;
- Leverage FEMA’s Base Level Engineering data, USACE storm transposition tools, and impervious surface GIS layers to generate 2055 storm runoff estimations for hydrology;
- Analyze current vs. future changes to runoff estimations to inform the need for areas of low impact development, green infrastructure, or on-stream structures for regional detention;
- Evaluate Land Inventory, future transportation infrastructure mitigation, and potential developments that allow for stormwater management structures that stabilize and offset impacts, produce a greater consolidated benefit, and enhance financial efficiency;
- Lead project management and organization: identify and retain stakeholders to ensure that project scope is developed with buy-in and implementation likelihood; identify and manage contracts for who will evaluate, model, identify ideal locations for stormwater quantity and quality features, plan and design; ensure continued communication with stakeholders to receive relevant information as part of planning and incorporate elements into scope that are preferred and achievable; identify effective means for data and resource dissemination; and follow through for implementation of plans developed during the integrated planning process through use of resources developed and partnerships;
- Ensure that developers, engineers, community staff, and the public are educated and engaged in accomplishing the goals and ensure that the products at a minimum include combined master planning for transportation infrastructure and safety, with future conditions stormwater runoff, with meaningful environmental features such as wetlands, riparian stream reaches, open space connectivity, tree farms, filtration/groundwater recharge areas, and habitat to meet the mitigation requirements of growth, infrastructure, and development;
- Evaluate products to ensure that the implementation of planning should result in reducing channel erosion and stream sediment transport and their impacts on the operation and maintenance budgets of transportation and other infrastructure managers;
- Provide regulatory tools and example policies for unincorporated areas and ETI’s that county officials may use to make decisions and regulate their floodplains in a more resilient and sustainable manner;
- Follow through with Implementation (products and technical tools): address challenges faced by implementing entities, who have limited resources, including staff, expertise, and funding.
November 25, 2019

The Honorable John Cornyn  
United States Senate  
517 Hart Senate Office Building  
Washington, DC 20510  

Dear Congressman Cornyn:

On behalf of the Regional Transportation Council (RTC), which serves as the Metropolitan Planning Organization (MPO) for the Dallas-Fort Worth (DFW) area, I would like to ask your assistance in resolving an issue that is putting the safety of our first responders at risk.

The Buy America Act was originally established to ensure the use of domestic iron and steel for road and bridge projects but has recently resulted in possible unintended challenges. Safety initiatives, such as incidence response and photogrammetry equipment used by first responders to document and quickly clear crashes from roadways, are being affected. Buy America requirements are restricting the purchase of vital safety equipment, like cameras, that are made up of complex components from all over world.

The RTC is concerned that any further inaction is jeopardizing the safety of our first responders and requests a legislative change. As Congress discusses a surface transportation authorization bill, in advance of the expiration of the Fixing America’s Surface Transportation (FAST) Act in 2020, the RTC asks that you include an exception for traffic incident management photogrammetry equipment in 23 U.S. Code §313. Another possible solution is to create and implement a Buy America credit program. In such a program, local governments and agencies would accrue credits for purchasing American products and Congress could then elect to apply these credits to products that either are difficult to establish Buy America compliance or that are not Buy America compliant (e.g., accident investigation equipment from non-U.S. sources).

Additionally, traffic safety is not only a priority for the RTC but is also a statewide priority. Earlier this year, the Texas Department of Transportation set a goal of cutting traffic deaths in half by 2035 and eliminating traffic deaths entirely by 2050, as part of the Road to Zero traffic safety goal. An exception in Title 23 for traffic incident equipment or the creation of a Buy America credit program will help to accomplish this goal.

Again, the RTC asks for your assistance is resolving this issue affecting the safety of first responders. Thank you for your leadership on transportation policy in the U.S. Congress. If you have any questions, please contact Michael Morris, P.E., Director of Transportation for NCTCOG at (817) 695-9241 or mmorris@nctcog.org.

Sincerely,

Andy Eads, Chair  
Regional Transportation Council  
County Judge, Denton County

cc: The Honorable Laura Ryan, Commissioner, Texas Transportation Commission  
Michael Morris, P.E., Director of Transportation, NCTCOG  
P.O. Box 5888 • Arlington, Texas 76005-5888 • (817) 695-9240 • FAX (817) 640-3028  
http://www.nctcog.org/trans
Here’s how Dallas expects its new climate plan to ‘transform’ transportation infrastructure
The full plan is slated to be revealed in April 2020.

By Jesus Jimenez, Dallas Morning News

The pieces of Dallas’ first climate action plan are slowly coming together.

This week the city’s environment and sustainability committee presented a draft of what one component of the plan could look like: getting around the city.

The committee began with transportation because vehicles create the most emissions in the city, said Susan Alvarez, assistant director for the Dallas Office of Environmental Quality and Sustainability.

An analysis by The New York Times found that since 1990, auto emissions in Dallas-Fort Worth have risen by 133%. Put another way, emissions are up 27% per person between 1990 and 2017.

“With that [comes] the greatest opportunity to reduce those emissions,” Alvarez said.

Decreasing solo travel

Electric scooters and bikes could be here to stay, and one of the proposed steps to reducing solo-driving trips would ensure there’s an equal distribution of those services throughout Dallas.

“These are great solutions for that last mile of getting people from their DART stop to home,” Alvarez said.

Other proposed solutions include implementing an existing bicycle master plan, supporting an app to help connect residents with travel options, and adopting “aggressive” goals to increase carpooling, Alvarez said.

The city also wants to work with Dallas Area Rapid Transit to expand bus service by adding new routes and improving DART’s reliability.

“There is no way to go west to east without having to go downtown, and not everybody needs to go downtown,” said council member and committee chair Omar Narvaez.

Curbing emissions

In addition to expanding DART’s coverage, the city also proposed a goal to have 100% electrified bus transit by 2040.

It’s a goal that isn’t “unreasonable,” said Todd Plesko, DART’s vice president of service planning and scheduling. Last summer, DART introduced a fleet of seven zero-emission electric buses. DART plans to evaluate how it can incorporate more of these buses, Plesko said.

The city also aims to partner with Dallas ISD and Richardson ISD with a goal of reducing emissions.
Other solutions include creating incentives for residents to buy electric vehicles, and converting all traffic and street lights to LEDs. Currently about 10% of the city’s traffic and street lights run on LED lighting, according to Alvarez.

**Coupling land use with transportation**

Another proposed objective in the draft is to make the most out of land use and housing with transportation.

“We’ve got to figure out how to move people without being in a car,” council member Paula Blackmon said. “It’s too expensive to live in our city, and we’ve got to figure out creative ways to bring people back.”

Mockingbird Station provides one example of what that could look like. The station not only serves as a DART hub — with access to light rail and buses — but also hosts retail and residential spaces.

“The idea is to create communities where you don’t necessarily have to travel across town to get to your job, so that you can do it easier,” Alvarez said.

The draft also proposes creating and adopting policies to reduce transportation-related greenhouse gas emission, and updating parking ordinances to support carpooling and green infrastructure.

**Improving reliability and safety**

Improving public transportation and making it greener is only part of the solution. The plan also proposes improving bus stations to offer protection and extra coverage in the heat or on rainy days. It also recommends using green infrastructure design and making sure that infrastructure is reliable and safe.

“We’ve got to build sidewalks without a pole in the middle,” Blackmon said. “When you have a dog and a stroller, it's not easy.”

**What comes next**

Three future committee meetings will tackle the topics such as water resources, buildings and energy, and food and urban agriculture.

The environment and sustainability committee wanted to begin with transportation because community outreach efforts found that it’s one of the issues people cared most about, said Narvaez, the committee’s chairman.

The city’s efforts to gather feedback from Dallas residents engaged more than 8,000 people, outreach that Narvaez says will help make the climate action plan “one of the best in the nation.”

“Because we really went out and were inclusive of all of the community,” he said.

In the coming months, the city will also work on ways to fully flesh out the plan to implement solutions, and how to further develop those proposals. The full plan is slated to be revealed in April 2020.
“We’ve got a pretty good handle on what our community is telling us, and we’re on our way towards developing that recommended pathway,” Alvarez said.

In a statement, Narvaez said the goals discussed on Monday “will transform Dallas’ transportation infrastructure to more effectively move people while decreasing our community emissions.”

“The benefits for these types of actions are more than environmental,” Narvaez said. "They will also help improve safety and access to jobs."
State Sen. Royce West Has a Conflict of Interest on I-345
His son wants to build soccer fields under the highway.

By Tim Rogers, D Magazine

Tonight brings us the first in a series of public meetings hosted by TxDOT to discuss the future of I-345. Folks will gather at St. Philip’s School & Community Center at 6 p.m.

On Tuesday of last week, State Sen. Royce West sent an email to constituents urging them to turn out and defend the elevated highway. “Don’t sleep on your rights!” West wrote. “Residents, community and religious leaders, and business owners needed at all three meetings. Come out and speak for yourself and the highway that brings you home, takes you to work, or connects you to other parts of the city and DFW!” In a DMN story that was posted Friday, West made it sound like the option of tearing down the old highway is nothing but a land grab orchestrated by developers.

That’s an interesting take from the senator, given that his own son, Roddrick West, is trying to get control of the land under the highway so that he can build some sort of soccer complex. And it looks like he’s doing it with help from Michael Morris, the transportation director for the North Central Texas Council of Governments. Obviously, if the highway were removed, West’s son couldn’t have his soccer complex. This would seem to be a conflict of interest, not unlike all the other conflicts of interest recently revealed by West’s run for the U.S. Senate.

Last week, I sent the senator a note. “I’d like to speak with you about I-345,” I wrote, “specifically about your son’s plans to build soccer fields under the highway. When are you available?” West replied: “You need to visit with him about his project.”

I explained that Roddrick is not a state senator and that I’d really like to talk with the senator. That was Wednesday. Royce West hasn’t responded. At this point, I expect he won’t.

Again, this is a series of meetings. Below is the email West sent to his constituents; in it, he gives the times and locations for the other meetings this week. As West says, don’t sleep on your rights. Or on your senator’s conflicts of interest.

Email sent November 26:

Dear Friend of Senate District 23:

I wanted to make you aware of these upcoming meetings that are of importance regarding the transportation system in your community.

What is I-345 and what is this about?

Maybe that is your response to notice of a series of public meetings hosted by TxDOT beginning Monday, December 2 at St. Philip’s School & Community Center at 6:00 p.m. To start, I-345 is the elevated section of highway overlooking Downtown Dallas from the east, north of the I-30 Mixmaster and south of Woodall Rogers Frwy.

Discussion to level this heavily-used roadway was initiated by realtors and developers started earlier this decade. They see the land beneath this publicly-owned section of the interstate
highway system as ripe for private development. They argue that north and southbound traffic that approaches 200,000 daily can be routed through the city street grid or sent out to 635.

While there is credence that the construction of I-45 that traverses South Dallas and Oak Cliff permanently divided those neighborhoods, the current S.M. Wright Project returns SH310 to a surface-level boulevard that could tie South Dallas back together, roughly between US175/Hawn Frwy. and MLK Blvd. But what must be considered is what happens to the thousands who travel daily on I-30, US175, I-45 and I-35E/US 67 to destinations north of Downtown Dallas to jobs that include the Presbyterian and Medical City medical complexes, the telecom corridor and now, even DISD headquarters?

Related meetings will be held the Monday after the Thanksgiving holiday, Monday, December 2, and Tuesday – December 3 and Thursday – December 5 as the first public meetings where input taken will help decide whether I-345 will remain as is, be rebuilt similar to US75 N. Central Expwy., or other proposed ideas. Don’t sleep on your rights! Residents, community and religious leaders, and business owners needed at all three meetings. Come out and speak for yourself and the highway that brings you home, takes you to work, or connects you to other parts of the city and DFW!

NOTICE OF PUBLIC MEETINGS Proposed

Improvements to Interstate 345 (I-345) from I-30 to Woodall Rodgers Freeway (Spur 366)

Dallas County, Texas CSJ: 0092-14-094 The Texas Department of Transportation (TxDOT) is conducting a feasibility study for improvements to I-345 from I-30 to Woodall Rodgers Freeway in Dallas County, a distance of 1.4 miles. TxDOT will conduct three public meetings to discuss and receive public comments on the feasibility study. All three meetings will present the same information and will be held in an open house format with one formal presentation at 7:00 p.m. The meeting scheduled for December 5 will have three presentation times: noon, 4:30 p.m. and 7:00 p.m. Representatives from TxDOT and project consultants will be available to answer questions about the feasibility study and process. The meeting dates, times, and locations are listed below.

Monday, Dec. 2, 2019 6:00 pm. to 8:00 p.m. Presentation at 7:00 p.m. St. Philip’s School and Community Center 1600 Pennsylvania Avenue Dallas, Texas 75215 Served by DART bus route 002.

Tuesday, Dec. 3, 2019 6:00 pm. to 8:00 p.m. Presentation at 7:00 p.m. CityPlace Conference Center Lakewood Room, First Floor 2711 N. Haskell Avenue Dallas, Texas 75204 Served by DART red, blue and orange rail lines to CityPlace/Uptown Station and bus routes 036, 409, 521.

Thursday, Dec. 5, 2019 10:00 a.m. to 8:00 p.m. Presentations at noon, 4:30 p.m., and 7:00 p.m. Sheraton Dallas Hotel Dallas Ballroom, First Floor 400 N. Olive Street Dallas, Texas 75201 Served by DART red, blue, green and orange rail lines to the Pearl Street Station and bus routes 024, 036, 084.
Suburbs try Vision Zero to protect walkers and cyclists on roads designed for vehicles

By Katherine Shaver, The Washington Post

In Montgomery County, where more people are killed in road accidents than in homicides, planners recently asked residents to tweet about their experiences as pedestrians.

They responded with photos of four-lane thoroughfares lacking sidewalks, bus stops with no nearby crosswalks, traffic whizzing past without buffers, and narrow sidewalks that end abruptly or are blocked by utility poles and overgrown bushes.

The problems, planners say, will be addressed in Montgomery’s first-ever pedestrian master plan aimed at making walking safer and more appealing in a Washington suburb where the car has long been king.

“We’ve had highway plans for 60 to 70 years,” said Montgomery planner David Anspacher. “This is the first time we’re doing a pedestrian master plan, and it shows. The pedestrian conditions aren’t great in Montgomery County.”

Montgomery, in Maryland, is among a growing number of car-centric suburbs across the country that are sharpening their focus on walking and cycling as a way to try to contain traffic congestion. They’re also responding to sweeping demographic changes, including more low-income residents and aging baby boomers, that have left more transit-dependent residents walking or riding to bus stops and rail stations. More suburbanites also want car-free commutes and a smaller carbon footprint, planners and public officials say.

“You have a whole lot more people walking along roads designed for suburban traffic,” said Bob Dallas, an Atlanta-area transportation safety advocate.

Meanwhile, more pedestrians and cyclists are dying. Nationwide, overall traffic fatalities declined in 2018, for the second-straight year, but the number of pedestrians and cyclists killed was up by 3.4 percent and 6.3 percent, respectively, according to the National Highway Traffic Safety Administration.

And a study by the Governors Highway Safety Association found that pedestrian fatalities nationally were recently projected to approach a 30-year high.

Governments in the Washington suburbs and in sprawling auto-oriented cities including Tempe, Ariz., and Charlotte are beginning to adopt Vision Zero, a traffic-safety strategy previously limited mostly to dense urban areas, such as the District, New York and San Francisco. In addition to Montgomery, recent suburban adopters in the Washington region include Prince George’s and Arlington counties and the city of Alexandria.

