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Dear Mr. Henry and Ms. Lark:

## **North Houston Highway Improvement Project (NHHIP) Draft Environmental Impact Statement (DEIS) Comments of Citizens Transportation Coalition (CTC)**

### **Intro**

**Citizens Transportation Coalition (CTC)** 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.

CTC discusses below its concerns with the present design and the Proposed Recommended Alternatives (PRA) for the NHHIP and impacts and mitigation not covered by the DEIS.

Our organization submitted extensive written comments for prior scoping meetings for this project commencing in 2011, and, prior thereto, CTC participated actively in the 2003-2005 previous plans to reconstruct what is essentially described in the NHHIP DEIS as Segments 1 and 2.

The scoping meetings in 2011 and 2012 introduced the concept and possible option of tunneling and reconstruction of the Downtown Loop as a one way circulator. It was not until the 4th Scoping meetings, held in April 2015, that the public was introduced to the Segment 3 proposal of a highly complex reconstruction of ALL the downtown interchanges. Given the information provided in the DEIS, CTC's general assessment is that the NHHIP DEIS is in not acceptable for environmental clearance.

## **Summary of Comments**

**An extensive and content rich RDEIS is required. Many foreseeable and significant impacts are not treated in the DEIS and there are no serious mitigation plans.**

**This DEIS cannot proceed directly to an FEIS as TxDOT intends it may do, and particularly not with a simultaneous Record of Decision approved without 3<sup>rd</sup> party oversight.**

**CTC foresees downtown construction impacts as the greatest NHHIP impact, and there is no documentation regarding construction impacts.**

**CTC cannot support the NHHIP Project without further written analysis, supplementation of the Constructability document, public input and input from elected officials addressing the long term construction impacts of Segment 3, its impact on the downtown viability, and the operability of the finished interchange segments.**

Long-term construction impacts, direct and indirect, on the resilience and viability of our downtown are foreseeable and must be numerically documented as to reductions in ingress and egress speeds and impacts on businesses and residents after holding extensive meetings regarding these issues. TxDOT did a Constructability document that should be incorporated into an RDEIS, and the foreseeable impacts occurring during construction (including mobility and business and job impacts) should be addressed in a Second Document.

Elected officials and the public need to know just how long the construction will take, and more importantly, just how long they will have to endure congestion to get downtown. Pass through vehicle operators have the option of using I-610, Beltway 8, and the Grand Parkway, all of which were constructed in part as bypasses, but downtown business drivers, residents, and employees do not.

Achievement of the project goals will be many years out, if ever. By then technology changes in mobility, not mentioned in this DEIS, may overtake the concrete design.

### **Interchange Reconstruction: Capacity Utilization, Avoiding Built In Bottlenecks, And Meeting Performance Metrics**

CTC agrees with HNTB's description of the entire NHHIP project as one large interchange at least for the Segment 3 interchanges and the I-610 /I-45 interchange.

CTC almost always supports improving road mobility and safety by reconstructing interchanges first, rather than last. The interchanges need to be planned first through iterations or directly. Generally, completed interchange designs lack capacity to keep traffic from moving at the project design speeds, thereby generating bottlenecks that are misconstrued as congestion, and falsely creating a perceived spiraling need for yet greater capacity or road miles on the pancake portions of the road.

Further, **if roads are going to be built, it is the interchange that should be overbuilt if anything.** The interchange should be built with enough capacity to avoid creating automatic bottlenecks due to speed reductions. This is not the sequence that has been followed in most cases.

It appears to CTC that measurable amounts of land will be added to the I-69 and I-10 interchanges and design of the other interchanges will rely on stacking to improve capacity. The addition to the Constructability Memo, suggested below, is intended to elicit discussion regarding which Segment 3 interchanges will improve performance and how.

