

The Senate Transportation Committee



**Interim Report
to the 89th Legislature**

December 2024

SENATE TRANSPORTATION COMMITTEE

SENATOR ROBERT NICHOLS

Chair

SENATOR ROYCE WEST

Vice Chair



SENATOR CAROL ALVARADO

SENATOR SARAH ECKHARDT

SENATOR KELLY HANCOCK

SENATOR PHIL KING

SENATOR BORRIS L. MILES

SENATOR TAN PARKER

SENATOR CHARLES PERRY

December 2024

The Honorable Dan Patrick
Lieutenant Governor
State of Texas
Capitol Building, Room 2E.13
Austin, Texas 78701

Dear Governor Patrick:

The Senate Transportation Committee of the Eighty-Eighth Legislature hereby submits its interim report for consideration by the Eighty-Ninth Legislature. We thank you for providing us the opportunity to address these important issues.

Respectfully submitted,

Handwritten signature of Robert Nichols in cursive.

Senator Robert Nichols, Chair

Handwritten signature of Royce West in cursive.

Senator Royce West, Vice Chair

Handwritten signature of Carol Alvarado in cursive.

Senator Carol Alvarado

Handwritten signature of Sarah Eckhardt in cursive.

Senator Sarah Eckhardt

Handwritten signature of Kelly Hancock in cursive.

Senator Kelly Hancock

Handwritten signature of Phil King in cursive.

Senator Phil King

Handwritten signature of Borris L. Miles in cursive.

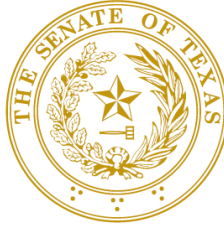
Senator Borris L. Miles

Handwritten signature of Tan Parker in cursive.

Senator Tan Parker

Handwritten signature of Charles Perry in cursive.

Senator Charles Perry



SARAH ECKHARDT

STATE SENATOR • DISTRICT 14

December 9, 2024

Senator Robert Nichols, Chair
Senate Committee on Transportation
Room 450
Sam Houston Building
201 East 14th Street
Austin, TX 78701

Re: Letter of Support for the Transportation Committee Interim Report to the 89th Legislature

Hon. Chair Nichols:

I am honored to serve on the Senate Transportation Committee. Thank you to you, my colleagues on the Transportation Committee, and the Committee staff for their diligent work on these important interim charge topics.

I am committed to ensuring that our state's transportation infrastructure remains robust and provides sufficient capacity to foster long-term economic growth. Doing this will require productive collaboration between federal, state, and local partners to provide the most effective, efficient, and fair policies for Texans.

I am proud to add my signature to this excellent interim report. I submit a few additional reflections and priorities that were of note to me during our interim hearing but not reflected in the report.

CAPITOL OFFICE:

P.O. Box 12068 • AUSTIN, TEXAS 78711-2068 • OFFICE: 512.463.0114 • FAX: 512.463.5949

sarah.eckhardt@senate.texas.gov



Charge 1: Transportation Funding

Transportation Safety

While this Committee's charge focused on meeting current demands and preparing for future growth for multimodal transportation, safety must remain among the highest priorities in transportation funding.

In 2023, 4,283 Texans lost their lives and 18,752 sustained serious injuries on Texas roads. Although congestion costs the state approximately \$19.9 billion each year, road safety far exceeds these costs, totaling approximately \$56.2 billion. While I support the report's recommendation to fund rail grade separations at highway-rail crossings, I believe additional multimodal safety investments must be considered.

In the 89th Regular session, we should consider ways to ensure TxDOT and our local partners (municipalities and counties) have both the tools and funding to make infrastructure improvements that reduce deaths on our roadways, including state funding sources for multimodal safety, sidewalks for on-system roadways, targeted investments on high-injury roadways, and recommendations from the Texas Statewide Active Transportation Plan. The next legislature's investments in safety must reflect our commitment towards ending the streak of at least one person dying every day on Texas roads since Nov. 7, 2000.

Public Transportation

The Interim Report notes that the state has not fully adjusted public transportation formula funding to account for 2020 Census impacts. In fact, TxDOT notes in their "Transportation of Texas Funding for Years 2024-2025" report that the legislature has never fully adjusted to 2010 census impacts, leaving the state below 2010 per capita funding levels for rural and urban public transportation programs. At a minimum, the legislature must appropriate the \$3.77 million requested by TxDOT to keep per capita funding levels constant with 2020 per capita spending.

The legislature should leverage federal transportation grants to make much-needed investments in modernizing our state's public transportation systems. This is particularly important for our rural transit and human service agencies, which often lack a consistent local funding source to use as matching funds. TxDOT requested \$25 million for rural transit agencies to use as part of the Federal Transit Administration Bus and Bus Facility discretionary grant program, which covers up to 90% of capital costs. The legislature must seize this opportunity to make generational investments in our rural communities for a fraction of what it will cost when funding expires in 2026.

TxDOT is expected to release the Statewide Multimodal Transit Plan in early 2025 and will begin developing an implementation plan to address needs and gaps in our current transit systems. The plan's success will ultimately rest on whether TxDOT has available non-dedicated funds to address the unmet needs of systems across Texas. The next legislature should ensure TxDOT has the flexibility in non-dedicated funds to spur much-needed investment in our urban and rural transportation systems. Additionally, the legislature must secure consistent, ongoing, and sufficient operations and maintenance funding for our rural transit and human service transit agencies.

Preparing for Future Growth

While the Committee has consistently advocated for and secured funding for multimodal investment through the appropriations process, we must acknowledge that the lack of flexible non-dedicated funds and reliance on federal grants is a significant barrier towards ensuring these modes are adequately prepared for future growth.

As TxDOT noted in their 2026-2027 Legislative Appropriations Request:

Traditionally, funding for multimodal projects over the last decade has remained stagnant, yet this has changed in recent years with the legislature appropriating TxDOT general revenue for some of TxDOT's multimodal exceptional items. This growing need creates a shortfall in flexible dollars. TxDOT must secure more flexible funding to support critical transportation initiatives and address the state's growing needs. Legislative backing is essential to bridge the funding gap and ensure the continued development and maintenance of all modes of transportation.

The next legislature should consider opportunities for dedicated and predictable formula funding sources for multimodal investments, and further study alternatives to the gas tax including a vehicle miles traveled tax, weight-based vehicle registrations, and other innovative funding sources.

Charge 4: The Future of Our Economy

The interim report correctly highlights the success of the National Electric Vehicle Infrastructure (NEVI) Formula Program, through which Texas is expected to receive \$407.8 million for FYs 2022-2026 for the installation, operation, and maintenance of EV charging infrastructure. This funding will be vital in preparing our transportation network for the economy of the future.

While future improvements may be beyond the scope of the Senate Transportation Committee, the next legislature should consider opportunities to address other barriers

to the widespread adoption of EVs including incentivizing the adoption of residential charging, updating residential building codes to ensure buildings are capable of EV charging, and preparing our state government for EV expansion.

