



PO BOX 66532, HOUSTON TX 77266-6532

October 26, 2017

TxDOT Freight Plan and International Trade Section
125 E. 11th St.
Austin, TX 78704
512-936-0961
TxDOT_Freight@txdot.gov

Attn: Kale Driemeier; kale.driemeier@txdot.gov

Texas Freight Mobility Plan 2017 – Draft Comments of Citizens' Transportation Coalition

The Citizens' Transportation Coalition (CTC) submits the following comments and recommendations to TxDOT's Draft Freight Mobility Plan 2017.

About the Citizens' Transportation Coalition

Citizens Transportation Coalition is a Houston-based, 501(c)(3) all-volunteer, nonprofit multi-modal transportation organization founded in 2004, which advocates for most the effective transportation infrastructure, expenditures, processes, and solutions that improve access to mobility and quality of life for all.

Our organization has submitted extensive written comments for topics ranging from major federal aid and state highway and transit projects, UTP and H-GAC TIP program inclusions and other funding plans, public participation and notice and comment procedures, sunset provisions, toll road proposals and financial structures, rulemakings, environmental impact statements, and appurtenant projects such as development of local street paving design standards, local flooding and drainage standards, to alternate transportation mode plans such as the Houston Bike Plan.

Certain key principles drive our analysis of transportation plans and many of those line up with the goals of FAST: fix it first, safety, investment in multi-modes including freight rail, and application of performance standards for transportation dollars.

Summary

The Draft Plan is a very well researched from a current state factual basis, but it lacks discussion of certain key definitions, issues, and events that we think should be included in, or explained further, in this plan. CTC hopes that some of these issues will be addressed in a Revised Draft.

Comments

Primacy of safety and infrastructure resiliency and security.

CTC will start off saying we wholly agree with the primacy of safety and infrastructure resiliency and security regardless of the transportation mode.

What is a “truck” in terms of the Draft Mobility Plan.

Roadways for “trucks” are perhaps the absolute central point of the draft Mobility Plan and certainly for the money and UTP and Project Tracker projects, but it is never made clear exactly what a truck is for purposes of the mobility plan.

CTC thinks the plan is lacking in a discussion of the key issue of what exactly is a “truck”, and the plan must add discussion about this.

MPOs maintain truck classifications and truck counts. (H-GAC is the MPO for Houston.) These truck classifications and their characteristics could be incorporated or referenced, but the issue must be clarified. We do not know if there is a delimiting characteristic for “freight” in terms of the definition of trucks—does the plan cover all trucks or only those that haul or are capable of hauling freight, but, if so, it should be included here. The definition should be flexible enough to account for technology changes.

Clarification of the crucial role of the UTP as a planning and management document for the Freight Mobility Plan would help also. TxDOT’s website indicates that “the Unified Transportation Program (UTP) is TxDOT's ten-year programming document to authorize and guide transportation project development and construction on Texas' intermodal transportation network. It is updated, and adopted by the Texas Transportation Commission annually.

The UTP includes funding strategies and projects to maintain and preserve the existing transportation system and taxpayer investments. The UTP also includes funding strategies and projects to construct transportation infrastructure. The UTP document can be viewed on TxDOT's website.”

The plan is biased toward the theory that growth has to mean more paved road miles rather than optimization of current highways.

CTC believes we must optimize our existing assets even if it means truck lane restrictions and dynamic scheduling for highway freight. The plan has a *pave the earth* mentality as the best way to accomplish freight transport.

Trucks are flexible and can share infrastructure with passenger vehicles, but given the stunning number of existing paved miles (*infra*), we cannot keep paving more roads in and around urban areas. We suppose there is more room for growth for rural areas. If this must occur, we hope that it will occur in the form of existing highway footprints and road widenings rather than greenfield projects.

Performance standards of FAST are largely ignored; local street bottlenecks are ignored.

FAST is biased toward highway funding even though the plan shows that far and away the greatest number of paved miles are local miles. The plan lacks serious performance and technological discussions such as better utilization of existing capacity and fuel efficiency (not just lip service).

The plan has an extended discussion of bottlenecks, but it does not discuss capacity utilization modifications and lane restrictions or time of day restrictions. **The bottleneck discussion focuses on bottlenecks on the highway and not local street bottlenecks.** The plan is very wholesale freight hauler oriented and has no discussion of how local bottlenecks affect freight cost or freight movement or how truck bottlenecks tie up others and damage local roads.