**The City of Houston must become involved with mitigation for this project: (a) first, the city needs to coordinate with TxDOT to determine temporary routes stakeholders can take to get to downtown during Segment 3 construction; and (b) second, the city must take an active role to protect city parklands from project impacts.**

**Downtown construction will necessitate active coordination with city officials to plan local routes for persons to take who work downtown.**

TxDOT should encourage the city to make plans for traffic during construction. A plan should be developed for access to downtown using major streets and optimized signalization. CTC does not see any coordination in the DEIS and such efforts should be made available to the public for comment.

**Flooding and drainage issues are probably the second greatest impact of this project. TxDOT acknowledges the presence of these impacts. These issues can and must be mitigated. Written financial mitigation commitments, particularly for flooding and drainage to achieve safety and evacuation goals, are needed for all 3 segments.**

Manmade flooding is an ongoing problem for the I-45 corridor, and it will be exacerbated by the reconstruction and its huge amounts of additional impervious surfaces and elevation buildup causing storm water runoff to at grade feeder lanes and adjacent stakeholders. The Segment 3

depressed areas require particular analysis and provision for funding and equipment to achieve normal mobility, and the safety, emergency preparedness, and evacuation goals of the project and of FAST.

**Other readily foreseeable impacts are discussed below.**

## **Specific Comments and Recommendations Regarding The DEIS**

**CTC particularly asks for full disclosure of the construction operations timeline, mobility impacts, and financial, business, and residential impacts of the Segment 3 Downtown Loop stakeholders.**

The highly complex Segment 3 is slated to be constructed first. FAST Performance Metrics must show that the Segment 3 impacts far outweigh its benefits once it is built as designed years from now.

Based on our observations of other interchange reconstructions, downtown may be gripped by construction induced gridlock for at least 7 years. The TxDOT/HNTB's very helpful Constructability Technical Memo, which became available after the DEIS, indicates that some of the downtown interchange structures will not be let or commenced until 2026 if CTC reads the memo correctly. This document is very elegant and informative in terms of explaining whether all the Segment 3 interchanges can be reconstructed at all and what is the optimum sequencing of the construction of the various pieces of each of the interchanges. The Constructability document, with modifications as necessary, should be incorporated by reference to the RDEIS.

But the Constructability Memo fails to address a major concern of CTC: the multi-year and crushing construction congestion.

CTC is especially concerned about the possibility of very great and negative impacts on the viability of downtown businesses and mobility during construction due to the multi-year reconstruction of the Segment 3 interchanges.

Based on our observations regarding other interchange construction projects, CTC thinks the Segment 3 Downtown Loop, as planned, will cause many years of choking congestion to our already vulnerable downtown. TxDOT must explain in meetings with both the public and elected officials and in written studies, the extent and duration of downtown access and egress

congestion. It must include an avoidance or mitigation plan for business losses, the need to relocate businesses out of the downtown area, and related job losses.

City officials must get involved in planning alternate local routes so drivers can get into the city and to offset the economic harm the city will in all likelihood suffer during the construction.

**Besides downtown construction operations impacts, there are many significant issues which require further analysis and mitigation before proceeding to an FEIS. Flooding and drainage and road buildup or fill impacts are probably the second greatest of the readily foreseeable impacts.**

**A Revised DEIS (RDEIS) Is Needed Prior To Proceeding To An FEIS In Order To Treat These Impacts and To Provide Mitigation Plans, and To Incorporate Additional Documentation, Studies, and Analyses**

The Draft Environmental Impact Statement (“DEIS”) is a premature tool to use to proceed to an FEIS and does not identify or consider sufficiently or at all major economic, safety, mitigation, and environmental issues arising from the revised design and construction of the NHHIP project.

**TxDOT states on its website that design changes are not included in the current evaluation of alternatives for the Draft Environmental Impact Statement, but will be presented at the public hearing and included and evaluated in the Final Environmental Impact Statement.**

The purpose of the DEIS is to pick the Preferred Alternatives, or Proposed Recommended Alternatives (PRA) in TxDOT parlance, not to postpone showing those to the public until the FEIS or hiding them from scrutiny until it is too late to do anything. We do not think TxDOT executives, its excellent project managers and environmental staff, and consultants really want to do this. These are rather errors it is not too late to fix.