I look forward to working with you and our colleagues on the Transportation Committee in the 89th Legislature to advance legislation that addresses these and other challenges.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'SEK' with a large, sweeping flourish extending to the right.

Sarah Eckhardt

Table of Contents

Interim Charges..... i
Senate Committee on Transportation Interim Hearings ii
Transportation Funding..... 1
Autonomous Vehicle Safety 9
Reviewing Historic Accomplishments in Transportation 11
The Future of Our Economy 15

Interim Charges

1. **Transportation Funding:** Assess the implementation of funding appropriated by the 88th Legislature for aviation, maritime ports, international points of entry, existing rail line operations, and public transportation from non-dedicated state funds and federal funds and make recommendations to ensure these sectors meet current demands and are prepared for future growth.
2. **Autonomous Vehicle Safety:** Evaluate autonomous vehicle operations, implementation, incident reporting, and accountability to law enforcement. Make recommendations to ensure public safety and transparency.
3. **Reviewing Historic Accomplishments in Transportation:** Review the implementations and outcomes of key transportation funding and policy initiatives since the 84th Legislature. Report on trends or patterns to guide future planning and governance.
4. **The Future of Our Economy:** Evaluate President Biden's plan to transition to all-electric vehicles and the impact on Texans and the state economy. Assess and report on the viability of the charging infrastructure, including the need for more charging stations and upgrades to the power grid, loss of gas tax revenue for transportation and public education, barriers to widespread adoption such as consumer costs for purchasing new vehicles and installing residential charging infrastructure, and the impacts to the oil and gas economy in Texas.

Senate Committee on Transportation Interim Hearings

September 18, 2024, Room E1.016

The Committee received invited testimony on Charge Nos. 1, 2, 3 and 4

The audio/video recordings, minutes, and witness lists for the above referenced hearings may be found online at: <https://www.senate.texas.gov/videoplayer.php?vid=20568&lang=en>

*Senate Committee on Transportation
Interim Report to the 89th Legislature
Interim Hearings*

Transportation Funding

Assess the implementation of funding appropriated by the 88th Legislature for aviation, maritime ports, international points of entry, existing rail line operations, and public transportation from non-dedicated state funds and federal funds and make recommendations to ensure these sectors meet current demands and are prepared for future growth.

Introduction:

The 88th Legislature authorized record levels of state and federal funding for numerous TxDOT-requested multimodal programs and projects.

The information below was provided by the Texas Department of Transportation at the September 18, 2024 Senate Committee on Transportation Interim hearing.

Transportation Funding – Aviation

The 88th Legislature appropriated an historic level of funding towards our state’s approximately 300 public-use general aviation airports, which serve critical functions and are owned primarily by either city or county governments.

Unlike larger commercial-service airports, such as DFW, Bush Intercontinental, or Austin-Bergstrom, these general aviation airports do not have regularly scheduled commercial flights or much ability to generate self-sustaining revenue. As such, they are generally more reliant on state and federal funding to support their maintenance and any major capital projects.

Before the 88th Legislature’s investment, state aviation funding had steadily hovered around \$40 million per biennium over the last 20 plus years. While TxDOT appreciated the predictability that this funding offered, its purchasing power had diminished because of inflation over time.

Under the General Appropriations Act passed during the 88th Legislative Session, TxDOT received an *additional* \$94 million in state funding over the biennium for airport development—

State Funding:

Non-dedicated SHF and TMF

- ACIP/RAMP Funding - **\$40 million**

General Revenue

- Exceptional Item for Additional ACIP/RAMP Funding - **\$94 million**
- Aviation Rider Projects - **\$58 million**
- State of Texas Flight Services Capital Improvements - **\$12 million**

Federal Funding:

- Federal Airport Improvement Program **\$58 million**
- Federal Infrastructure Investment and Jobs Act **\$35 million**

Aviation Programs:

Airport Capital Improvement Program (ACIP)

-Three-year Schedule of General Aviation Airport Development Projects

- Total Programmed Projects (2024-25)
 - FY 2024: **109**
 - FY 2025: **88**

Routine Airport Maintenance Program (RAMP)

-Maintenance and Small Capital Projects that require a Local Match of 10% (previously 50:50)
- State Maximum Participation: \$100,000 (previously \$50,000)

- Total Grants Executed in 2024: **224**
- 2025 Grants Budget: **\$10 million**

State of Texas Flight Services

-Maintenance and storage of the state’s aircraft fleet and state passenger services

this is on top of the \$40 million that the Legislature has historically allocated. Including federal funds, the Legislature invested approximately \$297 million during the 88th Legislative Session.

State aviation funding, usually referred to as the Aviation Facilities Development Program, supports two TxDOT aviation programs—the Aviation Capital Improvement Program, TxDOT’s plan for airport capital projects, and our Routine Airport Maintenance Program (RAMP).

The Aviation Capital Improvement Program (ACIP) is a tentative three-year schedule of general aviation airport projects across the state. It includes federal and state funding sources as well as local government funding from the airports’ sponsors. Estimated funding levels from all three sources are used by TxDOT staff to “program” specific airport projects over the next three Fiscal Years.

Since the appropriations bill was signed by the Governor, TxDOT has programmed all state aviation funding into the ACIP, obligated all Fiscal Year 2024 General Revenue (GR) funding, and anticipates obligating the remaining Fiscal Year 2025 General Revenue by Summer 2025. TxDOT must work extensively with an airport’s local government sponsor during the project development process as any state aviation grant requires at least a 10% local match under state law.

The Aviation Facilities Development Program also supports the Routine Airport Maintenance Program, or RAMP, which is a Transportation Commission-authorized program that provides yearly, reimbursable grants to general aviation airports for smaller maintenance projects. Although larger ACIP projects may receive some federal funding if an airport is part of the FAA’s national system of airports, RAMP is entirely reliant on state funding.

Before enactment of the increased state funding, RAMP provided 50% state/50% local cost-share grants to airports for maintenance projects. Each airport was eligible for up to \$50,000 of RAMP funding per year. As a result of the increased state funding, TxDOT was able to change the program rules to allow up to a 90% state/10% local cost-share. Furthermore, each airport is now eligible for up to \$100,000 in RAMP funding per year – instead of \$50,000.

These investments from the 88th Legislature are providing general aviation airports with more opportunity to access state grants to ensure that their runways are safe and well-maintained.

Transportation Funding – Rider-Funded Aviation Projects

During the 88th Session, six aviation projects were funded with General Revenue through budget riders outside of TxDOT’s regular project selection process. Of the \$58 million in airport budget riders in the appropriations bill, \$48 million has been awarded under grant by the Texas Transportation Commission.

- \$10 million is for the Sugar Land Airport and is anticipated to be under grant by Summer 2025.