Many are wrestling with a central tenet of Vision Zero: Redesigning roads to lower speeds and reduce the severity of crashes. Planners and traffic engineers are narrowing lanes, lowering speed limits, adding crosswalks and making crossings more visible with brighter paint or flashing lights. They’re also separating vehicles and people via more-protected bike lanes and wider medians for pedestrians who can get only halfway across the road before the pedestrian lights turn red.
But undoing decades of auto-centric planning is proving a tall order. Many suburbs lack older cities’ wide sidewalks, tight street grids that provide frequent crossings, and narrower roads intended for lower speeds. Instead, many suburbs have four- and six-lane roads designed to move the most traffic as quickly as possible — and large numbers of motorists stuck in stifling congestion who say the last thing they need is lower speeds.

In Montgomery, for example, four people who were walking or were on bikes were killed from 2015 to 2018 in a four-mile stretch of Veirs Mill Road in the Rockville and Wheaton areas of Maryland outside the District. The speed limit is 40 to 45 mph, and, in some stretches, pedestrians have to walk as long as 15 minutes to reach a crosswalk, planners say.

“You have this kind of wide-open road that encourages you to speed up,” Montgomery planner Jessica McVary said.

In Tempe, a suburb of sprawling car-centric Phoenix and home to thousands of cyclists and walkers at Arizona State University’s flagship campus, officials are exploring lowering speed limits by 5 mph on streets four to six lanes wide. Doing so would give drivers more time to react and lessen the force of impact if a motor vehicle hits a cyclist or pedestrian, said Julian Dresang, Tempe’s city engineer.

“How you design streets can dictate how people use streets,” Dresang said. “That’s something we’re struggling with.”

Traffic engineers are quick to point out that motorists can make up much of the time lost to lower speed limits if traffic signals are timed to help them avoid red lights. Even so, attempts to lower speeds and implement “road diets” to protect cyclists and walkers have been controversial.

In Alexandria, opponents of a plan to add bike lanes to Seminary Road by shrinking the vehicle lanes essentially from four to two threatened to vote out members of the city council who supported the idea. While some residents said they needed safer cycling routes, others said such a “road diet” would make traffic worse and encourage frustrated motorists to cut through neighborhoods. The council narrowly passed the plan, 4 to 3, in September.

As Dresang said of public pushback, “Trying to change [car] culture isn’t always easy.” In Charlotte, city officials implemented Vision Zero this year after traffic fatalities jumped 35 percent between 2016 and 2017.

Four in 10 road fatalities were related to speeding, and many of those occurred on four-lane roads with no dividers, said Angela Berry, the traffic safety program manager for the Charlotte Department of Transportation.

“We’ve committed to not creating those street types anymore,” Berry said.

Experts say most suburban jurisdictions are too new to Vision Zero to show how well, or whether, the approach can work on their vast road networks. Even some of the first large cities to adopt Vision Zero, including New York, San Francisco and the District, have seen mixed results.

But Leah Shahum, the founder of the Vision Zero Network, said the benefit of reducing speeds “is just a matter of physics.”
A pedestrian struck by a vehicle traveling at 20 mph has an 80-90 percent chance of surviving, Shahum said. If the vehicle is traveling at 40 mph, the pedestrian’s chance of survival plummets to 10-20 percent.

Suburban planners and engineers also are digging more deeply into crash data to pinpoint “high-injury networks” of roads. Many then prioritize those roads for repaving, which allows them to paint narrower travel lanes and new bike lanes.

While Arlington County officials are still drafting a Vision Zero plan, they’re looking at crashes through a “systemic lens” to spot possible road design problems that could be corrected elsewhere, Arlington planner Christine Sherman said.

“It makes your approach more proactive,” Sherman said. “We don’t have to wait for a crash to happen before we do something.”

Advocates of Vision Zero point to the success of Fremont, Calif., where wide roads designed for higher speeds reflect its growth during the 1950s. The city implemented Vision Zero in 2015, and traffic fatalities and serious injuries fell by 50 percent, from 36 in 2015 to 17 last year, officials said.

Matt Bomberg, a senior transportation engineer for Fremont, said the city added bike lanes, painted crosswalks with higher-visibility stripes and installed flashing crosswalk beacons. Repaved roads get re-striped with 10-foot-wide lanes, down from 12 to 14 feet wide. After the city replaced its street lighting, nighttime crashes dropped by 23 percent, he said.

Bomberg said the city also started focusing on the high-speed arterial roads where the “vast majority” of its most serious crashes occur.

“We started connecting the dots and found that 10 percent of our road network had 90 percent of the fatalities and 57 percent of the serious injuries,” Bomberg said.

Some safety advocates say that even with Vision Zero, improvements are taking too long. In Montgomery, critics point to two children recently being hit four months apart on Old Georgetown Road in Bethesda.

In July, 17-year-old Jacob Cassell was fatally struck by an SUV when he fell from his bike after possibly swerving to avoid trash cans on the sidewalk, according to published reports. In mid-November, a 13-year-old girl was seriously injured while riding in a crosswalk at the road’s entrance ramp to the inner loop of the Capital Beltway.

The executive director of the Washington Area Bicyclist Association, Greg Billing, said the region needs far more protected bike lanes. But he said he has also sensed that public officials in Montgomery and other D.C. suburbs have “stiffened” against the idea that motorists should take precedence on area roads.

Public officials “are really listening and helping communities organize and demand action,” he said.

Amy Ginsburg, the executive director of Friends of White Flint, said she was frustrated that it took more than nine months for the Maryland State Highway Administration to recently repaint crosswalks in the North Bethesda area. She said Rockville Pike still needs bike lanes and other
improvements if the area is to continue transforming from auto-centric sprawl into a denser, more walkable and bikeable community.

Still, Ginsburg said, transportation agencies that once seemed intent on moving motor traffic are paying closer attention to protecting all road users.

“I truly believe there’s been a sea change in thinking,” Ginsburg said. “Everyone is realizing people want to get out of their cars. Now it’s just a matter of undoing 50 years of car-centric planning to make that a reality.”
**TxDOT to begin work on I-345 feasibility study, wants to hear from public**
The transportation agency scheduled three meetings to gather input.

By Hayat Norimine, The Dallas Morning News

State transportation officials want to hear from the public about what they hope to include in the feasibility study for **Interstate 345**, the 1.4-mile elevated freeway between Interstate 30 and Woodall Rodgers.

Texas Department of Transportation will begin its two-year study to analyze options for the next steps. One of those options will include **the removal of I-345**, a proposal that’s gained momentum in the past few years as a way to reconnect Deep Ellum and South Dallas with the downtown core.

The state in 2014 began its $30 million project to rehabilitate the freeway, which officials expect will extend its service life 20 years, said Ceason Clemens, deputy district engineer for Dallas’ TxDOT district.

Now, it’s time to plan for the freeway’s future, she said.

For nonprofit **Coalition for a New Dallas**, that future should include stitching together neighborhoods once divided intentionally for purposes “rooted in race,” said Miguel Solis, the coalition’s executive director. The nonprofit continues to lead a crusade against I-345, and a push to replace the 240 acres between Deep Ellum and downtown with mixed-income, mixed-use development “It’s important that we recognize [that] allowing one road to dictate where people have to go for jobs is a very archaic way of thinking about how to plan a city,” Solis said. “We need more employment opportunities in southern Dallas. We know that. And it’s incumbent upon our leaders to make sure that our southern Dallas residents have that.”

TxDOT officials plan for the study to include a few options so far for the highway: removing it, depressing it, reconstructing and elevating it with ramp changes or leaving it as is. They said they’ll seek more suggestions with public input.

Patrick Kennedy, who has spearheaded the coalition’s own study on I-345, said the coalition will continue to push TxDOT to expedite the process. He said he hopes there’s substantial turnout at the public meetings to get more people involved in the advocacy.

“We want to improve public engagement and the public conversation around what we do with our transportation dollars,” Kennedy said, “because that has a fundamental impact on the viability and function of our cities.”

But while the advocates for removing I-345 have secured supporters in city leadership, some state officials aren’t sold on whether the remaining connections could handle the regional demands.

State Sen. Royce West, a Democrat who represents Dallas, said the removal of I-345 “is a nonstarter” for him without a “viable” alternative, such as depressing the interstate rather than tearing it all down.
West said southern Dallas residents still need I-345 to commute to their jobs in northern parts of the city, including the Medical District. He accused the plan of putting developers' financial opportunities above southern Dallas needs, and worries south Dallas could be left out of the conversation just as it was when I-345 was built.

“It's ridiculous. Makes no sense at all,” West said.

Mo Bur, district engineer for Dallas’ TxDOT district, remains skeptical. In the examples used to demonstrate that cities can indeed tear down a freeway successfully, he said it’s unusual to remove one that links together two other interstates, in this case I-75 and I-45.

“You’re saying that you want to remove something in the middle,” Bur said. “We don’t know what the implications are. That’s something that we have to study.”

Meetings

**Monday, Dec. 2**
6 to 8 p.m.
7 p.m. formal presentation
St. Philip’s School and Community Center, 1600 Pennsylvania Ave., Dallas

**Tuesday, Dec. 3**
6 to 8 p.m.
7 p.m. formal presentation
CityPlace Conference Center, first floor (Lakewood Room)
2711 N. Haskell Ave., Dallas

**Thursday, Dec. 5**
10 a.m. to 8 p.m.
Noon, 4:30 and 7 p.m. formal presentations
Sheraton Dallas Hotel (Dallas Ballroom)
400 N. Olive St., Dallas
5G & Autonomous Cars: Flashy Promise Meets Complicated Reality

By Stephen Lawson, Light Reading

Autonomous driving is a big part of the story being told about 5G. Almost every vision of 5G includes it as one of the most compelling applications for the next-generation standard. But, as with so much about 5G, the reality is more complicated than plugging in a new network and watching self-driving come to life.

The robocar applications promised with 5G sound great: 5G’s ultra-reliable, low-latency communication (URLLC) -- coming in 3GPP Release 16 next year -- might give self-driving vehicles access to cloud-based intelligence at the speed of a split-second driving decision.

Enhance mobile broadband (eMBB) would allow them to download software updates on the road. By constantly sharing real-time location and driving intentions through direct vehicle-to-everything links (V2X), the cars could stay out of each others’ way.

But even if those applications become real, it won't happen without a lot of work on the back end. For one thing, having useful 5G links among autonomous vehicles will depend on mass adoption of connected cars to enable a network effect. Even more daunting, building 5G operator networks with the low latency, high throughput and solid reliability that AVs need will require changes at multiple layers.

The relationship between 5G and AVs will be less like a quickie wedding at a drive-through chapel and more like a long family road trip. Between still-emerging technologies and difficulties in deployment, the large-scale use of 5G for vehicle automation probably won't happen for another five years or more.

Conflicting visions

To begin with, there's no industry consensus about either the basic requirements of full self-driving or how it will use cellular networks. Tesla and Waymo, for example, are mostly relying on powerful onboard hardware and software. Established automakers such as Ford and Volkswagen are exploring a mix of in-car computing and connected features, including network-based services and V2X, a set of applications using direct wireless links to nearby vehicles and roadway infrastructure. (See Sidebar: C-V2X)

Even the best network won't be enough by itself: AVs will need to be able to drive where 5G coverage is spotty, so they will also have enough onboard capability to use sensors and V2X to operate safely, said Jovan Zagajac, Ford Motor's manager, Connected Vehicle Platform and Product. But where available, cell networks could play important roles in applications such as software updates and remote operation, he said.

By turning to network-based services for things like real-time data for decision-making, automakers will be able to reduce the amount of computing power and software intelligence they build into their vehicles for making driving decisions, said Martin Beltrop, head of Nokia's mobile networks automotive business. "We would benefit from the information we could collect
in the cloud to simplify the decision," he said. But he added, "the final decision to go or stop will be done in the car."

Over time, 5G mobile operator networks could host an array of services supporting large-scale use of AVs. The key features to make these services possible may include network slicing, edge computing and even new business relationships.

**Learning from the present**

An early example of network-supported self-driving, currently using 4G, illustrates why 5G may play a key role for AVs in the future.

Swedish mobile operator Telia is piloting a service that supports **driverless trucks hauling goods between warehouses**. It has been operating in a commercial pilot at a logistics facility in Jönköping, Sweden, according to Ericsson, which supplies infrastructure for it.

The driverless trucks, developed by Swedish startup Einride, operate on pre-defined routes as part of an automated logistics system. The trucks can make most of the trip on their own with inputs from onboard sensors, but there are some situations they can't navigate, said Claes Herlitz, vice president and head of Global Automotive Services at Ericsson. When that happens, a human driver in a remote operations center takes over. Remote human driving, or teleoperation, will be a mandatory feature of AVs in many jurisdictions, Herlitz and others said.

In the Einride case, teleoperation requires both high upstream bandwidth to stream live video from trucks and low latency to ensure driving commands arrive in time. In Jönköping, the service is running on an advanced 4G radio network with a 5G core. The network has end-to-end latency of about 15ms and supports the service well, Herlitz said. However, with LTE, it has only been possible to stream high-definition video from four trucks per cell.

5G radio networks will allow this type of service to scale up to more vehicles, thanks to new spectrum bands, beam-forming, MIMO techniques and improved user-equipment capabilities that will provide higher capacity, Ericsson says. 5G core capabilities including URLLC and network slicing will help to ensure low latency.

**Centralized control**

If connected and autonomous vehicles ever dominate the roads, it may be possible to make driving even safer by managing them as a system. 5G WANs may deliver services that enable this mass automation.

Here's how one example of this might play out: Picture a major city intersection where as many as 1,000 cars, bicycles, scooters, pedestrians and other objects share the space at a given time. Watching over the crossroads are 20 cameras to monitor any participants that aren't equipped to communicate their own location, speed and intent.
An automated traffic management system collects the data transmitted by these objects and sends all relevant information to AVs, each of which uses those inputs in conjunction with its own sensors to decide whether to stop, go or turn. The data needs to be received, processed and sent out in near real time because the traffic situation is constantly changing.

Such a system couldn't work without a 5G network, according to Nokia's Beltrop and other automotive and mobile executives. The number of connected objects, the volume of data and the tiny margin for delay would require automakers and mobile operators to leverage new capabilities that are just beginning to emerge.

Some see 5G-enabled AVs getting even closer to networked robotic control. Road operators, collaborating with mobile carriers, could set up traffic management systems that effectively automate activities such as merging, said Maxime Flament, CTO of the 5G Automotive Association (5GAA), a cross-industry group backing automotive 5G.

Connected vehicles would communicate their location, speed and direction to the management software, which would create a model of the overall traffic situation. (Sensors in the roadway and in nearby cars would monitor unconnected, human-driven vehicles.) The system would create a virtual contract with each connected AV, in which the vehicle would commit to taking an action such as stopping, accelerating or turning. Based on those commitments, another AV coming into the roadway could safely merge into the flow of traffic, Flament said.

**The latency breakthrough**

Low latency is the 5G capability attracting the most attention for vehicle automation. While there's no universal agreement on what's needed, a frequently cited target is end-to-end latency of 10ms or less. Depending on how much an AV's onboard computer relies on network-based services for decision-making, the requirement could be as low as 2ms, Nokia's Beltrop said.

That's much tighter than the requirement for voice-over-LTE (VoLTE), one of the main low-latency applications of 4G. VoLTE can work with a round-trip latency of about 100ms, said Cameron Coursey, vice president and CTO of IoT at AT&T. This is where 5G becomes a windfall, because the new specification is designed to provide much lower latency, beginning with RAN latency as low as 1ms, compared with tens of milliseconds on average with 4G.

Another important piece of 5G for low latency is its flexible network architecture, which will let operators place computing resources toward the edge of the network to avoid long round trips to distant cloud data centers. More on that in a later article.