If the draft Plan does not wish to address this local issue on the basis it is not a TxDOT issue, it should explicitly indicate the local issue exclusion rather than ignoring it.

Freight is interstate movement of goods from end to end. FAST funding preference for highways reflects mid-20th century concepts about building out the federal highway system, which is already built out. Localities need more of the interstate funding and should not have to rely on floating local debt so interstate truckers can benefit.

The plan largely relegates local streets to the debt markets to obtain funding for maintain the FAST priority “good repair.” Gasoline taxes are collected for local driving as well as highway driving, and more local funding should be available for freight.

The plan and, to some extent, FAST ignore that freight is interstate commerce from source to destination. Local governments are being deprived of a huge amount of interstate commerce or freight funds under FAST that would better enable locals to maintain a state of good repair to streets. Localities are ultimately where retail buyers (in contrast to multimodal transporters) of the freight are situated.

FAST conflicts with legal theories about interstate commerce and mobility optimization. It is biased against localities for road funding, but there are opportunities to apply for local funding, and there are a few local UTP projects.

To avoid cost shifting and detriment to other classes of road users, trucks must pay their fair share. The FAST allows 10 percent funding for freight if there is an approved freight plan.

The FAST allows 10 percent funding for freight if there is an approved freight plan. CTC is not sure how this disaggregation of funds for a plan that sits inside the entire plan would take place. Further 10 percent is arguably not enough for freight to pay its fair share or it may be more than enough.

Truck traffic is a significant cause of roadway congestion causing wasted time and air pollution, and large trucks are a primary cause of roadway damage. Further, designing roadways bigger,

wider, and stronger for trucks drives up construction costs. Truck permits and fees should be increased to capture a fair share of the costs caused by trucks.

A key CTC principle that trucks must pay their fair share, and CTC follows that principle from start to finish, from source to end-use or retail destination.

CTC asks that the revisions to the draft plan discuss this fair share concept and in particular use of the 10%. Specifically, CTC would like the plan to address if this 10 percent is a reasonable level for trucks to pay their fair share. The FAST provides that having a Freight Plan will allow for 10% of the funding for freight. Apart from any permitting or weight charges, a portion of this 10%, or all of the 10%, should be dedicated to payment of this “fair share for trucks

The “fair share” principle relates directly to the interstate commerce status of freight, and to the idea that cost shifting among various classes of road users should be minimized. Local streets are also entitled to their fair share since trucks do as much, if not more, damage to less well designed local streets.

The draft 2017 Freight Plan includes a redesignation of the Texas Highway Freight Network (THFN); the THFN is huge, but these lanes are shared with other traffic.

CTC requests a better discussion of road capacity and this shared lane issue: is freight primary; is passenger primary; or are they prioritized by some formula?

The Draft Plan at 1.7 provides “This Freight Plan includes a redesignation of the Texas Highway Freight Network (THFN) to include the designation of Critical Urban and Rural Freight Corridors. This redesignation adds about 3,000 miles over the 2016 network and includes Texas' portion of the National Highway Freight Network, the Texas Trunk System and other state highways critical to moving freight.

Texas Highway Freight Assets. The plan indicates that “Texas has more than 313,000 centerline miles of public roads — more than any other state. More than 68 percent of these roads are in rural areas. While the interstates are a pivotal portion of the roadway network, they must be supplemented by other facilities in order to serve all freight users. Trucks accounted for 54 percent of total tonnage movement in Texas in 2016 and that tonnage is projected to grow significantly by 2045 assuming that there is capacity to handle the traffic and that commodities travel the same way in 2045 as they do currently.”(emphasis added)

Forecast 8.2.1 Highways. This section discusses highway forecasts by commodity and direction and presents the results of modeling movements on the Texas Highway Freight Network. Truck tonnage is forecasted to increase from 1.19 billion tons in 2016 to 2.48 billion tons in 2045, a cumulative increase of 108 percent. This increase is expected to result in a near doubling of truck trips on Texas roadways. **In 2016, an estimated 745,800 daily truck trips occurred on**

Texas roadways, and this is projected to increase to 1,117,600 daily truck trips in 2045.”

Notwithstanding that the plan does not really discuss what a “truck” is, the draft Freight Plan is well researched as to the issue of just how many paved road miles are there in Texas. This was very informative to CTC, and we are stunned. The vast number of road miles raises the issue of how many more road miles do we need before we catch up with the issues of better technology and optimization.