In recent legislative sessions, the number of budget riders funding specific airport projects has increased. It is important to note that any aviation project, whether it is funded by rider or

through our ACIP project selection process, requires a 10% local match under state law before a grant can be awarded.

When TxDOT selects aviation projects for funding, it categorizes and prioritizes these projects based on four objectives in order of importance. Those objectives are: (1) enhance safety; (2) preserve existing facilities; (3) respond to present needs; and (4) provide for anticipated needs. Similar to the Unified Transportation Plan (UTP), which guides TxDOT's project selection for state highway projects, the ACIP guides the three-year schedule of general aviation airport projects.

With increased state funding and the support of the Legislature, TxDOT is working with local airport sponsors to develop shovel-ready projects and add more projects to the ACIP. These investments are critical to our state's airport system and economic development efforts in communities across Texas.

Transportation Funding – Rail

Funding for rail-related programs total \$66.4 million for the biennium.

- \$26.4 million – State
- \$40 million – Federal

One of the key programs TxDOT manages within its Rail Division is the Federal Railway-Highway Crossings Program, referred to as Section 130. The program helps improve the safety of both motor vehicle drivers and pedestrians at railway-highway intersections by funding safety improvements such as the installation of gates, signals, and warning devices for on-system or state-managed roadways.

Texas receives about \$20 million annually for this program as part of the federal Highway Safety Improvement Program (HSIP).

In addition to some of the other programs listed, such as for crossing improvements and signal maintenance, TxDOT received \$10 million this past Legislative Session to fund projects related to the Texas State Railroad. TxDOT entered into an Interagency Cooperation Contract (ICC) with the Texas State Railroad Authority (TSRA) in October of 2023, and those funds have since been transferred.

Rail Line

It's important to note that freight railroads in the U.S. are primarily privately funded. For context, Class 1 railroads invested over a billion dollars in Texas' rail network in 2023 alone. This investment covers expansion, track maintenance, equipment, and all infrastructure needed for railroad operations. With numerous rail yards, intermodal facilities, and rail industry operations in communities across Texas, the rail industry emphasizes partnering with the state and localities to ensure safety and maintain essential infrastructure.

Texas has experienced substantial economic and population growth, which has increased demand for industrial products, consumer goods, agricultural products, and automobiles—all of which

are moved by rail. More people means more volume on Texas railroads and greater population density around railroad facilities, which leads to congestion where rail infrastructure intersects public roadways. Congestion at highway-rail crossings frustrates motorists, reduces economic productivity, increases emissions from idling, and, most importantly, delays first responders. Texas alone has over 16,000 such crossings.

TxDOT has been working to solve these rail crossing problems on the state system.

An average grade separation costs around \$20 million to engineer, permit, and build. There are currently several federal discretionary grant programs the railroads are actively assisting our state and local governments in accessing. However, these funds are regionally focused and distributed nationwide, making them unreliable funding sources.

Public Transportation Funding

The 88th Legislature appropriated \$97 million of state funds and authorized \$349 million of federal funds, totaling \$446 million for rural and urban public transportation programs across the state.

House Bill 1 also appropriated \$3.77 million in general revenue for public transportation formula funding to adjust for the 2020 U.S. Census outcomes to keep per capita funding levels constant – this was only ½ of the total request.

- 36 rural, 24 small urban, and 9 large urban transit providers qualified to receive this funding.
- 14 Human Services and 24 Planning Lead Agencies

Examples of “Human Service” agencies that receive funds through the 5310 “Enhanced Mobility of Seniors and Individuals with Disabilities” Program include various types of non-profit organizations that serve the subject clientele, such as centers for independent living and MHMR organizations. Specific examples include: Mounting Horizons, Inc., and Coastal Bend Center for Independent Living.

TxDOT requires each region in the state to develop a coordinated plan for public transportation and human services transportation. TxDOT defined these regions according to the boundaries of the 24 Councils of Governments (COG) in Texas. In conjunction with this requirement, TxDOT also requires that each region establish a lead agency and designate a steering committee to guide and improve regional coordination in order to enhance service delivery, customer satisfaction, efficiency, and effectiveness and integrate systems-based and client-based approaches to transportation. Examples of Planning Lead Agencies include - South Plains Association of Governments, and Heart of Texas Council of Governments.

- 529 total grants are to be awarded during the 2024-2025 biennium – 224 in 2024 and 305 in 2025.

- The grant funding will go to programs that include Enhanced Mobility of Seniors and Individuals with Disabilities Programs and Public Transportation Emergency Relief Programs, just to name a few.

Maritime

The 88th Legislature appropriated a historic \$640 million to fund port and maritime projects in Texas.

Ship Channel Improvement Revolving Fund (SCIRF)

- The 88th Legislature capitalized the SCIRF for the first time with a historic \$400 million for the first time to help fund loans for projects.
- The SCIRF is used to finance projects to widen and/or deepen federally authorized ship channels through flexible, low-interest loans.
- Projects are taken from the Texas Port Mission Plan - Ship Channel Improvement Report and approved by the Texas Transportation Commission.
- Eligible projects must have prior congressional authorization.
- 2 ports are receiving the funding (all \$400M) – the Sabine-Neches Navigational District received \$357 million to deepen the Sabine Neches waterway from 40 feet to 48 feet. The Brownsville Navigational District received \$43 million to deepen the Brazos Island Harbor Channel from 42 feet to 52 feet.

Maritime Infrastructure Program (MIP)

- The 88th Legislature appropriated \$200 million for the first time to help fund “inside the gate” port capital projects.
- No port can receive more than 20% of biennium funding - these are grants.
- Projects are taken from the Texas Port Mission Plan - Texas Port Capital Investment Report and recommended by the Port Authority Advisory Committee (PAAC) and approved by the Texas Transportation Commission.
- Eligible projects must:
 - Show economic, environmental and engineering feasibility
- Project types include:
 - Equipment purchases
 - Dock improvements
 - Warehouse construction
- 12 projects have been awarded since September 2024

Seaport Connectivity Program (SCP)

- The 88th Legislature authorized up to \$20 million for the first time to help fund port connectivity (“outside the gate”) roadway improvement projects through Rider 37 in the General Appropriations Act.
- Ports must put up a 25% match - these are grants.
- Projects are taken from the Texas Port Mission Plan - Texas Port Connectivity Report and recommended by the PAAC and approved by the Texas Transportation Commission.
- The Port Connectivity Report assesses the current state of landside connectivity at 18 maritime ports along the Texas seacoast, summarizing conditions for rail, pipeline, and road systems serving the ports.
- The report focuses on roadway connections from the port gates to major freight corridors. Transportation conditions and needs are unique to each port. They can include issues as diverse as:
 - incompatible surrounding land uses, such as residential neighborhoods, schools, or hospitals that can be disturbed by truck traffic;
 - modal conflicts, for example routes with numerous at grade rail crossings; operational inefficiencies, such as heavy mixed traffic congestion;
 - insufficient facility design for the needs of freight operators, such as roads with tight turns that cause trucks to veer into oncoming traffic lanes.
- Landside port connectivity projects to:
 - Improve connectivity
 - Enhance safety
 - Relieve congestion
- Project types include:
 - Widening “last mile” roads to/from port
 - Adding truck queuing lanes and multimodal queuing areas
 - Intersection improvements
- 14 projects at 8 ports and 5 district wayfinding projects have been awarded.