**Big driving data**

Other AV applications may need 5G for sheer speed. All self-driving vehicles run complex software, especially DNNs (deep neural networks), that need large updates. The cars also continuously collect huge amounts of onboard sensor data, plus information about the outcomes of driving decisions, that automakers and suppliers can collect to improve the self-driving software. These frequent downloads and uploads will benefit from the gigabit-speed wireless connections that 5G carrier networks are designed for.
Software updates may be frequent, and centralized systems may collect and analyze driving data quickly, but these are unlikely to happen in real-time. As a result, operators won't necessarily need to provide that kind of broadband to AVs in motion. Big data transfers could be activated when the vehicle is stationary and in range of a high-speed connection (at a charging station, for example), especially in areas with dense, high-frequency 5G coverage.

Another automation concept calls for AVs to share real-time sensor data so a car can "see-through" the vehicle in front of it, especially a large truck that blocks the view of traffic ahead.

Because it involves real-time streaming video, this is likely to require both high-speed broadband and low latency, with assistance from edge computing, Flament said. As a result, this application would probably go over a WAN instead of a direct V2X connection, so roadside networks would need to get faster and more robust, he said.

Making sure the network comes through

Reliability is a major concern for autonomous driving applications since a loss of signal -- or of a driving assistance application -- could affect safety. One significant 5G advance to help ensure performance and availability is network slicing, which will let mobile operators set a specific quality of service for an application by assigning virtualized network resources to it. An AV application could be assigned priority over other network applications due to that safety requirement. This is one thing Ford, for example, is seeking to ensure is supported in its AVs.

If autonomous driving services need guaranteed QOS on 5G networks in the next five years, they will probably use generic network slices like those used by other applications running on shared edge servers, 5GAA's Flament said. This edge computing infrastructure, along with network slicing, will be deployed first in dense urban areas where there are enterprise customers for it. Later, when 5G comes to highways outside those areas, carriers may create specialized network slices for AVs if a road operator requests them.

Reliability challenges

Network slicing is a start, but making 5G networks reliable enough for self-driving will be a tall order, analyst Philip Marshall of Tolaga Research said. Achieving low average latency isn't enough to support mission-critical applications like driving, Marshall said. What's needed is consistent low latency. That will require much higher network density than some people expect, including redundancy in both cells and computing infrastructure -- the lower the latency needed, the higher the cost, he said. Also, large-scale implementation of network slicing could take several years and hasn't yet begun, Marshall said. To achieve results without building separate infrastructure for priority applications, it will require virtualization of both the core of the network and the RAN. To use network slicing for self-driving applications on the open road, carriers first would have to convert to a cloud RAN architecture over a broad area, and it's way too early for that, he said. "Network slicing will get incubated with applications that don't have wide-area requirements," Marshall said. "To try to implement network slicing over a wide-area 5G network environment is crazy."
New role for carriers

Network uptime will become a bigger issue when 5G networks start supporting autonomous driving, Ericsson's Herlitz said. That may start with early deployments for enterprise customers such as logistics and waste management companies.

Such customers will need service-level agreements (SLAs) better than anything offered now, particularly with regard to fixing outages, because most carrier SLAs today are geared toward consumers, he said. In this case, the mobile operator will need to be integrated into the customer's business, with technicians on site to solve problems that affect network availability immediately. When a customer's core business relies on robotic trucks, 48 hours without service is prohibitively expensive, he said.

For times when AVs travel beyond the reach of all this infrastructure, automotive supplier Continental has demonstrated a system to help the vehicle prepare. "Predictive connectivity" uses historical information about network performance and predictions of a vehicle's route to gauge where the vehicle might run out of coverage, Continental says. Then the car can change to a different network, prioritize the applications in use, or even shift to a failover mode in which it relies on built-in sensors and computing power.

As for whether mobile operators, automakers, application providers or other entities will be held responsible if a network-dependent self-driving application fails, it's too early to know, Herlitz and others said. Even without the network element, liability for traffic incidents involving AVs is already a hot topic that's far from being resolved.

Setting a timeline

Bringing together 5G and self-driving cars will involve multiple daunting technology missions for players in both networking and automotive. 5GAA is working with network vendors and automakers to converge their timelines so neither cars nor networks get stranded waiting, Flament said.

While the first 5G modems should start showing up in new vehicles in 2022, ones that support URLLC and new, high-frequency radios probably won't arrive until 2025, Flament said.

Meanwhile, 5G infrastructure that can talk to those modems to enable self-driving isn't due for commercial deployment until about 2025, Flament said. A new generation of V2V that lets vehicles share more data, more reliably, to better support self-driving, may arrive around the same time, he said.

As 5G expands the role of mobile networks from primarily consumer voice and data services to emerging and mission-critical such as automated driving, network demands are growing and infrastructure becoming more complex. While the roadmaps for both 5G and self-driving are still being drawn, there's a clear possibility that 5G will help drive vehicle automation forward.
In the rest of this series, I'll look at more details about two evolving aspects of connected self-driving: edge computing and wireless spectrum.

**Sidebar: C-V2X**

While some uses of 5G for vehicle automation may place new demands on operators' networks, other features would use direct links among vehicles, roadway infrastructure and pedestrians' devices.

Qualcomm, BMW, Ford Motor and other companies are working to extend cellular vehicle-to-everything (C-V2X) onto 5G. The technology, which is now being tested on 4G radios, is a cellular alternative to V2X systems based on the IEEE 802.11p wireless LAN standard, including Direct Short Range Communication (DSRC).

Both systems let connected cars and other road users communicate even where cellular network coverage is weak or nonexistent. They have several modes of operation designed to make connected human-driven cars -- and later, autonomous vehicles (AVs) -- cooperate for greater safety.

For example, AVs could warn each other about obstacles such as construction zones or stalled cars ahead. Traffic lights could communicate their status to AVs and time their changes to improve traffic patterns. Emergency vehicles could force AVs to pull over as they pass. V2X-equipped smartphones in pedestrians' pockets could notify cars when the walker is crossing the street. Roadside beacons could send traffic and weather information and live, high-definition maps to passing AVs.

Proponents say C-V2X has longer range and higher reliability than 802.11p, plus an evolutionary path to 5G. It may also be able to piggyback on in-car modems provided for entertainment, information and diagnostics over 5G.

Enhancements targeted for Release 16 of the 3GPP's 5G standard would allow for latency of less than 1ms in C-V2X, according to Qualcomm. But the US and European Union are still weighing which technology to mandate or endorse. The wireless LAN-based systems have been in the works for years, though they haven't been widely deployed.

Last week, Federal Communications Commission Chairman Ajit Pai proposed a shift in U.S. policy that could be a big win for C-V2X. Pai asked the FCC to consider reassigning a 75MHz chunk of the 5.9GHz spectrum band that it allocated to DSRC in 1999. Saying DSRC had failed to reach its potential, he proposed handing over the bulk of that spectrum to unlicensed use, especially for Wi-Fi, and dedicating 20MHz of the band to C-V2X. The other 10MHz would be allocated to either C-V2X or DSRC, depending on public input.

C-V2X can achieve consistently low latency regardless of congestion, according to the 5G Automotive Association (5GAA), an industry group that promotes automotive uses of 5G.
Qualcomm has said the system can provide latency of 4ms or less depending on the implementation. To meet latency requirements, the system can optimally allocate resources within a spectrum band shared by multiple vehicles using deterministic resource scheduling, Qualcomm says.

While C-V2X has a mode in which the direct links between vehicles can be managed by basestations on a cellular network, it also allows onboard radios to manage it all on their own.

With no need to send packets across a carrier’s network and onto the cloud, low latency is easier to achieve.
DART’s Silverline to come in 2022

By Victoria Atterberry, Star Local Media contributor

With the planning period complete, residents can expect the DART’s Silverline to be online and running in late 2022.

With the official groundbreaking taking place earlier this year, DART is preparing to begin building the actual rail line.

"Now we are going to see a lot of construction activity," said Traci Leach, Coppell deputy city manager.

Leach said construction for the project is non-linear, and crews will work on different sections at a time. Coppell residents can expect to see construction in the area sometime in the second or third quarter of 2020, Leach said.

On Nov. 18, DART began the removal of abandoned rail along the DART right-of-way from the Dallas North Tollway in Addison to the west of Synergy Park Road in Richardson.

According to DART, the Silverline project will extend between D/FW International Airport and Shiloh Road in Plano, crossing seven cities: Grapevine, Coppell, Dallas, Carrollton, Addison, Richardson and Plano. In addition, the project will connect to the Fort Worth Transportation Authority TEXRail Regional Rail Line to Fort Worth.

“This truly will be, once completed, a connector for our region,” Leach said.

Leach said the vehicle DART will use for the Silverline will be quieter than what was anticipated in DART’s environmental impact reports.

Coppell will have seven quiet zones or crossings where a train horn won’t sound. Those crossings are at Fairway Drive, MacArthur Boulevard, Mockingbird Lane, Moore Road, East Belt Line Road, Southwestern Boulevard and South Coppell Road.

Leach said the council has also evaluated adding two more quiet zones at Freeport Parkway and Royal Lane.

The council is also looking at aesthetic upgrades for an elevated crossing at South Belt Line Road.

Betterments are also planned for the residential areas of Crest View at Mockingbird and MacArthur as well as two apartment complexes to the east of MacArthur, both of which are immediately adjacent to the rail line. Leach said the residents will decide collectively what kind of betterments they would like.
What we learned about the future of flying cars, drones and more at an exclusive North Texas summit
Some of the biggest names in aviation attended the invitation-only event, which was co-hosted by Ross Perot Jr.

By Melissa Repko, Dallas Morning News

Aviation entrepreneurs, investors and leaders in the future of flight convened at a North Texas ranch this week to work toward a shared goal: Making it possible for more people to soar through the skies.

Wearing cowboy hats and sipping cocktails, the roughly 160 attendees updated one another on progress they’ve made in the development of air taxis, sophisticated drones and other electric-powered aircraft. They delivered “lightning talks,” showed off slick videos and got an up-close look at prototypes. And they spoke candidly about challenges that remain: developing a better electric battery, getting regulatory approval and winning over skeptical members of the public.

The invitation-only summit Wednesday and Thursday was part ideas festival, part investor pitch and part networking event. But above all, it was a rally for believers in the maturing, but still nascent air taxi industry. The Dallas Morning News was one of just a few media outlets granted access.

The exclusive UP summit was thrown by aviation entrepreneurs and investors Ben Marcus and Cyrus Sigari. It was co-hosted by Dallas’ Ross Perot Jr., an avid aviator and real estate developer, in a giant barn on his Circle T Ranch in Westlake.

The list of attendees was the Who’s Who of futuristic aviation, including Nikhil Goel, who has helped lead Uber’s air taxi effort; Erik Lindbergh, grandson of famed flyer Charles Lindbergh; Dean Kamen, inventor of the Segway; former Federal Aviation Administration officials and leaders of major companies like Bell, Rolls Royce, Airbus and Boeing. Sigari estimated there was over $100 billion of investable capital in the room.

The summit was filled with Texas touches, such as a dinner of prime rib and roasted whole pig, a live country band, a photo-op with a longhorn and fittings of Cavender’s cowboy hats. A private flight show of a F-5E Tiger II fighter jet kicked off the summit’s opening night. The lineup featured former President George W. Bush, Tesla co-founder JB Straubel and record-breaking stuntman and skydiver Luke Aikins, who jumped from 25,000 feet without a parachute.

Marcus and Sigari, both 37 and from Santa Monica, Calif., met when they were 11 years old. Marcus is an Israeli Jew and Sigari is an Iranian Muslim, but they shared a fascination for aviation and became lifelong friends. They attended college together and later co-founded private jet broker, JetAviva.

About three years ago, they started the summit to gather together the brain trust behind electric vertical take-off and landing aircraft or eVTOLs. They held the first summit in a living room in Jackson Hole, Wyo., with about 30 attendees. They threw the second summit with about 100 attendees with aviation entrepreneur Steuart Walton, grandson of Walmart founder Sam Walton, in the retail giant’s hometown of Bentonville, Ark.
All attendees are hand-picked by Sigari and Marcus. Many flew there on private jets. Sigari, Marcus and Perot picked up the tab — along with sponsorships by companies including Bell and Honeywell.

The summit isn’t just about flying cars, but also cargo-carrying drones and technology improvements, such as autonomous systems, to make them possible.

At the summit’s opening dinner, Marcus said he and Sigari are inspired not just by flying’s novelty, but also by its impact. As kids, they volunteered for a nonprofit called Angel Flight that provides free flights to people who need medical treatment far from home. As they grew up and became flight instructors, they flew over congested Los Angeles.

“We used to look down at the highways and see these miserable people stuck in traffic and think, ‘Why are we the only ones in the sky and why are they all down there? How can we get them up here to enjoy the sky with us?’ ” Marcus said.

He said the room of innovators and investors could change an eye-opening statistic: Only one in five people in the world have ever taken flight.

Sigari said the summit has grown, but it won’t get much larger. He turned down about 400 others who wanted to attend. He said the intimacy of the summit is what allows all of the executives, entrepreneurs and investors to get to know one another and feel comfortable enough to speak candidly.

For some startups, the event has led to valuable connections. Clint Cope, co-founder of San Francisco-based Elroy Air, said he met his first investor at the Wyoming summit. His company is developing autonomous aircraft that carry heavy cargo. He said the summit is a morale boost and a way to promote momentum for all companies, even competitors.

“Everybody is in a bit of a frenemy stage now,” he said. “You want to help people along the way, so you have a critical mass.”

One of the first big names to sign on to the UP summit was then-Wyoming Gov. Matt Mead. He attended the first summit in his home state. As governor of a predominantly rural state, Mead said he understood how smaller, electric-powered aircraft could make life easier.

In conversations with the public, he said he has found people are quick to bring up barriers. They ask about safety risks, noise and visual clutter in the skies.

While those challenges are real, he said, aviation executives and entrepreneurs must also help the public understand the societal benefits. What would the aircraft mean for the environment? How could they spur economic activity in rural communities? Could they free up funds for states to invest in education rather than highways? And what would it mean if parents could spend an extra hour a day with their children instead of commuting?
An air taxi industry

The pursuit of an air taxi industry has taken off in recent years, particularly with a push by Uber.

Three years ago, the San Francisco-based company published a white paper and pledged to make a Jetsons-like vision of flying cars real. It hosted its first Uber Elevate Summit in Dallas in 2017 and announced that Dallas-Fort Worth would be one of the service’s first markets.

It laid out an aggressive timetable of starting flight demonstrations next year and launching limited commercial service in 2023. At launch, Uber’s air taxis will have a pilot — but the company wants them to eventually become autonomous. Uber is working with several partners, including Fort Worth-based Bell.

This summer, the company launched Uber Copter in New York City to learn how to synchronize seamless passenger trips that begin in a car on the ground, continue in the skies and end on the ground again. The one-way trip between Lower Manhattan and John F. Kennedy International Airport costs between $200 and $225 a person.

More than 200 companies from venture-backed startups to major corporations are now developing electric vertical-lift aircraft. Big tech names have put their money into the effort. For example, Google co-founder Larry Page is funding two startups, Kitty Hawk and Opener. And larger companies, such as Boeing, are snapping up smaller startups through acquisitions and building aircraft of their own.

Urban air mobility — from passenger travel to military and cargo applications — could grow into a $1.5 trillion market by 2040, according to a Morgan Stanley research estimate.

Perot, who flew the first round-the-world flight by helicopter in 1982, is among those who saw the business opportunity. For the past few years, his real estate company Hillwood has worked with Uber to help identify sites where air taxis could take off and land. One will be Frisco Station, a Hillwood development near the Dallas Cowboys headquarters.

The real estate developer is also turning AllianceTexas, his giant mixed-use residential and commercial development in Fort Worth, into a testbed for the future of mobility. It wants companies to test their drones and air taxis there. The master-planned development is larger than the island of Manhattan and home to hundreds of companies, including Facebook’s data center and a regional hub for Amazon. It also has a large industrial airport, Fort Worth Alliance.