Further, because of the MOU between TxDOT and FHWA, TxDOT can approve its own FEIS and issue its own Record of Decision (ROD) or final approval as to environmental clearance. CTC thinks this self-certification is too risky for a project that “only comes along every 50 years,” and CTC asserts that FHWA should at least review, formally or informally, any revised Segment 3 analysis.

**The NHHIP is unnecessarily unwieldy in scope for proper and efficient environmental clearance.**

**CTC recommends to separate the 3 segments into two separate environmental documents: one for Segment 3 and one for Segments 1 and 2. Consider constructing Segments 1 and 2 first.**

CTC sees no segmentation issues preventing the separation of the segments into 2 projects. Constructing Segment 1 first, particularly the I-610 /I-45 interchange, will provide mobility and safety benefits that should not be deferred while waiting on Segment 3. If Segment 3 is gridlocked, so is Segment 1.

TxDOT chooses to construct Segment 3, the newest design, first. It has no really good reason other than a press statement that Houston's problems are in the downtown area first and foremost.

Even though this is essentially a brownfield project, it is too complex, the stakeholders are too varied, and the impacts too significant for the public to grasp in one document. If the Segment 3 is going to be constructed first, there will be an unnecessary and unsupportable multi-year lead time between environmental clearance for Segments 2 and 1 and actual construction unless it is a funding question.

Timing clearance closer to construction reduces aggravating and incorrect claims regarding portions of major projects such as "a meeting was held" five years ago on the other side of town when commencing projects that surprise the public.

A stated purpose of the project is to improve "pass through." CTC thought that was the purpose of I-610, Beltway 8, and the Grand Parkway; road users should not get both a pass through and a bypass.

**Funding Commitments Must Be Included In The DEIS And Earmarked For Mitigation Of Certain Impacts Arising From The Preferred Alternatives For Each Segment**

Funding commitments must be included in the DEIS and earmarked for Mitigation of direct, indirect, and cumulative impacts arising from the Preferred Alternatives. Without a clear understanding at the DEIS stage of environmental project costs and provision for their mitigation, the public gets a false sense of how efficient the project will be, and how many costs will be shifted to stakeholders. Adequate compensation and infrastructure must be set aside for drainage, flooding, and Environmental Justice issues triggered by the project. Mentioning possible mitigation, particularly for drainage and flooding, is not sufficient. Nor is stamping on a project birds eye document "Planned Subject To Change." CTC has seen "Planned Subject To Change" detention structures for I-10 that have yet to be built, and probably will never be. We have had tragic results from not addressing these commitments earlier, rather than later.

## **Future Vehicles and Freight Automation; Air Quality and Congestion Management**

The project is being built for old year vehicle models for a design year that will span many changes in automotive types and surface roads use that cannot be forecast. These vehicle and transport operations changes are not referred to in the DEIS, but it is CTC's understanding from its research, that changes are coming soon whether we are ready or not.

The vehicle changes may have positive impacts on Air Quality and Congestion Management. The freight automation may have to avoid downtown due to construction congestion and difficulty of operational use.

TxDOT should confer with H-GAC and with staff internally as to whether it can take conformity credits and whether it approves of such vehicular changes.

## **Achievement of I-45 As An Evacuation Route Requires Financial Commitments and Cost Estimates For All 3 Segments**

CTC has a major issue with emergency evacuation as a stated purpose of the project. There is no discussion in the DEIS regarding evacuation plans other than to say I-45 is a major evacuation route, and that there is extensive flooding that impedes that purpose. If evacuation is a major purpose of the project, flooding and man-made build up runoff must be abated or the project goals should be changed.

Written financial mitigation commitments, particularly for flooding and drainage to achieve safety and evacuation goals and a brief analysis of how much flooding mitigation will cost, for all 3 segments should be included in the RDEIS.