Ports Industry

At the hearing Victor Martinez president of The Texas Ports Association (TPA) advocated for the collective needs of Texas seaports, which serve as gateways to the world. TPA represents 21 Texas ports, from the Port of Brownsville to the Port of Orange, each with its distinct commodities and customers.

Texas’ port system ranks first in the U.S. for total waterborne tonnage, handling 293.8 million short tons. It boasts the busiest waterways in the country, with a \$1.1 trillion economic impact on

the state. Texas is home to the largest container port on the Gulf Coast, the largest break bulk gateway, the leading energy export gateway, and the largest U.S. seaport by total revenue tonnage. Additionally, three Texas ports are designated as strategic military seaports by the Department of Defense, providing service deployment and worldwide distribution for military cargo. These economic engines work efficiently and in unison to benefit the state of Texas.

Important figures to note since 2018:

- The total tonnage has increased by 213.8 million tons.
- The total number of jobs supported by marine cargo activity has grown by 728,741 jobs, generating \$61.3 billion in direct revenue for Texas.
- State and local taxes from port activity has risen by \$9.3 billion, contributing to a \$264.3 billion increase in overall economic value and \$7.7 billion in direct revenue.
- The total economic value of Texas marine cargo activity has grown to \$713.9 billion.
- The contribution of Texas ports to the state's GDP rose from 25% in 2018 to 28% in 2023, generating \$17.1 billion in state and local taxes.

With the \$640 million investment in capital improvements from the 88th Legislative Session (explained above), including the Seaport Connectivity Program and the Ship Channel Improvement Revolving Fund (SCIRF), the return on investment will be even more substantial.

And as we look to the future, it's essential that Texas maritime ports not only meet current demands but also prepare for potential growth. TxDOT's LAR of \$1.2 billion in port funding reiterates the need for continued investment. This funding request represents shovel-ready projects that will immediately improve local economies and propel state growth.

International Ports of Entry

The information below was provided by the Texas Department of Transportation at the September 18, 2024 Senate Committee on Transportation Interim hearing.

Texas' 12 international ports of entry (POE), which include 34 border crossings, serve as a vital gateway for the movement of goods across the Texas-Mexico border.

It should be noted that almost all POEs are either privately owned or operated by local governmental entities and are not part of the state highway system, with the exception of the Presidio Texas Port of Entry, which is the only vehicular and pedestrian POE owned and managed by the state. Although the state also owns the South Orient Rail Line Crossing in Presidio, it is closed until the completion of the Presidio Border Rail Inspection Facility at the end of 2025. Because the POEs are off-system, TxDOT has very limited funds for POE projects.

The 88th Texas Legislature (Regular Session, 2023) appropriated \$20 million in general revenue under Rider 52 for the Pharr International Bridge located in Hidalgo County.

- This funding will contribute to the construction of a four-lane, twin-span bridge.

- On August 28, 2024, an Advanced Funding Agreement (AFA) was signed between TxDOT and the City of Pharr for such improvements to the bridge.

Recommendations:

Rail: During the 89th legislature the committee should further investigate rail grade separations. Rail grade separations at highway rail crossings improves safety, emergency response times, economic productivity, congestion mitigation, evacuation routing, and supply chain fluidity for critical locations in Texas.

Ports: Texas Ports are critical to the economic growth of the state and are key components of the Texas Transportation system. The committee recommends continued investment in Texas Ports.

Aviation: While the 88th Legislature funded aviation projects at an all time record high, doing so was only to keep up with a huge backlog of projects. The committee recommends continued investment in Texas Aviation Projects.

Autonomous Vehicle Safety

Evaluate autonomous vehicle operations, implementation, incident reporting, and accountability to law enforcement. Make recommendations to ensure public safety and transparency.

Background:

Since Texas enacted its Autonomous Vehicle (AV) law seven years ago, the state has become the center of the autonomous trucking industry in the United States. In Texas, AV companies have established commercial partnerships with major brands including Kroger, Georgia Pacific, Pitney Bowes, and IKEA, among others. Additionally, Texas is seeing new investment from the expansion of autonomous passenger services, which improves road safety and expands mobility options for citizens unable to obtain a driver's license. As the industry has evolved over the last seven years, other states have also developed their own AV frameworks.

Targeted updates to the 2017 Autonomous Vehicle (AV) law are much needed. According to Ariel Wolf with the Autonomous Innovation Alliance (AVIA), several states, such as Arizona, have incorporated additional safety and regulatory measures into their AV frameworks. AVIA has recommended several adjustments to current AV laws, including:

- First, a proposed adjustment that would allow the DMV to suspend or revoke the registration of an autonomous vehicle in certain circumstances. This can be implemented with modest modifications to Texas's AV law.
- Second, provide the DMV with the ability to review AV registrations to ensure that applicable requirements are met. These processes would apply to all AVs regardless of vehicle class or use case.
- Third, to accommodate AVs that operate as transportation network companies, we suggest expressly legislating that an on-demand autonomous vehicle network company to operate. For context, these concepts would mirror established processes as noted in Arizona, Pennsylvania and some other states.
- A process by which the DMV would obtain information about AVs that are going to be put online to ensure that all applicable requirements are met. Similarly Arizona which utilizes a review and authorization process, to provide approval on criteria that in part already exists in the law, to certify participants.
- Additionally, some states have added a first responders interaction plan as well as a certification for minimal safety standards to essentially certify that the vehicle is able to achieve a minimal risk condition.

Auto manufacturers were one of the loudest voices and leading proponents for passage of the law that created the basic framework to allow for AVs to operate on roads in Texas, which also provided regulatory certainty.

According to testimony from Nick Steingart with Alliance for Automotive Innovation (AAI), the AV law from 2017 really put the state of Texas at the forefront of innovation and investments in this emerging industry. In the years since its passage, at least 17 companies have deployed or tested on roads here in Texas, ranging from autonomous trucking to AV startups as well as

traditional automakers. The motivating factor behind the development of the autonomous vehicle is that roads are simply too dangerous. In 2022, 42,514 people died in a motor vehicle accident, according to National Highway Traffic Safety Administration (NHTSA).

Suggestions from AAI at the September hearing included:

- Maintain and keep the roles of the federal government and the state government separate and clarify issues as needed. Continue federal government oversight of vehicle design, construction, and safety standards under the Federal Motor Vehicle Safety Standards (FMVSS) .
- That the state government has oversight of operation of the vehicle.
 - Including licensing, regulation, registration, enforcement, and rules of the road.
- Personally owned vehicles be excluded from any certification or authorization process.
- Finally, balance public safety and public confidence.