Circle T Ranch — where the summit was held — is part of AllianceTexas. Hillwood and Bell offered free helicopter tours of the property to attendees.

Perot said he keeps up with progress in the air taxi industry, but it has exceeded the pace that even he imagined. He pointed to other examples of how social norms have changed with the emergence of new kinds of mobility. “One day, we will hop into an air vehicle and fly around without a pilot and not even think about it,” he said. “The first elevators had operators because people were afraid to get in an elevator and just punch a button. Now, look how it’s changed today.”
'The vertical dimension'

Austin-based Lift Aircraft showed a prototype of its flying vehicle, Hexa. It looks like a large drone, but has a cabin for a single passenger. It's light enough that FAA regulations allow it to be flown without a pilot’s license. It has software to simplify flying for a layperson and safety features, including a built-in ballistic parachute.

The company will initially use it as a form of entertainment or a tourist attraction, CEO Matt Chasen said. Thousands of people have reserved a ride, which will cost $249 for a 10-15 minute ride. It will begin offering rides on a cross-country road trip later this year or in early 2020.

Eventually, Chasen said, he imagines putting the vehicles in different parts of cities and allowing people to request rides through a smartphone app.

Martine Rothblatt, founder and CEO of biotech company United Therapeutics, accepted an award for her leadership. Rothblatt, co-founder of Sirius Satellite Radio, started the biotech company after her young daughter was diagnosed with pulmonary arterial hypertension. The company went on to discover a medication for that condition. Now, it’s developing new ways to repair and manufacture lungs and other organs to multiply the number of people who can receive transplants.

Rothblatt is financially backing two electric aircraft companies, Chinese manufacturer Ehang, and Vermont-based Beta Technologies. They’re developing electric-powered aircraft that can transport the company’s life-saving organ donations in a way that doesn’t harm the environment or public health.

In a speech, Rothblatt referred to a saying by Albert Einstein that problems can’t be solved at the same level of thinking. She encouraged the group to keep striving "until we are all thriving in the vertical dimension.”
Local transportation board hears pitch for Hyperloop linking Fort Worth, Laredo with stop in Waco

By Mike Copeland, Waco Tribune-Herald

Hyperloop high-speed travel exists only at test sites, but it represents the best option for moving people and freight between Fort Worth and Laredo, with a stop in Waco, a consultant told the Waco Metropolitan Planning Organization Policy Board during a meeting Thursday.

The local MPO has joined five others along the Interstate 35 corridor in weighing high-speed options as the interstate becomes more congested and Texas’ population continues to expand. AECOM, a consulting firm hired by the North Central Texas Council of Governments, has reached conclusions it is sharing with MPO boards, including Waco’s, which soon will make the results available to the public, Waco MPO executive director Chris Evilia said.

AECOM urban planner Steven Duong told board members the firm envisions a Hyperloop pathway that includes stations in Waco, Temple-Killeen, Austin and San Antonio on a line from Fort Worth to Laredo. Duong said extending the service to Monterrey, Mexico, is an option. He said ridership demand between Monterrey and San Antonio would be significant.

A Hyperloop system would carry passengers at more than 600 miles per hour, more than twice as fast as high-speed rail or maglev trains. The obvious drawback, is that Hyperloop remains in the testing stage, Duong said. The U.S. Department of Transportation is weighing proposals from 29 urban areas, including the Dallas-Fort Worth Metroplex, for creating a 6-mile test track. Conversely, high-speed and maglev systems have been widely accepted and have outstanding safety records, Duong said.

Hyperloop would allow the hauling of freight, a revenue generator the high-speed rail and maglev options would not include, he said.

Funding sources for such a system remain undetermined Evilia said. It is assumed the Hyperloop would prove more expensive than other options, but a conclusion must await more study, he said.

“This is incredibly exciting,” said Dillon Meek, a Waco City Councilman and a policy board member. “As technology developers, we have to keep our eye on examining the potential of high-speed rail, which could increase the state’s mobility. That, in turn, could improve the state economy. We will have to continue doing our homework, but we’re off to a great start.” Mayor Kyle Deaver, also a policy board member, agreed.

“The way I understand it, what they’re saying is that Hyperloop is not yet a proven technology, but it is transitioning so rapidly that it can’t be ignored,” Deaver said. “It is so much faster, so much easier to have multiple stops, meaning Waco, Temple and Austin could be included in the route, that it is wise to open up that conversation. This is something that could be 10 to 20 years out, and it remains to be seen just how viable it will prove to be.”

Evilia said the Waco Metropolitan Planning Organization “is chipping in its time” toward providing data to be used in future planning.
“Hyperloop is operational only at test tracks in Nevada and in Toulouse, France, which means something in the United States, in Texas, would be close to the cutting edge, though there are places in Asia and the Middle East that may beat us to the punch,” Evilia said. “Hyperloop is kind of like an aircraft coming in at 600 miles per hour before coming to a full stop on a runway. That’s the concept, and why they were talking about it being easier to make multiple stops. I’m not sure I follow that logic, but that’s not our area of expertise and why we hired a consultant to examine the issue.”

Elon Musk, founder of the SpaceX rocketry company, has been instrumental in developing and promoting Hyperloop. His “Hyperloop Alpha” white paper, which has appeared on his SpaceX website, claimed passengers would travel through depressurized tubes in pods reaching more than 700 miles per hour, according to reporting in gearbrain.com.

Evilia said the future of a high-speed link between Fort Worth and Laredo likely rests with the success of yet another high-speed project, one by Texas Central linking North Texas and Houston. Backers are pursuing private investors for the project that would link Dallas-Fort Worth to Houston in 90 minutes with a high-speed train traveling about 200 miles per hour, according to a company representative who recently spoke to the Waco Rotary Club.

The route would not go through Waco, or even McLennan County, though it would include a stop in the Brazos Valley near Bryan, backers have said.

It was announced the company predicts such a train would have a $36 billion economic impact on Texas over 25 years. It would create 10,000 jobs during the construction process and 1,500 permanent jobs upon completion.

“If Houston-to-Dallas is not successful, that would not bode well for our line, which is why cities participating in this project are watching developments with that one so closely and with great interest,” Evilia said.
When will the toll roads in North Texas be paid off? Curious Texas goes for a drive
The total amount of outstanding debt the North Texas Transportation Authority owes in bonds is roughly $9.3 billion.

By Nataly Keomoungkhoun Dallas Morning News

It’s not hard to find a reason to use North Texas’ tollways. On a good day, motorists on the Dallas North Tollway can make the drive from Plano to downtown Dallas in about 30 minutes and avoid congestion on U.S. Highway 75.

The only downside is the price: That trip downtown from Plano can cost up to $6 under the current toll rates.

Toll roads have existed in North Texas since the 1957 opening of the Dallas Fort Worth Turnpike, more commonly known as Interstate 30. That road, which at the time stretched 30 miles between Dallas and Fort Worth, was built by the Texas Turnpike Authority, a state agency tasked with transportation planning and development.

On New Year’s Eve 1977, the TTA ended fees on I-30, and North Texans gained a toll-free highway between and stretching beyond the two cities. The Dallas North Tollway opened about a decade after the DFW Turnpike, but over 50 years later its tolls remain firmly in place.

A reader who wondered when or if that might change consulted Curious Texas, an ongoing project from The Dallas Morning News. The idea is simple: You have questions, and our journalists are trained to track down answers.

“When will the toll roads in North Texas be paid off?” asked Mike Hernandez, a reader who hopes to one day travel the tollway, the Bush Turnpike or Sam Rayburn Tollway free of charge.

It’s no longer a statewide practice to deem roads toll-free after they’ve been paid off, the North Texas Transportation Authority says on its website.

The NTTA owes roughly $9.3 billion in bonds across its entire system of roads, said Michael Rey, a spokesman for the agency, which upon its creation in 1997 inherited the Texas Turnpike Authority’s toll roads. The NTTA’s debt, he says, is no longer calculated by specific toll road.

A 2018 NTTA financial dashboard lists the debt payoff date as 2052. While that answers our reader’s question, it doesn’t mean the roads will ever be free.

If anything, tolls will keep going up rather than go away. According to the NTTA website, toll rates increase “every year at 2.75%, compounded and are reset in odd-numbered years.” The additional money is needed to maintain existing roads, Rey said via email.

NTTA oversees eight toll roads: the Dallas North Tollway, Bush Turnpike, Chisholm Trail Parkway, Addison Airport Toll Tunnel, Mountain Creek Lake Bridge, Sam Rayburn Tollway, Lewisville Lake Toll Bridge and 360 Tollway. The agency operates over 1,000 miles of toll lanes, primarily throughout Collin, Dallas, Denton and Tarrant counties and in small parts of Ellis and Johnson counties, Rey said.

Sixty percent of tolls collected on those roads goes to repay bonds, 23% is used for continued operation and maintenance of the roads, and 17% is reinvested in system expansion and
projects. Current projects include widening the Bush Turnpike and adding a fourth lane to the Sam Rayburn Tollway.

No new toll roads are planned for the near future, Rey said. But the agency is investing nearly $2 billion on existing roads in the next decade, and the plan is to complete those reinvestment projects without issuing more bonds or otherwise incurring more debt.
Chisholm Trail Parkway 5 years later - How the toll road sparked Fort Worth growth

By Gordan Dickson, Fort Worth Star-Telegram

When Chisholm Trail Parkway opened more than five years ago, the toll road created a veritable blank canvas for developers to build homes, shops, restaurants and other destinations in a stretch of Fort Worth that was previously inaccessible.

Well, that proverbial canvas now has more than a few brush strokes on it. Homes are being built quickly, especially in the master-planned Chisholm Trail Ranch development near McPherson Boulevard. Big box retailers are under construction in that area, too, and scheduled to open next year.

“Chisholm Trail Parkway opened up a new quadrant of the community, and, with that, you’ve been seeing the commercial and residential development,” said Chris Strayer, senior vice president of business attraction, retention and expansion at the Fort Worth Chamber.

Traffic has steadily risen on Chisholm Trail Parkway since it opened May 11, 2014. About 110,000 toll transactions are recorded each day on the road, up from 66,600 transactions per day in 2015, the road’s first full year of activity. (Drivers may pay more than one toll transaction per trip, depending upon how many electronic toll collection gantries they drive under during each trip.)

About two miles south of McPherson Boulevard, Tarleton State University has opened the initial phase of a Fort Worth campus that eventually could have more than 9,000 students — nearly the size of the school’s flagship campus in Stephenville.

Closer to downtown Fort Worth, the outdoorsy, high-end retail center known as the Shops at Clearfork has been an immediate success since it opened in 2017 near the intersection of the toll road and Edwards Ranch Road. The shopping area features high-end brand stores such as Louis Vuitton and Tiffany & Co.

BOOMING IN CLEBURNE

In Johnson County, development also is picking up on the southern end of the toll road. At the southeast corner of Chisholm Trail Parkway and U.S. 67, a mixed-use development known as Cleburne Station features a new minor league baseball park and pad sites for numerous restaurants and retail stores.

And, industrial and warehousing businesses are eyeing the southwestern corner of Tarrant County and northern edge of Johnson County, too.

Walmart recently opened a large distribution center along Sparks Drive in Cleburne, on the southern end of the toll road.

Also, the Mexico-based pasta company La Moderna last year opened a $50 million pasta manufacturing facility on Sparks Drive. The company, which uses highly automated machinery to make the noodles, employs about 100 people and says the ease of access on Chisholm Trail Parkway was a key factor in the decision to move to North Texas.
Also in Cleburne, about 500 new homes are under construction in various developments, and a new high school is being built as part of a $130 million voter-approved bond package.

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The impact of the toll road also surfaces in job data. For example, NTTA tracks development within five miles of all of its roads — a metric known internally as the “NTTA influence area.”

There are now 2.6 million jobs within that area, up from 1.5 million jobs a decade ago.

Those figures represent more than half of all jobs in the Metroplex.

Chisholm Trail Parkway is not only living up to its expectations as a mobility and economic development tool. It may be a road in need of expansion, officials said.

The southern portion of the toll road in Johnson County is only one lane in each direction, with passing lanes every few miles. But NTTA officials said they are ready to begin the planning process for adding at least one lane in each direction in the next five years.

“In anticipation of future growth, we’re beginning to do some planning and design work for the southern section of Chisholm Trail Parkway,” said Michael Rey, NTTA spokesman. “We want to make sure we don’t get behind the congestion curve.”
Panther Island hires new coordinator. Will things change for $1.17B Fort Worth project?

By Luke Ranker, Fort Worth Star-Telegram

Mark Mazzanti, a 35-year veteran of the Army Corps of Engineers, will serve as the new coordinator for Panther Island, the $1.17 billion project that aims to reshape the Trinity River north of downtown Fort Worth.

The Trinity River Vision Authority board approved a contract with Mazzanti on Wednesday for up to two years at $25,000 per month. Either party can opt out with a 30-day notice.

This position was a key suggestion from Dallas-based management consultant Riveron, which was hired to assess the project after the federal government skipped funding Panther Island last year. It marks a transition away from J.D. Granger, the executive director of the TRVA and son of U.S. Rep. Kay Granger, as a public leader of the project and move toward the authority taking on more risk assessment. It is the last Riveron recommendation the board adopted.

The goal is to clear up confusion about the project and improve transparency with the hope that Washington will fund the U.S. Army Corps of Engineer’s portion of the project.

“I think what you're going to see, quite frankly, is greater detail about the steps we need to do to get funding,” said G.K. Maenius, Tarrant County administrator and TRVA board president.

Most recently Mazzanti was the director of programs for the Army Corps' Southwestern Division based in Dallas. He oversaw $6 billion worth of Corps programs and led the emergency response to Hurricane Harvey. He retired about a month ago.

From 2011 to 2016 he worked out of the Corps' Washington, D.C., headquarters where he prepared the budget for the Civil Works Program, the traditional way projects like Panther Island receive funding. In that role he prepared other senior Corps staff for testimony in defense of the budget on Capitol Hill.

Mazzanti said he was familiar with Panther Island, which the Corps calls the Central City Project, from his time in Dallas and Washington. He wouldn’t say how likely he thought it was that the project would receive funding in the 2020 appropriations bill Congress has yet to pass.

The Army Corps could receive between $2 billion and $3 billion for a project like Panther Island, but it's unclear where Panther Island stacks up in priorities.

“When there’s $2 to $3 billion there is a chance the funds will be allocated,” he said. “The leadership here is behind this project. It has been shown from the Corps that there is a danger.”

Congress in 2016 authorized up to $526 million for Panther Island, but the Trump administration has been unwilling to provide new money. The Corps, in coordination with the water district, has asked for $30 million to $40 million each year but has received just $68 million since 2006.
As much as $250 million could come to the project after Fort Worth Mayor Betsy Price met with Mick Mulvaney, the White House budget director and acting chief of staff, along with U.S. Rep. Roger Williams in July. So far the Corps has not received funding for the project for fiscal year 2020.

Through June 30, local partners have spent almost $328 million to get the 800-acre area ready for the Corps to dig a bypass channel along the Trinity River. That includes purchasing property, environmental cleanup and expenses related to building three bridges.

Riveron didn’t outright say whether any of its recommendations would lead to more federal dollars, but local officials hope they would.

The convoluted nature of the project, an effort of the city, the water district and the Army Corps of Engineers, has been confusing to the public, Riveron suggested. It’s seen as entertainment, flood control and economic development.

That might hurt chances to receive federal dollars since the Corps can only participate in flood control projects.

The authority has already taken several steps, in line with Riveron recommendations, to clarify the project goals. Granger and the authority will no longer handle economic development on the future island. That responsibility lies with the city. And the water district has absorbed recreation and river events.