Air Quality: the huge forecasted increase in truck trips will have negative consequences for our health as well as for SIPs and funding allocations.

Reducing vehicular pollutants is a goal in and of itself, but it is a major funding issue in nonattainment areas. The huge increase in truck trips may result in more nonattainment areas, but the increase may also negatively affect funding allocation in nonattainment areas.

The plan has almost no discussion of air quality issues caused by the continued and forecasted growth in truck trips.

The draft Plan section “Technology” subsection “Alternative Transportation Fuels” contains little mention of fuels and less mention of truck technologies and dispatch systems.

About all the plan states is that

“Trucks, railroads and ports are investing in alternative fuels and technology to increase fuel efficiency and reduce costs and harmful emissions. Trucks are switching to newer models and retrofitting older fleets; railroads are using alternative fuel vehicles and equipment in railyards and testing natural gas powered locomotives; and ports are using electrification and alternative fuel equipment inside their gates.” (4-13)

Air Quality is not only a funding constraint in the Houston District, but it is also a major health and safety issue. H-GAC is in a nonattainment area and maintains data and studies regarding truck counts and regional air quality modelling.

The plan should add discussion regarding this major issue. We may slide far backward in our efforts to make our air safer for ourselves and others and living creatures and plants with the projected levels in increase.

The aforementioned truck trips will create huge amounts of NOx and VOCs and other ground level pollutants. With the plan’s projections, we may slip into greater areas of nonattainment rather than fewer. This will have implications for SIPs. The plan does not really discuss technological improvements in equipment or fuels. Many of the “trucks” may be diesel powered. Biofuels are not as efficient and are still a carbon-based, plant-based fuel. Notwithstanding the plan’s huge projections for truck/highway freight increase, only a brief mention is made of technological improvements and possible fuel improvements for motor vehicles.

The Texas 5-Year Financially Constrained Freight Investment Plan (Section 12.2); 20 year design life

The 5-Year Financially Constrained FIP is a new element in the 2017 Freight Plan. The purpose of the FIP is twofold: 1) Meet the FAST Act requirement, and 2) Document the immediate multimodal recommendations necessary to address current needs and deficiencies.

These fiscally constrained projects, to the extent they involve federal-aid highways, must have a 20 year design life, so even for projects currently funded, they are expected to be built for 20 year survival.

The plan should track in terms of time the design life of the project and not merely catalog the projects.

Fiscally constrained vs unconstrained plans; prioritization.

As best CTC can determine, the first part of the Freight Plan, the fiscally constrained portion of projects, sits inside, or is subsumed into, the UTP and Project Tracker projects and funding,

How the projects are prioritized between freight and non-freight projects is unclear. We ask that the revised Plan address this prioritization issue.

A second piece of the plan is a longer-term unconstrained project portion, and these projects do not necessarily have funding and should have a lower priority.

Better scoring or prioritization mechanisms are needed to determine whether road funding could be put to better use for other freight modes.

Project prioritization right now, and in the plan, is done largely among various road projects without simultaneous scoring comparisons with other project modes. The comparisons will involve apples and oranges to some extent, so they do not have to stand up to strict scrutiny, but pros and cons should be weighed.

Multimodality in the plan is usually looked at from the standpoint of the Last Mile of trucks switching to (or from) another mode such as rail, pipelines, ports, or planes. If safety is a key goal, road funding could be put to rail crossings, distribution hubs, public private partnership for railroad tie replacement, and ITS. Such projects are merely where one mode interfaces with another.

Honest and open calculations should be done at the plan level to determine whether the road money could be better put to use on other modes. TxDOT had to have, and now has, rail responsibilities that are not funded, as the plan points out.

The UTP Projects in the Appendix. Projects Specific to Houston District. A key CTC principle is Fix it First, so we are glad to see the repair and reconstruction projects in the plan.

Everything in the Houston District plan was road or bridge related. There were no provisions for rail. We only examined the Houston District projects.

Many of the Houston projects listed were bridge reconstructions, are part of an interchange reconstruction (including direct connectors), or already on the UTP. Some presuppose environmental clearance.

CTC had hoped that more money and UTP space would be devoted to ITS to accommodate the coming technology revolution for truck freight transport and distribution. We hope the ITS will be built to be scalable or upgradable to do more for freight distribution and tracking operations.