Conclusion:

Texas is a leader in AV testing and deployment, fostering economic growth and job creation. The Texas approach is a proven success story, and we want to ensure that this progress moves forward while continuing to address issues that arise and update the framework accordingly. There is a need to balance safety concerns with the potential benefits of AV technology. The federal government's role in vehicle design and safety standards should be maintained, while the state focuses on operational regulations. Personally owned AVs may be excluded from any new authorization processes.

Recommendations for additional legislation include:

- * DMV and DPS work in conjunction and are authorized to suspend/revoke AV registrations.
- * DMV review of AV registrations for compliance.
- * Explicit legislation for on-demand “TNC” AV network companies.
- * Clarification of federal and state roles in AV oversight.
- * Exclusion of personally owned AVs from authorization processes.

Reviewing Historic Accomplishments in Transportation

Review the implementations and outcomes of key transportation funding and policy initiatives since the 84th Legislature. Report on trends or patterns to guide future planning and governance

Introduction:

Much has happened since the 2014 passage of Proposition 1 and Proposition 7 that has put Texas in an enviable spot today – allowing Texas to be a leader in transportation funding and solutions among DOT’s across the nation.

Over the past 10 years, as funding has increased because of the policies of the Texas Legislature, TxDOT has seen record-setting revenues with Propositions 1 and 7, which has led to record programming levels, lettings, project awards, and contractor payments.

The information provided below was provided by the Texas Department of Transportation at the September 18, 2024 Senate Committee on Transportation Interim hearing.

Transportation Funding Timeline

Proposition 1 was passed by an overwhelming majority of Texas voters on November 4, 2014, authorizing a constitutional amendment for transportation funding. This was passed with the approval of 80% of the voters at a time when the Unified Transportation Program (UTP) was \$33.7 billion.

Then in 2015, 83% of Texas voters approved a ballot measure known as Proposition 7, at which time there was \$34.5 billion in the UTP.

Proposition 1 and Proposition 7 funding originally had sunset dates of August 31, 2032, and December 31, 2034. The legislature extended Propositions 1 and 7 for an additional 8 and 10 years, respectively, in 2023.

Propositions 1 and 7 comprise 40% of TxDOT’s total funding sources in TxDOT’s LAR and 47% in the 2025 10-year UTP that is focused on our construction project awards. Texas exceeded \$100 billion for the first time in the 2024 UTP. This past August, the Transportation Commission approved a UTP that exceeded \$100 billion again with a \$104.2 billion 2025 UTP, representing an over 200% increase from the 2014 UTP. These historic investments are due in large part to historic levels of funding associated with Propositions 1 and 7.

Proposition 1

- Proposition 1 has contributed to significant deposits into the State Highway Fund, totaling \$16.4 billion. The latest deposit amounted to \$3.06 billion.

- Proposition 1 deposits to the State Highway Fund fluctuate from year to year because they depend on annual oil and natural gas production. The table below shows Proposition 1 transfers to the SHF from FYs 2015-2024.

Fiscal year	Deposits to SHF	Total deposits to date
2015	\$1.74 billion	
2016	\$1.13 billion	
2017	\$440 million	
2018	\$734 million	
2019	\$1.38 billion	
2020	\$1.67 billion	
2021	\$1.13 billion	
2022	\$1.46 billion	
2023	\$3.64 billion	
2024	\$3.06 billion	\$16.4 billion

Proposition 7

- Proposition 7, despite the deposit transfers not occurring until 2018, has exceeded Proposition 1, totaling \$19.4 billion.
- The 88th Legislature (Regular Session, 2023) passed Senate Concurrent Resolution 2, which extended both funding components of Proposition 7 – sales and use tax and motor vehicle sales and rental tax revenues – for ten years beyond their original expiration dates. The state’s sales and use tax transfers into the State Highway Fund will be extended through August 31, 2042, while the motor vehicle sales and rental tax portion will be extended through August 31, 2039.

Fiscal Year	Deposits to SHF	Total Deposits to Date
2018	\$939 million	
2019	\$4.061 billion	
2020	\$2.5 billion	
2021	\$2.7 billion	
2022	\$2.99 billion	
2023	\$3.12 billion	
2024	\$3.13 billion	\$19.4 billion

UTP Funding

- The Unified Transportation Plan (UTP) has seen an almost 210% increase since 2014. TxDOT recently adopted UTP reaching \$104.2 billion in estimated construction costs for projects over the next ten years.
- Federal funds are the largest single source of funding for the Department at 30%, Propositions 1 and 7 collectively comprise 40% of TxDOT’s funding and when taken together, they are the largest source of funding.
- This is significant because our state funding exceeds federal funding – a rarity for state DOTs, which reduces our reliance on federal funding.

Project Delivery

- In 2014, TxDOT had \$17 billion in projects under construction in the core design-bid-build program.
- Today, that number is \$54 billion in total highway construction contracts.
- These historic funding levels, have driven historic numbers in lettings, active contracts, and planning dollars for transportation projects
- In 2024, TxDOT set a record with \$13.63 billion in new highway improvement contracts.

2025 UTP

Category and Description	Draft 2025 UTP New Available Funding	Draft 2025 UTP Distribution
1 Preventive Maintenance & Rehabilitation	\$2,916,751,355	\$18,667,880,000
2 Metro and Urban Corridor Funding	\$1,767,064,127	\$11,487,980,409
4R Statewide Connectivity (Rural)	\$1,977,141,042	\$11,318,177,679
4U Statewide Connectivity (Urban)	\$2,037,169,692	\$8,748,686,475
5 Congestion Mitigation and Air Quality	\$230,821,377	\$2,322,790,000
6 Bridge	\$576,000,000	\$4,681,612,746
7 Federal Metropolitan Mobility	\$861,081,270	\$6,041,345,275
8 Safety	\$372,390,477	\$3,747,421,009
9 Transportation Alternatives	\$205,562,325	\$1,769,509,408
10 Supplemental Transportation Projects	\$462,920,078	\$1,534,275,585
10CR Carbon Reduction Program	\$133,337,440	\$1,077,417,167
11 District Discretionary	\$629,429,675	\$2,240,000,000
11ES Energy Sector	\$350,981,513	\$2,714,115,000
11SF District Safety	\$242,129,363	\$1,191,932,030
12 Strategic Priority	\$1,178,000,000	\$14,025,958,943
12CL Strategic Priority (Texas Clear Lanes)	\$600,000,000	\$6,000,000,000
Sub-Total Distribution (Less Cat 3)	\$14,540,779,734	\$97,569,101,726
3 Non-traditional (SUBJECT TO CHANGE)		\$6,604,813,383
Total Estimated UTP Funding		\$104,173,915,109
Estimated Development Costs		\$34,700,000,000
Estimated Routine Maintenance Contracts		\$9,000,000,000
Total 10-Year Estimated Investment in Projects		\$147,873,915,109

Yearly Contractor Payments

- TxDOT’s contractor payments have seen a steady increase over the years, except during COVID, reflecting a surge in construction and maintenance activities across the state.
- These payments include various categories: construction, major maintenance, routine maintenance, and design-build projects.