James Hill, a Tarrant Regional Water District board member who also sits on the TRVA board, said Mazzanti would add a greater level of credibility to the project.

“This is an independent person with Corps experience who can say ‘Here’s how I would set this up,’” he said. “If nothing else we have a voice in the room who can be open and honest with us.”

Jim Oliver, water district manager and TRVA board member, said Granger would continue as the district’s Panther Island project lead, coordinating with Mazzanti and working with the Corps.

His duties will include planning drainage canals on the island, negotiating property buyouts and finishing environmental cleanup, he said. Previously Granger, who was an attorney before getting involved in the Panther Island project, led those efforts while coordinating with the city and promoting Panther Island events.

**PANTHER ISLAND**

Also known as the Central City Project, the project calls on the Army Corps of Engineers to cut a roughly 1.5 mile bypass channel in the Trinity River north of downtown Fort Worth, creating a 800-acre riverfront island prime for development.

Federal funding for the project, spearheaded by Kay Granger, has been parceled out through the years.
The bypass channel is meant to prevent upstream flooding along the Trinity River by allowing the two forks of the river to meet before a large U-shaped bend that slows the flow of water.

The Corps and local project leaders have said it’s a more viable alternative to raising levees and should pull roughly 2,400 acres out of the flood plain for what the Army Corps of Engineers calls a “standard project flood,” the most severe flood considered possible for a region.
Cities Worldwide Are Reimagining Their Relationship With Cars

By Somini Sengupta and Nadja Popovich, New York Times

At a time when most of humanity lives in cities, where do cars belong — especially the old, polluting ones that make city air foul for people to breathe?

That question has vexed city officials across the world. Many are trying a variety of measures to reimagine the role of automobiles, the machines that forever changed how people move.

The immediate motivation is clear: City dwellers want cleaner, healthier air and less traffic. The long-term payoffs can be big: Curbing transportation emissions, which account for nearly a fourth of all greenhouse gases, is vital to staving off climate catastrophes.

And so, cities, which account for a large majority of global emissions, are dangling both carrots and sticks to persuade their residents to get out of their cars — or into cleaner ones.

Several have begun by making it expensive to bring older diesel cars and trucks into the city center. Some are aiming to keep out diesel vehicles altogether during rush hour (Bristol, by 2021, for example) and eventually all vehicles with internal combustion engines (Amsterdam, by 2030). Several offer incentives to switch out conventional cars for electric ones.

Some mayors have come under intense political pressure to address the health hazards of air pollution. “They see the growing concerns about the health effects of air pollution,” said Jane Burston, head of the Clean Air Fund, a London-based charity.

There are road bumps though.

Delhi, choking on toxic air, is struggling to staunch the flow of new cars and motorcycles on the roads, while in Madrid, where tens of thousands of delegates are to gather next month for international climate negotiations, the effort to restrict cars has turned into a political battle.

In London, Tightening Limits on Pollution

London’s effort to reimagine the role of cars began early. In 2003, the city started a congestion charge of 5 pounds, about $8 at the time, to drive a car or truck into the city center on weekdays between 7 a.m. and 6 p.m. The charge has since risen to £11.50. (New York City, packed with cars and noisy, diesel-burning trucks in its city center on weekdays, will be the first American city to adopt a congestion price, but not until 2021.)

In April of this year came a new Ultra Low Emissions Zone levy on top of the congestion charge.

It applies around the clock to the worst-polluting vehicles: older-model gas and diesel cars, trucks and motorcycles. Altogether, driving a car into central London can now cost up to £24 on weekdays.

By October 2019, nitrogen dioxide levels in the air had declined by 36 percent compared to February 2017, according to an assessment by the city. There were nearly 13,500 fewer of the most polluting vehicles in the city center on an average day, compared to the month before the new rules came into effect.
London has taken other measures to clean up its air. No new licenses are offered to black cabs that run on diesel. The city offers a roughly £3500 incentive to small business owners and charities to trade older polluting cars and vans for electric ones.

These programs were spurred in large part by concerns for public health: Exposure to the city’s polluted air resulted in more than 9,000 premature deaths in 2010, according to official figures.

**In Beijing, a License Plate Lottery**

The Chinese capital is a portrait of what cars can do to a city — and also what a city can do its cars. The number of vehicles in Beijing nearly tripled to 5 million in 2011 from fewer than 2 million in 2000. Beijing became notorious for its bad air.

The city turned to some familiar measures: financial incentives to scrap older diesel-burning cars, congestion zones, stricter tailpipe emissions standards.

In 2011, began an unusual strategy. Officials instituted a lottery to issue new car license plates, essentially forcing car buyers to wait until they can actually take a new car out for a spin. There are more lottery slots for electric vehicles than for conventional ones, so the wait is longer for would-be buyers of the latest gas-powered S.U.V. Not least, every gas-powered vehicle must remain idle one day each week, as determined by the last digits of its license plate.

Those restrictions have inspired subversion. The wealthiest have bought more cars, sometimes registering them outside the capital, so the city has in turn has imposed new restrictions on how often out-of-town cars can park in the city.

Beijing’s air has improved, at least in part because of these restrictions. A United Nations report, relying on government data, found that between 1998 and 2018 levels of transportation-related pollution decreased markedly (nitrogen dioxide declined by 55 percent and the fine, lethal particulate matter known as PM 2.5 by 81 percent). But, the city’s air quality still fails to meet national standards for fine particulate pollution and far exceeds levels the World Health Organization deems safe to breathe.

**In New Delhi, Little Progress and a Growing Crisis**

New Delhi’s air quality is today as notorious as Beijing once was. It is among the most polluted cities in the world because of a year-round combination of vehicle, industrial and construction-related emissions, as well as seasonal crop burning.

Delhi has taken several steps to reduce tailpipe pollution: a vast Metro system, a peripheral highway designed to keep cargo trucks out of the city, restrictions on older and more polluting vehicles, and a requirement for all buses and taxis to switch from diesel to less-polluting natural gas.

That has made barely a dent against the new motorcycles, cars and trucks coming onto the roads. Between 2006 and 2016, the number of new cars registered in the capital grew by 11 percent to a total of nearly 9 million, according to an analysis of government data by the Center for Science and Environment. The report’s authors found that 49 percent of the miles traveled every day in the Indian capital are by bus and metro, while 51 percent are by private vehicles.
“There is a real need to expand public transportation in the city,” said Anumita Roy Chowdhury, the center’s director of research and advocacy.

In November, when the city was blanketed by hazardous air, Chief Minister Arvind Kejriwal, campaigning for re-election, rolled out the third and strictest measure to curb the number of cars on the roads. License plates ending in even and odd numbers would have to take turns every other day for the first two weeks of November, which is peak pollution season. Mr. Kejriwal, facing a bitter re-election contest, extended the ban for the first time to vehicles used by federal government officials.

Will it work? The last two times an odd-even measure was tried, it improved the air a bit, according to a study by the University of Chicago. But it was a temporary gain, and the city’s air remains extremely hazardous for the approximately 20 million people who live there.

In Madrid, a Partisan Tug-of-War

The Spanish capital is in the throes of a heated debate about what kind of a city it wants to be, and cars are at the heart of it.

City officials last year rolled out one of the toughest auto restrictions in the world: A ban on most conventional cars in a portion of the city center, with fines for violators. The measure came after the European Commission said Madrid was falling short of its air-pollution reduction targets.

After the ban, according to the city’s own air pollution sensors, there was measurable improvement.

Not everyone saw it as an improvement, though. Conservatives won a city election this year and they were keen to undo their liberal predecessors’ decrees. In July, the city announced it would scrap the fines, marshaling its own data showing that pollution had worsened around the no-car zone.

The reversal was short lived. Within a week, a judge stepped in, ordering the city to continue imposing fines for those who drive into the city center. The judge’s rationale: People need to breathe clean air.
At the End of Ozone Season, We Wanted to Know If Anyone Pays Attention to Ozone Alert Days

By Meredith Lawrence, Dallas Observer

If you’ve driven on a Dallas freeway in the summer, chances are you’ve seen the sign: “Ozone Action Day Tomorrow.” The announcement — followed by a list of ways to cut down your ozone emissions: walking, carpooling or taking DART — punctuates the daily drudgery of a hot summer commute.

Have you ever wondered if those signs actually do anything, if people change their well-worn patterns just because of an orange and black sign flashing past the window? We did too. But the answer, it turns out, is complicated.

Ozone gas is found both in the earth’s upper atmosphere, where it’s essential, and at ground level, where it’s a pollutant. Ozone is formed when volatile chemicals emitted by things like cars and manufacturing facilities react with sunlight, according to the Texas Commission on Environmental Quality.

Ozone alert days are issued when Dallas’ 20 or so monitoring stations indicate that levels in the air are at risk of surpassing safe amounts the following day, said Chris Klaus, a senior program manager for the North Texas Council of Governments.

Dallas ozone season runs from March through November each year. As this year’s season winds down, we took a look at some of the numbers for the past season.

While traffic speed and number counts are tracked, it’s hard to link changes in traffic volume to ozone action day displays, because not all highway signs show the same message on a given day, Klaus said.

An ozone alert displayed on a freeway sign gets overridden by higher priority messages like Amber alerts, silver alerts, construction information and traffic accident notices, Klaus said.

Additionally, while there is an inventory of where the signs are located and what messages they can display, what was actually posted on a message board on a given day is not archived, he said.

It is something he’s interested in looking into more closely, though, now that the Observer has brought up the question, he said.

What is available, though, is DART ridership data. At least for the months of June through August this year, it appears more likely that Dallas residents would ride public transportation because it was Thursday, than because of an ozone action day.

Daily ridership in June through August ranged from a low of 78,919 on Sunday, June 16 (apparently no one likes to take public transit for Father’s Day) to a high of 229,060 on Thursday, Aug. 29. In general, more people take public transit during the week than on the weekends, which did not change on ozone action days. On Sunday, June 9, an ozone action day, only 79,366 riders took public transit.
There were 24 ozone action days in that time period, but just a handful corresponded to DART’s highest ridership days. Of the 10 highest DART ridership days during the three-month period surveyed, only three were ozone action days.

The top three ridership days, on which more than 225,000 people rode the DART’s bus, train and streetcar services, were not ozone action days. They were two Thursdays and a Wednesday, which were consistently high ridership days throughout the survey period.

The fourth-highest ridership day between June and August was an ozone action day, but it was also a Thursday.

Judging by the available numbers, at least when it comes to public transit decisions, Dallas residents are creatures of habit who may ride DART every day to help the environment, but don't seem particularly inspired to do so on bad air-quality days.
Virgin’s High Speed Hyperloop Technology Could Be Coming to North Texas

The North Central Texas Council of Governments plans to submit a proposal in December to bring a hyperloop testing facility to the state.

By Kim Roberts, The Texan

Suppose you step into a pod and are transported to a destination via vacuum tube hurtling over 600 miles per hour. You might think that you were in a science fiction film, but if some Texas officials have their way, you could be traveling between north Texas cities in the next decade by hyperloop technology.

Hyperloop is an autonomous transportation system that could move people or freight by propelling magnetic-levitating vehicle pods through low-pressure tubes at high speeds. It claims to be safe, fast, and energy-efficient.

Virgin Hyperloop One has been working on the technology since 2014 and has a test facility in Nevada. However, the privately-held company is now seeking to build a six-mile certification track to further test the safety and efficiency of the technology and to satisfy government regulations.

The North Central Texas Council of Governments (NCTCOG) plans to submit a proposal in December to Virgin Hyperloop One to bring its certification track to the area, explained Kevin Feldt, program manager at NCTCOG.

They will work with the Dallas Regional Chamber of Commerce, trade associations, and local governments to present a competitive proposal to Virgin Hyperloop One.

When asked if the track project would include any taxpayer funding, Feldt said it was too early to know although he did not rule out a public-private partnership.

Feldt suggested that the track might be constructed along Highway 360, but added that NCTCOG would be soliciting location suggestions from local government leaders before submitting the proposal.

Virgin Hyperloop One would like to begin construction on the track before 2021 and hopefully start testing in 2025, Feldt said.

The hyperloop tubes would be set on columns and would be about 30 feet tall and between 60 and 80 feet wide.

If the certification process is successful, the hyperloop technology may be considered for wider application for high-speed travel across the state.

Tarrant County Commissioner Gary Fickes, who is a member of the Regional Transportation Council for NCTCOG, is interested in the hyperloop technology.
“It is a dynamic concept and a fascinating means of technology,” commented Fickes. “I would foresee it being a private venture. The private sector is the best way to accomplish it profitably and quickly,” he added.
Uber’s Self-Driving Car Didn’t Know Pedestrians Could Jaywalk

The National Transportation Safety Board releases hundreds of pages related to the 2018 crash in Tempe, Arizona, that killed Elaine Herzberg.

By Alex Davies and Aarlan Marshall, WIRED

The software inside the Uber self-driving SUV that killed an Arizona woman last year was not designed to detect pedestrians outside of a crosswalk, according to new documents released as part of a federal investigation into the incident. That’s the most damning revelation in a trove of new documents related to the crash, but other details indicate that, in a variety of ways, Uber’s self-driving tech failed to consider how humans actually operate.

The National Transportation Safety Board, an independent government safety panel that more often probes airplane crashes and large truck incidents, posted documents on Tuesday regarding its 20-month investigation into the Uber crash. The panel will release a final report on the incident in two weeks. More than 40 of the documents, spanning hundreds of pages, dive into the particulars of the March 18, 2016 incident, in which the Uber testing vehicle, with 44-year-old Rafaela Vasquez in the driver’s seat, killed a 49-year-old woman named Elaine Herzberg as she crossed a darkened road in the city of Tempe, Arizona. At the time, only one driver monitored the experimental car’s operation and software as it drove around Arizona. Video footage published in the weeks after the crash showed Vasquez reacting with shock during the moments just before the collision.

The new documents indicate that some mistakes were clearly related to Uber’s internal structure, what experts call “safety culture.” For one, the self-driving program didn’t include an operational safety division or safety manager.

The most glaring mistakes were software-related. Uber’s system was not equipped to identify or deal with pedestrians walking outside of a crosswalk. Uber engineers also appear to have been so worried about false alarms that they built in an automated one-second delay between a crash detection and action. In addition, the company chose to turn off a built-in Volvo braking system that the automaker later concluded might have dramatically reduced the speed at which the car hit Herzberg, or perhaps avoided the collision altogether. (Experts say the decision to turn off the Volvo system while Uber’s software did its work did make technical sense, because it would be unsafe for the car to have two software “masters.”)

Much of that explains why, despite the fact that the car detected Herzberg with more than enough time to stop, it was traveling at 43.5 mph when it struck her and threw her 75 feet. When the car first detected her presence, 5.6 seconds before impact, it classified her as a vehicle. Then it changed its mind to “other,” then to vehicle again, back to “other,” then to bicycle, then to “other” again, and finally back to bicycle.
It never guessed Herzberg was on foot for a simple, galling reason: Uber didn’t tell its car to look for pedestrians outside of crosswalks. “The system design did not include a consideration for jaywalking pedestrians,” the NTSB’s Vehicle Automation Report reads. Every time it tried a new guess, it restarted the process of predicting where the mysterious object—Herzberg—was headed. It wasn’t until 1.2 seconds before the impact that the system recognized that the SUV was going to hit Herzberg, that it couldn’t steer around her, and that it needed to slam on the brakes.

That triggered what Uber called “action suppression,” in which the system held off braking for one second while it verified “the nature of the detected hazard”—a second during which the safety operator, Uber’s most important and last line of defense, could have taken control of the car and hit the brakes herself. But Vasquez wasn’t looking at the road during that second. So with 0.2 seconds left before impact, the car sounded an audio alarm, and Vasquez took the steering wheel, disengaging the autonomous system. Nearly a full second after striking Herzberg, Vasquez hit the brakes.