While CTC nearly always approves bridge reconstruction for safety and interchange reconstructions for traffic flow and pollution and delay reduction, some of the projects were just garden variety road widenings that did not really relate to anything other than old-timey capacity addition that presumably would support greater freight traffic.

Invest in the advantages of freight rail. This is a key CTC principle.

The draft Plan indicates that in 2014, rail cars moved 20 percent of the total freight tonnage moved in the state.

Each rail car takes as many as three trucks off Texas highways, and one train can move one ton of cargo 436 miles on 1 gallon of fuel. Enabling more freight to move by rail will reduce congestion, improve safety on our roadways, reduce pollution, and minimize right-of-way requirements. Texas voters authorized the Freight Rail Relocation & Improvement fund in 2005, and gave control over this issue to TxDOT.

Freight rail is a mode we are under-funding at our commercial peril.

We think it is time to fund projects under the mandate rather than continuing the bias in favor of roads.

As the draft plan notes (1-8), Texas has more miles of rail and more railroad employees than any other state, with over 10,000 track miles. In fact, Texas has 30 percent more freight rail miles than the next highest state (Illinois), making it a rail hub in North America.

CTC reviewed The Texas Rail Plan Update 2016 which updates the 2010 plan and which was written in conjunction with the Texas Freight Mobility Plan and the 2040 TTP. There is only one small rail project, the South Orient project, on the UTP list. There are several rail access projects in the UTP including fully funded and partially funded projects for at-grade rail crossing projects, rail overpass projects and port, airport and border-crossing access projects.

Only the fully funded projects are included in the 5-Year Financially Constrained FIP. This is far too rigid a criterion compared to inclusion of road projects whose funding can be more easily shifted around.

A Freight Rail Case Study- Tower 55 Multimodal Improvement Project – CTC hopes partners will all will be on a steep learning curve for these sorts of partnerships.

The hurdles of a freight rail project are daunting, but at the paperwork end of the business. The draft Plan describes the Tower 55 project addressed a safety and congestion situation at an at-grade rail intersection where five major freight and passenger rail routes converged into two doubletrack mainlines crossing each other. This is complex infrastructure with a complex alignment and a number of stakeholders and funding sources.

The Plan notes that “through a funding partnership, which included a federal TIGER grant, funding from TxDOT and the City of Fort Worth, and major contributions by BNSF Railway and Union Pacific Railroad, a total of over \$101 million was invested in a combination of at-grade infrastructure improvements, new signaling and control systems, and the installation of additional main line trackage through the area.”

CTC hopes partners will all be on a steep learning curve and can use this transaction as a template for other similar deals. Also we hope the expense matches the benefits. Locally in Houston we have seen projects that are over-engineered, over specified, and far too expensive to be replicated on a widespread basis. Costs must come down to be able to build at grade crossings and other railroad related appurtenances.

The plan falls far short in analyzing the Last Mile issues for a comprehensive freight transport plan.

The Short term discussion should also contain use limitations such as lane restrictions. Locally, large trucks cause much local road damage, for which there is little funding, notwithstanding the plan claim that localities can float bonds. The Last Mile, especially as it applies to local retail deliveries which use a combination of large to small trucks and Walmart which uses large to large trucks should be discussed.

This is essentially all of the plan’s treatment of the Last Mile issue, and we urge greater analysis of this difficult issue and the related interstate commerce issue in a revised draft.

“1.2.6 Urban Freight Transportation Growing population and employment in Texas’ urban areas means increased demand for the delivery of goods. Urban areas are large consumers of these final goods, and urban freight distribution is the **last mile** in the supply chain. The growth of freight movement within Texas urban areas intensifies congestion, since the movement of goods, like the movement of passengers, contributes to traffic. Congestion in urban areas greatly impacts the efficient movement of goods and affects the reliability, timing and distribution of freight.”

Conclusion

CTC asks that you consider addressing some of the issues above in a Revised Draft Plan for 2017 to make the plan more comprehensive and informative to funders and stakeholders.

Submitted October 26, 2017

Best Regards,

/s/ Dexter R. Handy, Lt Col USAF (Retired)
Chair, Citizens' Transportation Coalition (CTC)
phone: 832-724-8753 email: drhandy@aol.com

Contributors: Carol Caul, Advocacy Chair and Board Member; Dexter Handy, Chair, CTC;
Ed Browne, Board Member, CTC