Multimodal Investment

- In addition to the increased funds in roadway maintenance and improvements across the state, last session The 88th Legislature allocated funding for various multimodal purposes.
- The Legislature invested in aviation of \$297 million in state and federal funds almost doubling the previous biennium appropriations.
- The Legislature first-time direct investments in maritime infrastructure and ship channel improvement with over \$600 million in investments to Port Capital Projects, Ship Channel Widening and Deeping Projects, and Port Connectivity Projects.

Transportation Policy Timeline

- In 2015, the passage of HB 20 provided a framework for performance-based funding, project selection decision making and a 10% Commission discretion cap.
- In 2017, we saw an important safety measure put into place with HB 62, the ban on texting and driving.
- In 2017, the legislature passed the TxDOT sunset bill. TxDOT next undergoes the Sunset review process in 2028-2029.
- In 2019, SB 537 was passed, an important bill for first responders. It allows for food and drink purchases for TxDOT's emergency responders during these emergencies.
- In 2021, the legislature passed another important safety measure in HB 3282, which allows TxDOT District Engineers to have speed limit authority in temporary work zones.
- In 2023, HB 1885, Variable Speed Limits was passed.
- Finally, SB 1021, also passed in the 88th Legislative Session, increased the local letting cap from \$300,000 to \$1 million allowing more efficient delivery on local projects.

The Future of Our Economy

Evaluate President Biden’s plan to transition to all-electric vehicles, and the impact on Texans and the state economy. Assess and report on the viability of the charging infrastructure, including the need for more charging stations and upgrades to the power grid, loss of gas tax revenue for transportation and public education, barriers to widespread adoption such as consumer costs for purchasing new vehicles and installing residential charging infrastructure, and the impacts to the oil and gas economy in Texas

Background:

The information below was provided by the Texas Department of Transportation at the September 18, 2024 Senate Committee on Transportation Interim hearing.

The Infrastructure Investment and Jobs Act (IIJA), was signed into law by President Biden on November 15, 2021. The law authorizes \$1.2 trillion for transportation and infrastructure spending with \$550 billion of that figure going toward “new” investments and programs. Funding from the IIJA is expansive in its reach, addressing energy and power infrastructure, access to broadband internet, water infrastructure, and more. Some of the new programs funded by the bill such as the National Electric Vehicle Infrastructure could provide the resources needed to advance the development of Electric Vehicles.

National Electric Vehicle Infrastructure Formula Program

Establishes a National Electric Vehicle Infrastructure Formula Program (“NEVI Formula”) to provide funding to states to strategically deploy electric vehicle (EV) charging infrastructure and to establish an interconnected network to facilitate data collection, access, and reliability.

Pre-Apportionment Set-asides

- For Fiscal Year 2022 (FY22) only, sets aside up to \$300 million, which may be transferred to the Joint Office of Energy and Transportation (Joint Office), to establish such Joint Office and carry out its duties.
- For each of FY22-26, after the set-aside listed above, sets aside 10% of NEVI Formula funding for grants to states and local governments that require additional assistance to strategically deploy EV charging infrastructure.
- Allows FHWA to use up to 1.5% of annual NEVI Formula funds for FHWA’s operations and administration.

Apportionment of Funds

- Directs FHWA to apportion NEVI Formula funding among states (including the District of Columbia and Puerto Rico) on a formula basis. Under the formula, each state receives a share of program funding equal to the state’s share of the combined amount that FHWA distributes in—
 - Federal-aid highway apportionments; and
 - Puerto Rico Highway Program funding.

- NEVI Formula funds will not be made available to a State for obligation until the State has submitted to the Joint Office of Energy and Transportation, and FHWA has approved, the State’s Electric Vehicle Infrastructure Deployment Plan.

Redistribution of Funding

- Allows the Secretary to—
 - withhold (or withdraw) funding from a state if the state fails to submit to the Department by a date specified by the Secretary its plan for use of NEVI Formula funding, or if the Secretary determines that a state has not taken action to carry out its plan; and
 - through a competitive process, award funds withheld (or withdrawn) from a State to local jurisdictions in the same state, for use on eligible projects.
- Provides for a notification, rectification, and appeal process in connection with any such withholding (or withdrawal) of NEVI Formula funding.
- If the Secretary determines that withheld or withdrawn funds cannot be fully awarded to local jurisdictions in the same state, directs the Secretary to redistribute any remaining funds—
 - among other states via the same formula used in the initial apportionment; except
 - excluding from that redistribution States from which NEVI Formula funds have been withheld or withdrawn for that fiscal year.

Transferability to Other Highway Formula Programs

- Prohibits the transfer of NEVI Formula funding to other highway formula programs.

Federal Share

- 80%

Eligible Projects

- Limits NEVI Formula funding to use on projects that are directly related to the charging of a vehicle and only for EV charging infrastructure that is open to the public or to authorized commercial motor vehicle operators from more than one company.
- Directs the Secretary of Transportation, in coordination with the Secretary of Energy, to develop guidance for states and localities to strategically deploy electric vehicle charging infrastructure, which must consider:
 - the distance between publicly available electric vehicle charging infrastructure;
 - connections to the electric grid, including electric distribution upgrades; vehicle-to-grid integration, including smart charge management or other protocols that can minimize impacts to the grid; alignment with electric distribution interconnection processes, and plans for the use of renewable energy sources to power charging and energy storage;
 - the proximity of existing off-highway travel centers, fuel retailers, and small businesses to electric vehicle charging infrastructure acquired or funded with NEVI Formula funding;

- the need for publicly available electric vehicle charging infrastructure in rural corridors and underserved or disadvantaged communities;
 - the long-term operation and maintenance of publicly available electric vehicle charging infrastructure to avoid stranded assets and protect the investment of public funds in that infrastructure;
 - existing private, national, State, local, Tribal, and territorial government electric vehicle charging infrastructure programs and incentives;
 - fostering enhanced, coordinated, public-private or private investment in electric vehicle charging infrastructure;
 - meeting current and anticipated market demands for electric vehicle charging infrastructure, including with regard to power levels and charging speed, and minimizing the time to charge current and anticipated vehicles; and
 - any other factors, as determined by the Secretary of Transportation. [fourteenth and fifteenth provisos]
- Subject to minimum standards and requirements to be established by the Secretary of Transportation, in coordination with the Secretary of Energy and in consultation with relevant stakeholders [eighteenth proviso], NEVI Formula funding may be used for—
 - the acquisition and installation of electric vehicle charging infrastructure to serve as a catalyst for the deployment of such infrastructure and to connect it to a network to facilitate data collection, access, and reliability;
 - development phase activities relating the acquisition or installation of electric vehicle charging infrastructure;
 - operating assistance for costs allocable to operating and maintaining EV charging infrastructure acquired or installed under the program (for up to 5 years);
 - acquisition or installation of traffic control devices located in the right-of-way to provide directional information to EV charging infrastructure acquired, installed, or operated under the NEVI Formula program, and on-premises signs providing information about such infrastructure;
 - mapping and analysis activities to evaluate current and future demand for EV charging infrastructure; and
 - data sharing about EV charging infrastructure to ensure long-term success of investments under program. [first and seventeenth provisos]