In a statement, an Uber spokesperson said that the company “regrets the 2018 crash,” and emphasized that its Advanced Technologies Group has made changes to its safety program.

According to Uber documents submitted to the NTSB as part of the investigation, Uber has changed its safety driver training in the 20 months since, and now puts two safety operators in each car. (Today, Uber tests self-driving cars in Pittsburgh, and will launch testing in Dallas this month.) The company has also changed the structure of its safety team and created a system where workers can anonymously report safety issues. “We deeply value the thoroughness of the NTSB’s investigation,” the spokesperson added.

Another factor in the crash was the Tempe road structure itself. Herzberg, wheeling a bicycle, crossed the street near a pathway that appeared purpose-built for walkers, but was 360 feet from the nearest crosswalk.

On November 19, the NTSB will hold a meeting on the incident in Washington, DC.

Investigators will then release a comprehensive report on the crash, detailing what happened and who or what was at fault. Investigators will also make recommendations to federal regulators and to companies like Uber building the tech outlining how to prevent crashes like this in the future.

For Herzberg, of course, it’s too late. Her family settled a lawsuit with Uber just 11 days after the crash.
Commentary: Panther Island and the Tarrant Regional Water Discombobulation (TRWD)

Former Fort Worth City Councilman Clyde Picht outlines how and why Panther Island became such a mess, with taxpayers “left holding the bag.”

By Clyde Picht, Texas Scorecard

Okay, it’s really “Water District,” but it’s an organization established in 1924 as a Water Control and Improvement District to provide raw water and flood control.

Now, 80 years later, it deals in buying and selling land (taking some by eminent domain) and going full bore in an economic development disguised as flood control—Panther Island. The Fort Worth City Council was led to believe this “investment” of $360 million of taxpayer dollars would increase the tax base by $1 billion, and Fort Worth voters were assured they wouldn’t “be left holding the bag.”

It has since ballooned from $360 million to $1.15 billion and, as expected, it’s still not running on all cylinders.

Pretty spectacular for a government agency with no public oversight other than the elected five-member board. How could that happen, you might ask? It happened because the water district has a very small voter base and was organizationally structured so nobody could be held accountable.

First, to help TRWD work on a problem they couldn’t solve, State Rep. Charlie Geren (R-Fort Worth) shepherded House Bill 2639 through the legislature. It enabled the TRWD to beg, borrow, and steal land from the owners along White Settlement Road and any area impacted by TRVA.

They pursued it with a vengeance, and it hurt a lot of small business owners.

To add insult to injury, TRWD General Manager Jim Oliver picked a lawyer to oversee this project. This lawyer was reportedly from a fourth-tier law school and, at the time, worked for the Tarrant County district attorney.

You should be aware that the general description of a fourth-tier law school is one with lower entrance requirements, but apparently, they also teach economic development and flood control subjects.

This new, highly paid manager, who has since declared that everything is on cost and on schedule, was J.D. Granger, coincidentally the son of U.S. Rep. Kay Granger (R-TX); a recent programmatic review from a third-party organization found the opposite to be true.

When it came to fully funding this project, initially, there was hope that a Tax Increment Financing (TIF) district would provide $94 million from the taxes on properties near the Trinity River Vision Authority (TRVA) and Central City Project boundaries. The city council felt a larger area would provide enough additional money to cover city obligations along with $76 million in bond money for the bridges. Then Councilwoman Wendy Davis supported the TIF, which
included part of West 7th, but she wanted to increase the area of coverage to increase the tax revenue going to TRV.
I voted against the TIF, saying the city shouldn’t be in economic development. “Every time we have a projection of economic gain on a project like this, it gets overstated, and the cost is greatly understated.” (Fort Worth Star-Telegram 12/17/03).

The TIF expansion passed, of course, and was expanded once again later. What was proposed and what was said at the time is very interesting. The fund estimate had escalated to $435 million with the following breakdown:

- Federal funding – $217.5 million (Federal funds are now authorized at $565 million, but far from being funded.)
- TIF funding – $115.9 million (Now estimated at $320 million or more.)
- TRWD funding – $64 million (Voters authorized $260 million in bonds to cover unexpected downturn in revenue from gas sales. It’s expected to be repaid by extending the TIF.)
- Fort Worth funding – $76 million in bonds for bridges
- Tarrant County funding – $11 million for road and bridge work

Here are the projected costs and completion dates as of 2005:

- Bypass channel cost – $63 million; expected completion 2012
- Property acquisition – $83 million; expected completion unknown
- Samuels Ave. dam – $421 million; expected completion 2014
- Isolation gates – $37.4 million; expected completion 2014
- Environmental cleanup – $32.9 million; expected completion unknown
- Road bridges – $50.4 million; expected completion 2009
- University Drive – $5 million; expected completion 2013
- “Natural” flood control – $51.2 million; expected completion unknown

Again, a third-party programmatic review found that after all this time, in October of last year, only the design portion had been finished, not any construction phases.

Then, there is this famous statement from the Star-Telegram article: “Ultimately, Oliver said, backers might seek more money from the city, Tarrant County or the Water District, or by borrowing based on future development potential.”

James Toal (a partner at Gideon Toal and now deceased) helped draw up the plans for TRWD.

He supported it, saying, “It completely eliminates the need for levees in the downtown area.” “The taxpayers will not be left holding the bag,” Toal said.

Really!
Buckle up: Dallas, Mesquite have more dangerous drivers than Houston

By Jay Wallis- WFAA

Dallas ranks as the third most dangerous city for drivers, according to 2017 data.

The Car Insurance Companies study created a composite score based on factors including traffic-related deaths, the likelihood of getting in a wreck and vehicle theft rate.

Car Insurance Companies curates driving data for consumers.

These are the study’s top 10 most dangerous cities:

2. Savannah, Ga.
3. Dallas
5. St. Louis, Mo.
6. Atlanta
7. New Orleans
8. Cleveland
10. Louisville, Ky.

Though Dallas ranks third in the overall composite score, it lags behind larger cities in traffic fatality rates.

A study by the National Highway Safety Administration shows Dallas has 14.5 motor vehicle fatalities per 100,000 people, which comes out to 194 per year.

Los Angeles has 257 deaths a year, Phoenix has 249, Houston has 245 and New York has 207.

Dallas also has 590 motor vehicle thefts per 100,000 people, which comes to about 7,913 per year. The only Texas city that ended up with more is Houston with 11,596 per year.

When looking at the top 25 most dangerous cities, Texas is tied with California and Florida for the states with the most.

Dallas is one of four Texas cities ranked in the top 25 most dangerous for drivers.

Mesquite is No. 16, Houston is No. 19 and Fort Worth is No. 21. Dallas and Houston are also the two most populated cities among these 25 cities.
Other Texas cities in the top 100 include:

- No. 44 San Antonio
- No. 47 Garland
- No. 54 Waco
- No. 56 Austin
- No. 69 Killeen
- No. 75 Amarillo
- No. 83 Grand Prairie
- No. 89 Arlington
- No. 100 Plano

There were 37,133 deaths from crashes nationwide in 2017. This study shows an average driver experiences a crash once every 10.6 years, while Brownsville, Texas, ended up with the highest rate of 14.9 years.
RTC to Honor Traffic Incident Instructors, Patrol Staff
North Texas program trains first responders, managers to keep traffic moving efficiently

Nov. 12, 2019 (Arlington, Texas) – With the holidays approaching, North Texans will be traveling extensively over the next few weeks. Residents who are driving to visit friends and family are encouraged to make sure their vehicles are well-maintained and that they are prepared for emergencies that might occur along the way.

For those who encounter trouble during their road trips, North Texas has mobility assistance patrol officers who can handle a multitude of situations – from wrecks to stalled vehicles – and help get people moving again.

Since 2003, the North Central Texas Council of Governments has trained over 3,000 first responders and managers to help them clear incidents on the freeways quickly and efficiently. The Regional Transportation Council will recognize traffic incident instructors and mobility assistance patrol personnel from across Dallas-Fort Worth on Thursday.

The RTC will hold a luncheon celebrating their contributions in conjunction with National Traffic Incident Response Awareness Week, which is celebrated Nov. 10-16. Additionally, mobility assistance patrol vehicles will be on display beginning at approximately 11:45 a.m.

Last year, mobility assistance patrol crews responded to approximately 135,000 incidents along the region’s roadway system. There were 121,612 crashes and 697 fatalities reported last year in the 12-county Dallas-Fort Worth area. Both figures declined in 2018, but there is more work to be done.

The Traffic Incident Management training courses in North Texas seek to initiate a common, coordinated response to traffic incidents that enhances safety, improves reliability by reducing upstream traffic incidents and builds partnerships among area emergency-response agencies.

An average of nine emergency responders work a typical injury crash in the region. According to data, approximately 45 responders may be working near moving traffic every hour. So, keeping police officers, firefighters and other emergency workers safe while they respond to incidents is crucial.

NCTCOG is joining the Federal Highway Administration, key partners, and responders around the nation to celebrate this year’s theme that Safety is a Team Effort. This serves as a reminder that every person has a role in traffic incident response. Drivers and passengers, passing motorists, public safety communications professionals, emergency responders, traveler information providers, and the towing/recovery community all play a role when an incident snarls traffic and threatens lives.
About the North Central Texas Council of Governments:

NCTCOG is a voluntary association of local governments established in 1966 to assist local governments in planning for common needs, cooperating for mutual benefit and coordinating for sound regional development. NCTCOG's purpose is to strengthen both the individual and collective power of local governments and to help them recognize regional opportunities, eliminate unnecessary duplication and make joint decisions.

NCTCOG serves a 16-county region of North Central Texas, which is centered on the two urban centers of Dallas and Fort Worth. Currently, NCTCOG has 238 member governments including 16 counties, 170 cities, 24 school districts and 30 special districts. For more information on the NCTCOG Transportation Department, visit [www.nctcog.org/trans](http://www.nctcog.org/trans).

# # #
Public to Receive Hyperloop Update Nov. 11
NCTCOG to also highlight bicycle video series, alternative fuel corridor

Nov. 7, 2019 (Arlington, Texas) – The North Central Texas Council of Governments will host a public meeting in November to provide updates on several transportation projects and initiatives, including hyperloop technology.

The meeting will take place at 6 pm Monday, November 11 at NCTCOG’s Arlington offices, 616 Six Flags Drive.

With transportation needs increasing throughout the region, NCTCOG is focused on several innovative projects that could improve the reliability of the system. Staff will provide a status report on one of these, hyperloop technology. Hyperloop is a new mode of transportation that could involve moving people and goods in pods via electric propulsion through a low-pressure tube. The pods float above the track using magnetic levitation, gliding at airline speeds for long distances due to ultra-low aerodynamic drag.

In addition, the meeting will touch on High-Occupancy Vehicle lane transportation control measures, which are not yielding the same emissions benefits they once were. Consequently, they could be removed from the clean air plan, known as the State Implementation Plan.

If taken out of the plan, they must be replaced by other projects that achieve equivalent emissions benefits for the Dallas-Fort Worth area, currently working to meet attainment of federal air quality regulations. NCTCOG staff has identified traffic signal corridors in the nonattainment region that will serve as alternate TCM projects.

Staff will also highlight 12 shared-use trails within the Dallas-Fort Worth region through a series of videos detailing their benefits, including economic development, regional connectivity and improved quality of life.

Finally, the meeting will feature a discussion of alternative fuel corridors. The US Department of Transportation must identify highways that have adequate alternative fuel infrastructure. Staff will present an update on the status of highway designations and next steps to alternative fuel station signage and development of additional infrastructure.

Information on the Regional Smoking Vehicle Program and Know Before You Fly Your Drone workshops will be highlighted.

To watch the meeting online, click the “live” tab at www.nctcog.org/video. A recording of the presentations will also be posted at www.nctcog.org/input.
About the North Central Texas Council of Governments:

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NCTCOG serves a 16-county region of North Central Texas, which is centered in the two urban centers of Dallas and Fort Worth. Currently, NCTCOG has 238 member governments including 16 counties, 169 cities, 22 school districts and 31 special districts. For more information on the NCTCOG Transportation Department, visit www.nctcog.org/trans.

###
WHEREAS, the North Central Texas Council of Governments (NCTCOG) is designated as the Metropolitan Planning Organization (MPO) for the Dallas-Fort Worth Metropolitan Area by the Governor of Texas in accordance with federal law; and,

WHEREAS, the Regional Transportation Council (RTC), comprised primarily of local elected officials, is the regional transportation policy body associated with the North Central Texas Council of Governments, and has been and continues to be the regional forum for cooperative decisions on transportation; and,

WHEREAS, since 1991, the region has been designated as nonattainment for the pollutant ozone and one of the primary sources of ozone precursor oxides of nitrogen (NOx) emissions is on-road mobile; and,

WHEREAS, three high occupancy vehicle (HOV) projects, Interstate Highway (IH) 35E corridor (Stemmons freeway) between IH 635 and State Highway (SH) 121, IH 635 East corridor (LBJ Freeway) between Coit Road and Greenville Avenue, and IH 635 West corridor (LBJ freeway) between Luna Road/IH 35E and US 75, have been included as Transportation Control Measures (TCM) in the federally required Attainment Demonstration State Implementation Plan (SIP) for their on-road mobile emissions reductions; and,

WHEREAS, the increase in population and vehicle miles traveled in the Dallas-Fort Worth Metropolitan Area has resulted in increased congestion in these corridors necessitating replacement of traditional HOV lanes with tolled managed lanes with HOV discounts, providing congestion relief and associated air quality benefits; and,

WHEREAS, the MPO and the Texas Commission on Environmental Quality concur if TCM emissions benefits identified in the SIP are no longer appropriate, these agencies may initiate a TCM substitution process; and,

WHEREAS, the MPO has convened a substitution working group to identify and evaluate projects ensuring associated emissions benefits from initiatives substituted into the SIP must be equal to or greater than those being replaced; and,

WHEREAS, the planning process used for the TCM substitution process was conducted in accordance with NCTCOG’s approved Public Participation Plan. An overview of the TCM substitution initiative was presented at the public meeting on November 11, 2019, allowing for a 30-day public comment period; and,

WHEREAS, the three SIP TCM HOV projects: IH 35E corridor (Stemmons Freeway) between IH 635 and SH 121, IH 635 East corridor (LBJ Freeway) between Coit Road and Greenville Avenue, and IH 635 West corridor (LBJ Freeway) between Luna Road/IH 35E and US 75, be replaced with traffic signalization projects and received Surface Transportation Technical Committee endorsement for RTC approval on December 6, 2019.
NOW, THEREFORE, BE IT HEREBY RESOLVED THAT:

Section 1. In accordance with the Environmental Protection Agency, the RTC approves the Transportation Control Measures substitution of three HOV projects and their associated emissions benefits: IH 35E corridor (Stemmons freeway) between IH 635 & SH 121, IH 635 east corridor (LBJ freeway) between Coit road & Greenville avenue, and IH 635 west corridor (LBJ freeway) between Luna road/IH 35E & US 75, with traffic signalization projects and their associated emissions benefits.

Section 2. In accordance with Clean Air Act Section 176(c)(8), the substitute TCM initiatives account for an equivalent or greater amount of emission reductions than the existing TCM commitments to be replaced.

Section 3. This resolution will be transmitted to the Substitution Working Group comprising of the Federal Highway Administration, the United States Environmental Protection Agency, the Texas Department of Transportation and the Texas Commission on Environmental Quality.

Section 4. This resolution shall be in effect immediately upon its adoption.

____________________________________
Andy Eads, Chair
Regional Transportation Council
County Judge, Denton County

I hereby certify that this resolution was adopted by the Regional Transportation Council of the North Central Texas Council of Governments for the Dallas-Fort Worth Metropolitan Area on December 12, 2019.

____________________________________
Theresa Daniel, Ph.D., Secretary
Regional Transportation Council
Commissioner, Dallas County
OVERVIEW

Three Interim HOV lanes remain in the following State Implementation Plan (SIP) as TCMs:

*Dallas-Fort Worth 1-Hour Ozone Attainment Demonstration State Implementation Plan Revision* - April 2000

*Dallas-Fort Worth 1997 8-Hour Ozone Attainment Demonstration and Reasonable Further Progress State Implementation Plan Plan Revision* - May 2007

These Interim HOV lanes are being removed as a TCM in the SIP documentations due to being changed to Managed Lanes.

Removing them requires substituting alternate TCM projects that achieve equivalent emissions benefits.
IH 35E corridor (Stemmons Fwy) between IH 635 and SH 121

IH 635 east corridor (LBJ Fwy) between Coit Rd and Greenville Ave

IH 635 west corridor (LBJ Fwy) between Luna Rd/IH 35E and US 75
HOV TCM SUBSTITUTION
TRAFFIC SIGNALIZATION PROJECTS TO BE USED AS SUBSTITUTES

6 Corridors:

Parker Rd (Midway Rd to Preston Rd)  
9 signals

Park Blvd (Midway Rd to Coit Rd)  
16 signals

Custer Rd (Legacy Dr to SH 121 NB)  
8 signals

Coit Rd (Legacy Dr to SH 121 NB)  
8 signals

Spring Creek Pkwy/Shiloh Rd (Custer Rd to Plano Pkwy)  
14 signals

Plano Parkway (Dublin Rd to Marsh Ln)  
30 signals

Location of Traffic Signals
Transportation Control Measure Substitution

Transportation Control Measures (TCM) specified in an implementation plan may be replaced with Control Measures if the substitute measures achieve equivalent or greater emissions reductions than the TCMs to be replaced.

<table>
<thead>
<tr>
<th>Pollutants</th>
<th>Emissions Impact of three HOV Projects</th>
<th>Emissions Impact of Corridor Signalization Projects</th>
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## HOV TCM SUBSTITUTION

### TIMELINE

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<td>October 25&lt;sup&gt;th&lt;/sup&gt;, 2019</td>
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<tr>
<td>RTC – HOV TCM Substitution – Information</td>
<td>November 14&lt;sup&gt;th&lt;/sup&gt;, 2019</td>
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<tr>
<td>STTC – HOV TCM Substitution – Action</td>
<td>December 6&lt;sup&gt;th&lt;/sup&gt;, 2019</td>
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<tr>
<td>RTC – HOV TCM Substitution – Action</td>
<td>December 12&lt;sup&gt;th&lt;/sup&gt;, 2019</td>
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<tr>
<td>Interagency Consultation Concurrence Letters</td>
<td>February, 2020</td>
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<tr>
<td>Approved HOV TCM Substitution</td>
<td>May, 2020</td>
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Request for Action

Approve Resolution (Reference Item 5.1)

- Approve the Transportation Control Measures substitution of three HOV projects and associated emissions benefits with traffic signalization projects and their associated emissions benefits:
  - IH 35E corridor (Stemmons Fwy) between IH 635 and SH 121
  - IH 635 east corridor (LBJ Fwy) between Coit Rd and Greenville Ave
  - IH 635 west corridor (LBJ Fwy) between Luna Rd/IH 35E and US 75

- The substitute TCM accounts for equivalent or greater emission reductions than the TCM to be replaced
- The resolution will be transmitted to the local, State, and federal partners
CONTACTS

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METROPOLITAN PLANNING ORGANIZATION (MPO)
MILESTONE POLICY (ROUND 2)

Regional Transportation Council
December 12, 2019
BACKGROUND

- The Regional Transportation Council (RTC) has been selecting projects since 1992.
- The first Metropolitan Planning Organization (MPO) Milestone Policy was adopted by the RTC in June 2015, and it reviewed projects selected from 1992 to 2005 that had not yet gone to construction.
- That initiative has been successful in getting 46 projects to construction thus far.
- Staff has been directed to initiate a second round of the Milestone Policy to review projects currently over 10 years old that have not been implemented.
**MILESTONE POLICY ROUND 2**

- **Affected projects:**
  - Funded between 2006 and 2010 that have not let or obligated
  - Funded prior to 2006 that had let, but have had implementation issues (e.g., re-bid, utility delays)
  - Funded with RTC-selected sources
  - Locally funded and added to the Transportation Improvement Program (TIP) prior to 2010
  - Funded with Congressional Earmarks that are subject to rescission

- 41 projects will need to be reconfirmed or cancelled
- Projects have $605,904,439 in total funding
INTENDED OUTCOMES OF THE MILESTONE POLICY

- Provide a realistic assessment of project status for decision-making
- Balance project construction schedule capacity within the current financial constraints
- Increase the amount of available funds for priority, “ready-to-go” projects, rather than long delayed projects
Agencies with projects on the Milestone Policy Project List will be notified via letter (in addition to STTC & RTC agenda items).

Agencies must reconfirm the projects as a priority by:
- Providing a realistic and achievable schedule, which must receive NCTCOG & TxDOT concurrence.
- Providing documentation of policy board support.
  - If projects are advancing imminently or have policy board approval within the last six months, new action is not needed (just submit latest approval documentation).
  - If policy support documentation is greater than six months old, new action is requested.
- Documenting the availability of local matching funds.
LESSONS LEARNED - SUGGESTIONS FOR AGENCIES TO CONSIDER

- Review timeline with “20/20 vision,” not “Rose-Colored Glasses”
  - Include review of start and end dates for STIP approval, funding agreement execution, engineering, environmental clearance, right-of-way acquisition, utility relocations, bidding process, railroad or other interagency agreements
  - Include time for TxDOT review
  - Do not assume phases can run concurrently
  - Build in reasonable, but not excessive, contingency timing

- Coordinate with TxDOT & NCTCOG staff in advance to ensure timelines are realistic
TIMELINE

- January 2020 - Notify implementing agencies
- May 1, 2020 - Formal responses due to NCTCOG staff
- Summer 2020 - Bring the Milestone Policy Project List to STTC/RTC for review and approval
FOLLOW UP: CITY OF DALLAS ROUND 1 PROJECT ACTION

- City established a revised schedule
- TxDOT and NCTCOG concurred with the updated schedule

Proposed RTC action:
- Grant an extension of the project’s construction start timeline
- If the City does not meet that schedule, staff proposes that the RTC remove funding from the project automatically (i.e., without further action needed).
- Direct staff to continue monitoring the project for timely implementation
- Extension is contingent upon development of tracking system within City of Dallas

- City developing a tracking system and better understanding of outstanding commitments
- Tracking system must include regular updates to elected officials
QUESTIONS?

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James Adkins
Transportation Planner
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jadkins@nctcog.org
<table>
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<th>Funding Initiative</th>
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<th>CSJ</th>
<th>Fiscal Year</th>
<th>Implementing Agency</th>
<th>City</th>
<th>Funding Category</th>
<th>City Funding</th>
<th>Facility/Limits</th>
<th>Project Scope</th>
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<td>20115</td>
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<td>Denton CD</td>
<td>Argyle</td>
<td>RTR, SBPE, S102, Local Contribution</td>
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<td>US 377 from South of FM 1171 to Crawford Road</td>
<td>Reconstr and Widen Roadway from 2 Lane Rural to 4 Lane Divided Urban</td>
<td>09/2024</td>
<td>$52,007,246</td>
<td>Construction is not fully funded (Funding gap of approximately $77 million)</td>
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<td>2010 Congressional Earmark</td>
<td>53079</td>
<td>0902-50-104</td>
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<td>Burleson</td>
<td>Burleson</td>
<td>CAT 10 (Congressional Earmark), Local Contribution</td>
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<td>Alsbury from Hulen ST to CR 1020 (Approximately 0.2 Miles)</td>
<td>Constrt of A 4 Lane Extension of Alsbury Boulevard</td>
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<td>$4,802,880</td>
<td>Earmark funds are at risk of rescission by FHWA if project does not advance to the Right-of-Way phase prior to 2021</td>
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<td>Dallas CD</td>
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<td>RTR, Local Contribution</td>
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<td>Riverfront Blvd from Cadiz Street to Union Pacific Railroad</td>
<td>Reconstr 6/8 Lane to 6 Lane with Bike, Pedestrian Improvements and Intersection Improvements</td>
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<td>IH 20 at Bonnie View Rd</td>
<td>Improve Approach, Widen Bridge to add Turn Lanes, and Replace Traffic Signal System</td>
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<td>RTR</td>
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<td>Omni Convention Hotel and Convention Center, and addition to traffic signalization</td>
<td>Pedestrian Improvements; Landscaping; and Traffic Signalization</td>
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<td>Collective Mixed Use Development</td>
<td>Bicycle Lanes, Sidewalks, Pedestrian and Intersection Improvements Bounded by Fort Worth Ave, Bahama Dr, IH 30, and Plymouth Road; and Connection to Coombs Creek Trail Along Plymouth Rd.</td>
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<td>Tre Crossing at Halton Rd</td>
<td>Upgrade to Quad Gates and Resurface Crossing</td>
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<td>Tre Crossing at Riverside Drive</td>
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<td>FORT WORTH</td>
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<td>RECONSTRUCT NORTHBOUND FRONTAGE ROAD AND EXIT RAMP SOUTH OF FM 3479</td>
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<td>US 82/US 287 FROM FM 3479 (HARMON ROAD) TO SOUTHBOUND ENTRANCE RAMP</td>
<td>CONSTRUCT TURNAROUND FROM NB TO SB AT NORTH TARRANT PARKWAY; RECONSTRUCT EXISTING SOUTHBOUND FRONTAGE ROAD FROM FM 3479 TO US 287</td>
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<td>CAT 2M</td>
<td>US 82/US 287 FROM NORTH OF FM 3479 TO NORTH OF IH 35W INTERCHANGE</td>
<td>CONSTRUCT AUXILIARY LANE FROM NORTHBOUND ENTRANCE FROM FM 3479 AND IH 35W TO NORTH TARRANT PARKWAY; AUXILIARY LANE FOR SOUTHBOUND EXIT TO FM 3479 AND ENTRANCE FROM NORTH TARRANT</td>
<td>10/2022</td>
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<td>LEBANON RD FROM COIT RD TO INDEPENDENCE PKWY</td>
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<td>1992 CALL FOR PROJECTS</td>
<td>3089</td>
<td>N/A</td>
<td>2020</td>
<td>GARLAND</td>
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<td>LOCAL CONTRIBUTION</td>
<td>CITY WIDE BOTTLENECK IMPROVEMENTS</td>
<td>FIRST AT AVENUE B/AVENUE D; BROADWAY AT IH 30; NAAUMAN SCHOOL RD AT SH 78; ARAPAHO AT SHILOH; BUCKINGHAM AT PLAN; BUCKINGHAM AT SHILOH; SHILOH AT BELTLINE; CENTERVILLE AT SH 66; FOREST AT SHILOH; FIRST AT MILLER; FOREST AT JUPITER</td>
<td>01/2020</td>
<td>$3,202,833</td>
<td>PROJECT ORIGINALLY FUNDED FEDERALLY AND WAS DEFEDEDALIZED THROUGH THE 2013-2016 TIP DEVELOPMENT PROCESS</td>
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<td>2020</td>
<td>GARLAND</td>
<td>GARLAND</td>
<td>RTR, LOCAL CONTRIBUTION</td>
<td>MGR BIKEWAY FROM JUPITER &amp; APOLLO TO SOUTH CITY LIMITS AT DUCK CREEK</td>
<td>CONSTRUCT BIKEWAY/TRAIL CONNECTING MESQUITE AND RICHARDSON, BRIDGE OVER DUCK CREEK, TRAIL CONNECTOR UNDER IH 30, DUCK CREEK GREENBELT, DUCK CREEK BRIDGE ADJACENT TO CENTERVILLE, ON/OFF STREET GLENBROOK/KINGS BRIDGE/APOLLO CONNECTOR, LINKS TO VELOWEB</td>
<td>01/2020</td>
<td>$3,620,086</td>
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<td>DECEMBER 2009 EMERGENCY RTR FUNDING CHANGES</td>
<td>20213</td>
<td>0918-47-051</td>
<td>2019</td>
<td>DALLAS CO</td>
<td>GRAND PRAIRIE</td>
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<td>WILDFIURE PARKWAY FROM SH 361 TO BELT LINE RD</td>
<td>CONSTRUCT 02 LANE RURAL TO 2/4 LANE DIVIDED INCLUDING BRIDGE OVER TRINITY RIVER</td>
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<td>11263.2</td>
<td>0902-48-645</td>
<td>2015</td>
<td>HALTOM CITY</td>
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<td>STBG, CAT 12(S), LOCAL CONTRIBUTION</td>
<td>UNION PACIFIC RAILROAD CROSSING AT NORTH HALTOM ROAD AND GLENVIEW DRIVE</td>
<td>INSTALL NON-TRANSVERSABLE MEDIANS ON NORTH HALTOM AND NON-TRANSVERSABLE MEDIANS AND OFF-SETTING FOUR QUADRANT GATES AT GLENVIEW DR</td>
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<td>11527</td>
<td>0581-02-124</td>
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<td>TXDOT-DALLAS</td>
<td>IRVING</td>
<td>SBPE, 5102, CAT 1, CAT 12</td>
<td>SL 12 AT SH 183</td>
<td>RECONSTRUCT INTERCHANGE (PH 2)</td>
<td>09/2020</td>
<td>$232,100,000</td>
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**SORTED BY CITY, THEN BY TIP CODE**