Project Features

Location of Projects on Designated Corridors

- Requires that any EV charging infrastructure projects acquired or installed with NEVI Formula funding be located—
 - in general, along a designated alternative fuel corridor; or [thirteenth proviso]
 - if a State determines, and the Secretary certifies, that all designated alternative fuel corridors in a State are fully built out, on any public road or in other publicly accessible locations.

State Plan for Use of Funding

- Requires the Secretary to—
 - establish plan requirements and a deadline by which each State must submit a plan to the United States Department of Transportation (DOT) describing how the State intends to use NEVI Formula funds distributed to it each FY; and
 - develop, make publicly available, and submit to Congress a report summarizing the plan that each State has submitted to DOT, and assessing how such plans make progress towards the establishment of a national network of EV charging infrastructure.

Involvement of Private Entities

- Allows funds to be used to contract with private entities to acquire and install publicly accessible EV charging infrastructure and permits private entities to pay the non-Federal share of a project funded under the NEVI Formula program.

Designation of EV Corridors for Freight

- Requires DOT to designate national EV charging corridors that identify the near- and long-term need for, and the location of, EV charging infrastructure to support freight and goods movement at strategic locations—
 - along major national highways and the National Highway Freight Network; and
 - at goods movement locations, including ports, intermodal centers, and warehousing locations

What TxDOT is Doing

With TxDOT as a passthrough entity for the state, Texas will receive \$407.8 million in FY 2022-2026 – with \$60.4 and \$86.8 million apportioned for FY 2022-23 – for NEVI.

The NEVI program is 80 percent federally funded with a required 20 percent match from grant recipients. Federal funds will be available to grant recipients for 5 years for operations and maintenance.

TxDOT will provide federal grants to third-party entities for the installation, operation, and maintenance of EV charging infrastructure under the Texas plan.

- Third-party grant recipients will be responsible for the 20 percent required match under the Texas program.
- Costs incurred before a grant is awarded are not eligible for reimbursement.
- No state funds will be used for the 20 percent required match.
- TxDOT will not own or operate any charging equipment or charging stations.

NEVI funds must first go towards designated alternative fuel corridors (AFCs) along public roads, to establish a national network of charging and fueling infrastructure along the national highway system corridors.

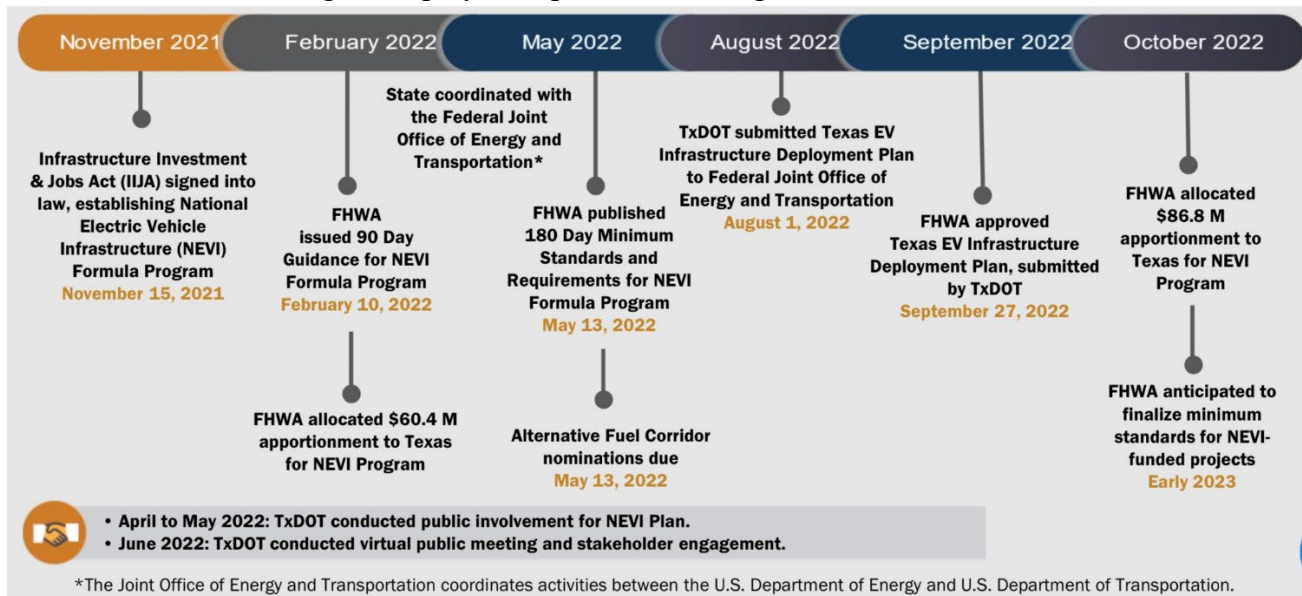
In September 2022, the Federal Highway Administration (FHWA) approved the statewide EV Infrastructure Deployment Plan submitted by TxDOT, authorizing TxDOT to receive funds to administer the NEVI Program.

The Texas Commission on Environmental Quality and the Texas Comptroller of Public Account’s State Energy Conservation Office partnered in the development and approval of the Texas EV Infrastructure Deployment Plan, as required by FHWA.

Texas EV Infrastructure Deployment Plan addresses:

- Charging infrastructure deployment in rural and urban areas;
- Existing and future conditions;
- Contracting, implementation, and program evaluation;
- State agency coordination; and
- Public involvement.

Below is a chart outlining the deployment plan and funding timeline.



NEVI Program — Deployment Plan Outreach

NEVI guidelines required public involvement to include the public, government entities, federally recognized tribes, public transportation agencies, private industry, and other stakeholders. Over the last year, TxDOT conducted listening sessions with numerous companies in various industries and sectors to gain insight and recommendations for the Texas Plan.

In March 2022, TxDOT published a dedicated NEVI webpage, statewide planning maps, and stakeholder engagement tools. TxDOT continues to work with various state agencies including the Texas Department of Motor Vehicles, Public Utility Commission, Electric Reliability

Council of Texas, Texas Department of Licensing & Regulation, Texas Department of Emergency Management, and Texas Parks & Wildlife Department.