CPF: CALL FOR PROJECTS

RTC INFORMATION ITEM

DECEMBER 12, 2019
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<th>FUNDING INITIATIVE</th>
<th>TIP CODE</th>
<th>CSJ</th>
<th>FISCAL YEAR</th>
<th>IMPLEMENTING AGENCY</th>
<th>CITY</th>
<th>FUNDING CATEGORY</th>
<th>FACILITY/LIMITS</th>
<th>PROJECT SCOPE</th>
<th>ESTIMATED LET/START DATE</th>
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<th>COMMENTS</th>
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<td>CONSTRUCT 0 TO 4 LANE DIVIDED FACILITY WITH NEW SIDEWALKS AND SHARED USE PATH</td>
<td>02/2021</td>
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<td>2009 CONGRESSIONAL EARMARK</td>
<td>83219</td>
<td>0918-47-073</td>
<td>2018</td>
<td>IRVING</td>
<td>IRVING</td>
<td>CAT 10 (CONGRESSIONAL EARMARK)</td>
<td>IRVING BOULEVARD/2ND STREET FROM SOWERS ROAD TO LEE STREET</td>
<td>PLANNING AND IMPLEMENTATION STUDY FOR IRVING BOULEVARD/2ND STREET TO MOVE FROM TXDOT ON-SYSTEM TO CITY OF IRVING CONTROL; IMPLEMENTING COMPLETE STREETS THROUGH THE DOWNTOWN CORE</td>
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<td>$380,000</td>
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<td>0918-46-238</td>
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<td>CORPORATE DR FROM HOLFORD'S PRAIRIE RD TO ELM FORK TRINITY RIVER BRIDGE</td>
<td>CONSTRUCT FOUR LANE DIVIDED ROADWAY; SEGMENT 4</td>
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<td>CORPORATE DR FROM HOLFORD'S PRAIRIE RD TO FM 2281</td>
<td>CONSTRUCT FOUR LANE DIVIDED ROADWAY SEGMENT 5</td>
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<td>CORPORATE DRIVE FROM FM 544 TO JOSEY LANE</td>
<td>CONSTRUCT FOUR LANE DIVIDED ROADWAY SEGMENT 6</td>
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<td>0918-46-236</td>
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<td>CORPORATE DRIVE FROM ELM FORK TRINITY RIVER BRIDGE TO DUNO RR</td>
<td>CONSTRUCT FOUR LANE DIVIDED ROADWAY SEGMENT 2</td>
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<td>CORPORATE DRIVE AT ELM FORK TRINITY RIVER BRIDGE</td>
<td>CONSTRUCT FOUR LANE DIVIDED ROADWAY SEGMENT 3</td>
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<td>MESQUITE</td>
<td>MESQUITE</td>
<td>RTR, LOCAL CONTRIBUTION</td>
<td>MGR TRAIL AT MESQUITE CITY LIMITS NEAR DUCK CREEK TO MESQUITE HERITAGE TRAIL NEAR NORTHWEST DR</td>
<td>CONSTRUCT NEW HIKE/BIKE TRAIL FROM MESQUITE HERITAGE TRAIL TO CONNECTING MGR TRAIL IN GARLAND; CONNECTS ACROSS IH 30 AND DUCK CREEK</td>
<td>02/2020</td>
<td>$827,115</td>
<td>PROJECT RECENTLY BROKEN OUT FROM TIP 20261.2, BUT HAS THE SAME SCOPE AND THE FUNDING WAS AWARDED TO THE PROJECT IN 2008, THEREFORE, IT IS BEING INCLUDED IN THIS LISTING</td>
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<td>LAWSON RD FROM MILAM RD TO CLAY-MATHIS RD</td>
<td>WIDEN FROM 2 LANES TO 4 LANES</td>
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<td>PARKER ROAD AT COIT ROAD AND ALMA ROAD</td>
<td>ADD DUAL LEFT AND RIGHT TURN LANES</td>
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<td>PARK BOULEVARD FROM COIT ROAD TO JUPITER ROAD</td>
<td>INTERSECTION IMPROVEMENTS TO INCLUDE SIGNAL MODIFICATIONS, REMOVAL OF ROAD HUMP, MAXIMIZING LEFT LANE LENGTHS, RIGHT TURN LANES AND DUAL LEFT TURN LANES ALONG PARK BLVD AT COIT RD, CUSTER RD, ALMA DR, K AVE AND JUPITER RD</td>
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<td>LEGACY DRIVE FROM INDEPENDENCE PARKWAY TO K AVENUE</td>
<td>ADD RIGHT TURN LANES AND DUAL LEFT TURN LANES</td>
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<td>TOTAL FUNDING</td>
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<td>0495-01-064</td>
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<td>TERRELL</td>
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<td>LOCAL CONTRIBUTION</td>
<td>SP 557 AT LAS LOMAS PARKWAY (CR 305)</td>
<td>CONSTRUCT PHASE 1 (4-LANES) OF ULTIMATE 8 LANE BRIDGE PLUS CONNECTIONS TO LAS LOMAS PARKWAY</td>
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<td>FWTA</td>
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<td>CAT 12(S)</td>
<td>16 TRE GRADE CROSSINGS THROUGHOUT TARRANT COUNTY</td>
<td>UPGRADE CROSSINGS BY PROVIDING NEW CROSSING PANELS, NEW AND LONGER CROSSING ARMS, NEW RAILROAD SIGNALS, AND A NON-MOUNTABLE CURB MEDIAN</td>
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<td>$1,054,223</td>
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<td>2005-2006 PARTNERSHIP PROGRAM 3</td>
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<td>0902-90-034</td>
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<td>DFW AIRPORT</td>
<td>VARIOUS</td>
<td>STBG</td>
<td>EAST-WEST CONNECTOR FROM SH 360 TO RENTAL CAR DRIVE</td>
<td>CONSTRUCTION OF EAST-WEST CONNECTOR 0 TO 4 LANES DIVIDED URBAN</td>
<td>10/2019</td>
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<td>SBPE, S102, RTR</td>
<td>US 75 FROM NORTH OF CR 370 TO CR 375 (GRAYSON COUNTY LINE)</td>
<td>RECONSTRUCT AND WIDEN FROM 4 LANE TO 6 LANE FREEWAY AND RECONSTRUCT EXISTING 4 LANE TO 4/6 LANE FRONTAGE ROADS</td>
<td>08/2025</td>
<td>$27,000,000</td>
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**TOTAL** | | | | | | | | | | **$605,904,439** |
High Occupancy Verification Technology

RTC
December 2019

Natalie Bettger
Project Overview

Project Purpose:
Regional Transportation Council instructed staff to replace manual enforcement (self-declaration through Drive On TExpress app/website) with more advanced technology verification equipment.

Work Completed:
- Pilot Test on DFW Connector Corridor
  - 98.4% exact match in reported occupancy
  - 1.6% indicates an “over count”

Proposed Phases:
- Phase 1 – Managed Lanes
  - HOV Discount
  - Support for all managed lanes in DFW (LBJ, NTE, DFW Connector, IH 30, IH 35E and IH 635)
- Phase 2 and Beyond – Other Corridors, Modes, & Events
Current HOV Enforcement

Register

Pre-Declare Every Trip

Occupancy Declaration Sent to Field

Officers Watch for Red Light

Violation: Legal Process

Toll Collected

NTTA Back Office System for Billing
Proposed HOV Program

Register
Pre - Declare
Every Trip

Occupancy Declaration
Sent to Field

Officers Watch
for Red Light

Violation:
Legal Process

Toll Collected

NTTA Back
Office System
for Billing

Violation:
Legal Process
GoCarma
How it Works

Get the GoCarma App
Each person in the car has the GoCarma app on their phone.

Setup a GoCarma Pass
A small Bluetooth device that you keep in your car’s glove box.

Drive in a TEXpress Lane
The app automatically verifies the number of people in the car.

Earn HOV Discounts
Each HOV transaction will result in a discount being applied by NTTA.
Continue Monitoring through Implementation Process

- Technology Pilot
- Data
- US 75 Implementation
- Existing Enforcement
- Rewards Program / Accounting System
- Institutional / Legislative
- TxDOT Funding
- Communications Plan
Ramp Up to Implementation

Cooperative effort between:
- TxDOT/Transcore
- NTTA
- LBJE/NTE Mobility Partners

Back-office integration testing

Public education and outreach plan developed

Coordinated switchover schedule

Violation process

Customer service scenarios and business rules
<table>
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<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>December 2, 2019</td>
<td>December 2, 2019 – LBJ/NTE will begin communications with current TExPress Users and Partner Website Updates with GoCarma; 2nd Pre-Launch Meeting with Partners</td>
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<td>December 6, 2019</td>
<td>STTC Update Item</td>
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<td>December 12, 2019</td>
<td>RTC Update Item</td>
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<td>December 2019</td>
<td>Public Meeting</td>
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<td>January 6, 2020</td>
<td>GoCarma App Release</td>
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<tr>
<td>January 9, 2020</td>
<td>RTC Reminder – Director’s Report</td>
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<tr>
<td>January 10, 2020</td>
<td>3rd and Final Pre-Launch Meeting with Partners</td>
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<td>January 13, 2020</td>
<td>NCTCOG Press Release</td>
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<td>January 24, 2020</td>
<td>STTC Fast Fact</td>
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<tr>
<td>January 24, 2020</td>
<td>Go Live (focus on existing TExPress users)</td>
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<tr>
<td>February 13, 2020</td>
<td>RTC Update Item</td>
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<td>February 28, 2020</td>
<td>STTC Update Item</td>
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<tr>
<td>April 2020</td>
<td>Paid Outreach and Education (new recruitment)</td>
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Contacts

Natalie Bettger  
Senior Program Manager  
nbettger@nctcog.org  
817-695-9280

Dan Lamers  
Senior Program Manager  
dlamers@nctcog.org  
817-695-9263
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<td>Pat Deen (08/19)</td>
<td>Parker County</td>
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P= Present
A= Absent
R=Represented by Alternate
--= Not yet appointed

E= Excused Absence (personal illness, family emergency, jury duty, business necessity, or fulfillment of obligation arising out of elected service)
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Note: Date in parenthesis indicates when member was 1st eligible to attend RTC meetings

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Online input chance begins Dec. 9

The North Central Texas Council of Governments invites the public to review and provide comments online on a new way to receive peak-period managed lane discounts, the hyperloop certification center initiative and more transportation-related projects.

Information will be posted at www.nctcog.org/input for public review and comment December 9, 2019-January 7, 2020.

CALENDAR

December 4, 8:30 am
TRTC
Fort Worth Central Station
1001 Jones St.
Fort Worth, TX 76102

December 6, 1:30 pm
Surface Transportation Technical Committee
NCTCOG
Transportation Council Room
616 Six Flags Drive
Arlington, TX 76011

December 12, 1 pm
Regional Transportation Council
Transportation Council Room
616 Six Flags Drive
Arlington, TX 76011

VHO sets sights on location for certification center

Virgin Hyperloop One is searching for a home for a facility to serve as a certification center for its groundbreaking technology — and North Texas is interested. The company released a request for proposals in November asking for regions with a desire to welcome a facility.

Conceptual proposals are due to Virgin Hyperloop One by December 13. The North Central Texas Council of Governments is looking for ways to integrate high-speed transportation into the current transportation system to improve mobility as the region continues growing. Hyperloop and high-speed rail are two possibilities for moving people through Dallas-Fort Worth and throughout Texas. Texas Central Partners is working to bring high-speed rail to the Dallas-to-Houston corridor. A separate effort is underway to connect the rest of the region to high-speed rail. In October, NCTCOG released an RFP seeking a consultant to study high-speed options in the Dallas-Fort Worth corridor, including Arlington, Dallas and Fort Worth. Firms interested in the project face a December 13 deadline. A study of the Fort Worth-to-Laredo corridor is also being conducted, with a final report due in early 2020.

For more information about Local Motion topics, contact Brian Wilson at 817-704-2511 or bwilson@nctcog.org. Visit www.nctcog.org/trans for more information on the department.
Ozone season in North Texas concluded November 30, with the region continuing to pursue the federal government’s standards for clean air. The nonattainment area’s ozone concentration is 77 parts per billion, up slightly over last year’s 76 ppb, but still historically low.

NCTCOG is in pursuit of two standards: the 2008 standard of 75 ppb and the more stringent 70 ppb, set in 2015. North Texas has until 2021 to attain both standards.

Ten counties — Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, Tarrant and Wise — are in nonattainment for the 2008 standard. Nine counties are working to comply with the 2015 standard. Rockwall is not included.

In planning for the present and future transportation needs in North Texas, it is important to make sure health is not negatively impacted.

Dallas-Fort Worth has made significant progress to improve its air quality since 1998, when the design value was 102. The design value has steadily declined over the past two decades due to improvements in fuel efficiency and the efforts of NCTCOG and its partners to encourage clean air choices.

One way residents are empowered to contribute is through Air North Texas. This is NCTCOG’s public awareness campaign that encourages individuals, businesses and governments to make small changes to their routines. During Clean Air Action Day 2019, North Texans committed to take nearly 3,000 clean air actions to help improve air quality. For more information on NCTCOG’s efforts, visit www.airnorthtexas.org.

Trail of the Month series highlights Preston Ridge

NCTCOG is continuing its trail of the month focus in December, highlighting the Preston Ridge Trail, a 14.5-mile, north-south concrete facility that begins near Coit Road and Haymeadow Drive in Dallas, traversing northward up to Ridgeview Drive in Plano. A segment approximately a mile long is funded and will connect both the Dallas and Plano sections in the future.

NCTCOG is highlighting 12 bicycle-pedestrian trails as part of a monthly series that began this summer. The videos are being released on the first Friday of each month and are intended to help residents learn more about the many great trail systems in the Dallas-Fort Worth area.

Look for the release of the Preston Ridge Trail video December 6 and watch all the videos at www.nctcog.org/bikeweb.
DCTA renames station in honor of longtime chair

The Old Town Lewisville commuter rail station has been renamed for Charles Emery, the longtime Denton County Transportation Authority chair who was instrumental in the agency’s development.

It officially became the Charles Emery Old Town Station on October 29.

While serving as chair of the DCTA board for 18 years, Emery was heavily involved in the growth of the agency, including the expansion of DCTA’s footprint to include a commuter rail.

In 2011, the 21-mile A-train opened, connecting Denton County to the Dallas Area Rapid Transit Green Line in Carrollton. The A-train has stations in Denton, Highland Village and Lewisville in addition to connecting with DART in north Carrollton.

In addition to his almost two-decade run as DCTA chair, Emery was a member of the Regional Transportation Council for 15 years.

In 2002, 73% of the county’s voters approved the creation of DCTA. The following year, a half-cent sales tax was passed by Denton, Highland Village and Lewisville voters.

www.dcta.net

Texas LoanSTAR provides energy financing

The Texas LoanSTAR (Saving Taxes and Resources) Revolving Loan Program opened in October to provide low-interest loans to assist Texas public institutions by financing their energy-related, cost-reduction retrofit projects.

Loan recipients may be cities, counties, independent school districts, State agencies, public colleges and universities, and tax-supported public hospital districts. Loans are repaid through the cost-savings each recipient receives through retrofitting.

Entities with renewable energy efficiency projects are strongly encouraged to apply for funding through this new program. These can include the installation of rooftop solar water and space heating systems, geothermal heat pumps, and small wind and solar-thermal systems.

The deadline for submitting applications is August 31, 2020. For more information, visit www.comptroller.texas.gov/programs/seco/funding/101819/.

Clean fleets funding reopened for DFW

NCTCOG has reopened the Clean Fleets North Texas 2019 Call for Projects with approximately $700,000 available in grant funding. The deadline to apply for funding is February 14, 2020.

Eligible applicants include local governments and private companies that contract with local governments. Activities can include the replacement of on-road diesel vehicles and non-road diesel equipment, such as sweepers, crawler tractors, excavators and rubber tire loaders.

Funding levels are as follows:

- 45% for electric vehicles and equipment
- 35% for vehicles/equipment powered by an engine that meets the California Air Resource Board’s optional low-NOx standards
- 25% for all others

Visit www.nctcog.org/aqfunding for more information on this funding opportunity.
UAS workshops begin January 18

Unmanned aircraft system (UAS) devices are showing up faster than rules can be made for them. In North Texas alone, there are more than 20,000 unmanned aircraft systems registered.

The recent growth in this evolving field has brought these devices, also known as drones, to the masses, and safe operation for all those involved quickly became a top priority.

From professional operators to those who see drones flying near their home, it is becoming imperative that all North Texans be aware of the rules and regulations, best practices, and where to fly these devices.

NCTCOG is hosting the first of a series of drone workshops at 10 am January 18 at its Arlington offices, 616 Six Flags Drive.

Over the next two years, 12 free drone workshops will be held in a variety of locations across North Texas. For information on locations, times and dates, visit www.northtexasuas.com.

Attendees will learn the rules and regulations on how to register their drones, and tips on operation, including pre-flight planning and conducting a safe flight.

NCTCOG has been working with partners on issues related to this evolving technology. The workshops are currently being sponsored by various UAS industry stakeholders and are being supported by the North Texas UAS Safety and Integration Task Force.

The taskforce was organized to serve as an information "clearinghouse" for academia, public- and private-sector entities and the general public.

To address integration issues and carry out solutions, the task force has formed working groups focused on education and public awareness, legislation, training and integration.

Prepared in cooperation with the US Department of Transportation (Federal Highway Administration and Federal Transit Administration) and the Texas Department of Transportation. The contents of this report reflect the views of the authors who are responsible for the opinions, findings and conclusions presented herein. The contents do not necessarily reflect the views or policies of the Federal Highway Administration or the Texas Department of Transportation.