NEVI Program — Deployment Plan & Contracting Details

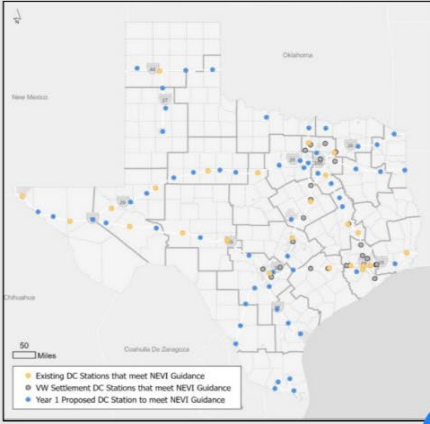
TxDOT will administer a competitive grant program to award to third parties. TxDOT is working to develop scoring criteria for applicants, based on FHWA’s minimum standards and requirements for NEVI-funded projects. TxDOT will not own or operate the EV charging equipment funded through NEVI. Sites will be owned and maintained by third parties selected during the contracting process.

NEVI grant recipients must:

- Secure host agreements on private property for siting;
- Ensure charging sites are open to the public for charging 24/7;
- Set competitive rates for station users; and
- Provide quarterly usage reporting to TxDOT

NEVI Program — Deployment Plan Phases

- **EV Infrastructure Plan – Phase 1: Alternative Fuel Corridor (AFC) Deployment**
 - Focuses on interstate highway routes.
 - Must be sited every 50 miles along corridors and 1 mile from highway exits – totaling around 55 sites with 4 to 8 charging “plugs” per site.
 - Charging infrastructure must be built along AFCs before funds can be directed to other parts of the state.
 - \$60.4 million in funding will be provided to complete Phase 1.
 - **Projected around 46-megawatt maximum power draw from the grid.**
- **Phase 2 & 3: Non-AFC Highway and Metropolitan Planning Organization (MPO) Jurisdictional Deployment**
 - Will include around 190 rural county seat locations for siting – totaling over 1,000 plugs.
 - MPOs will determine the location and number of fast- and medium-charge equipment within their boundaries.
 - **Projected around 620-megawatt max power draw from the grid.**



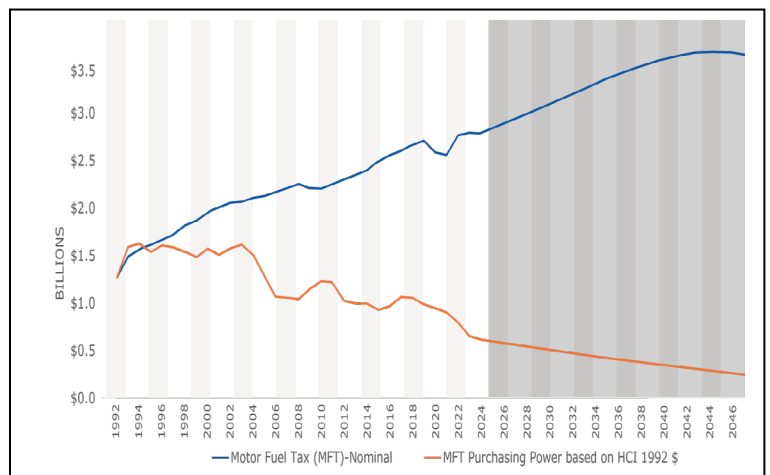
NEVI Program Updated Information from Chart above

- An additional 35 study areas are currently open for applications as of September 16, 2024. Applications for these additional 35 study areas will close on October 28, 2024.
- TxDOT anticipates spending approximately \$75M to complete Phase One
- The minimum requirement for service areas includes 4-port installations with each delivering at least 150kW of power.
- The estimated max power draw from the grid for Phase One is 57 megawatts.
- When the 85 study areas in Phase One (50 original + new 35) are complete, submit request to FHWA for a "buildout complete" designation on the alternative fuel corridors.

- Once approved, TxDOT will then move on to Phase Two.
- Phase Two will build upon Phase One with a focus on rural counties, small urban areas, and additional needs within Metropolitan Planning Organizations (MPOs).
 - Includes focus at or near county seats, and
 - Higher vehicle miles traveled (VMT) locations.
- TxDOT anticipates that Phase Two rollout for applications will occur later in 2025.
- The estimated total theoretical max power for the NEVI program is 667 megawatts.

State Gas Tax Revenue

- From 2014 to 2023, the state gas tax revenue rose from \$2.42 billion to \$2.82 billion, but when you look at these numbers with inflation and rising costs in mind, the purchasing power of gas tax dollars has actually eroded.
- As noted, Texas’ motor fuels tax has remained the same since 1991 at 20 cents per gallon total, with 15 cents going to the State Highway Fund and five cents to the Available School Fund. This has remained unchanged since 1991.
- Similarly, the federal motor fuels tax has remained at 18.4 cents per gallon of gasoline since 1993.



Electric Vehicle Road User Fee Revenue – SB 505, 88R (2023)

- Senate Bill 505 aims to address transportation funding gaps through a state electric vehicle registration fee of \$400 for new vehicles at the time of new electric vehicle registration and an ongoing yearly registration fee of \$200.
- These fees apply to EVs weighing 10,000 pounds or less and statute has designated the Texas DMV to collect the registration and renewal fees.
- After collection, the fees are then deposited into the State Highway Fund.
- One thing to note: as of 2023, Electric Vehicles made up less than 1% of vehicles registered in Texas.

So, while these revenues will work to offset funding gaps experienced by the state given reductions in motor vehicle gas tax buying power, we will need to see a greater increase in registered EVs to notice the estimated and anticipated impact.

ERCOT

In November 2022, Electric Reliability Council of Texas (ERCOT) provided testimony to the Senate Business and Commerce Committee regarding the adoption of electric vehicles. In 2022, EV charging represented 0.2% of all electric energy. At that time the 2029 estimate showed a growth of EV charging to expand to 1.25%. This represented approximately 900 megawatts of EV charging load at the ERCOT coincident peak load hour.

In testimony given by Jeffrey Billo from ERCOT, updated estimates now show that the estimate for 2029 EV charging will represent 0.9% of total annual demand. The EV charging load at the ERCOT coincident peak hour for 2029 is now estimated to be 744 megawatts.

As it stands today for the year 2024, ERCOT estimates show that EV charging this year will represent about 0.2% of all electric energy on the system.

Key Takeaways:

TxDOT will continue to manage the NEVI program's implementation, focusing on completing Phase 1 and preparing for Phase 2. The private sector is responsible for securing host agreements, constructing, owning, operating, and maintaining EV charging stations and setting competitive rates.

ERCOT projects a substantial increase in EV charging demand by 2039, requiring grid infrastructure upgrades. Current estimates show that EV charging will represent 0.9% of total annual demand by 2029 and 6.5% by 2039.