There will be multi-year congestion in Segment 3 constraining access and traffic flow, let alone evacuation. The DEIS acknowledges there are currently multiple depressed areas, and there will possibly be more. With proper pumping, distributed/onsite generation, and air circulation, and rerouting signage, the constraints of the depressed areas can be reduced for both evacuations and other emergencies. Segments 1 and 2 also require funding earmarks for drainage to achieve the evacuation purpose. Some sort of hazmat spill and terrorist plan should be considered as a separate document, perhaps as an exhibit or technical memorandum. (Surely those plans already exist, perhaps with a federal agency.

Houston already has the I-610 Loop, Beltway 8, and the Grand Parkway to assist pass through traffic during construction and those features were all constructed with hurricane "evacuation" as a stated purpose and need.

## **Segment 1: Construct The IH-610/IH-45 Interchange First Of All Project Segments; Consider Design Modifications To Increase The Planned Capacity Of The Interchange To Avoid Creating A Built-In Bottleneck.**

This interchange is considered as the southern boundary of Segment 1. As a common sense matter and to conform to FAST Optimization requirements, ALL the interchanges need to be rank ordered, not just for Segment 3, for both mobility and safety.

CTC strongly recommends that this structure be rebuilt first because it is out of date and unsafe. Its reconstruction will provide better access to I-610 and I-45, to I-69 from I-610, and to the Hardy Toll Road, thereby providing better utility and access to a large number of alternate road opportunities. This will provide a good opportunity for TxDOT to develop better signage and lane marking for merging from one road to another to improve the functionality of the interchange. Those markings may be adopted for the Segment 3 interchanges which will pose significantly greater complexity of use by drivers.

CTC almost always supports improving road mobility and safety by reconstructing interchanges first rather than last. The interchanges need to be planned first through iterations or directly. Generally completed interchange designs lack capacity to keep traffic from moving at the project design speeds, thereby generating bottlenecks that are misconstrued as congestion, and falsely creating a perceived need for yet greater capacity or road miles on the pancake portions of the road. Further, if roads are going to be built, it is the interchange that should be overbuilt if anything. The interchange should be built with enough capacity to avoid creating automatic bottlenecks due to speed reductions. This is not the sequence that has been followed in most cases.

## **Segment 1: Design Change For MaX Lanes**

CTC always supports combined toll lanes and transit where it can pay for itself or even nearly pay for itself. CTC, however, here recommends that the interconnectors to the I-610/I-45 interchange allowing access from I-610 to the I-45 toll and HOV lanes be dropped as a design change. This is a very convoluted and expensive feature for a small gain in mobility. Traffic counts, unless they are restated in the RDEIS, or unless CTC misconstrues them, do not support these direct connectors just at this particular interchange. If traffic counts and fares justify the feature, CTC could support it.

## **Segment 1: Taking of Land, Environmental Justice, and Compensation For Business Owners and Business Tenants**

CTC objects to the continued construction of feeder roads and reliance on abutting businesses as a source of the economic development and redevelopment, but feeder road businesses are already well established along Segment 1. Many of those businesses present Environmental Justice issues and compensation payments are not transparent, often are late, and are often discriminatory.

**Takings and Environmental Justice: TxDOT Real Estate Must Treat Stakeholders Fairly. Mitigation Is A Small Part Of The Project Cost.**

Environmental Justice is a big issue for business owners and business tenants in this segment. Many of the stakeholders adjacent to or whose land will be taken or who will be forced to move their business are underrepresented and lack access to legal counsel. Due to significant expansion of the footprint of this segment, much land will be taken and much of it is owned or rented by small or minority businesses. Most of these businesses appear to have little negotiating power and cannot afford legal representation. TxDOT appears to have a low ball strategy for these areas of Environmental Justice impacts. This is not conducive to economic growth and certainly is not fair. TxDOT real estate should be punished rather than praised for exercising undue pressure on these businesses. The FHWA should review these purchases if TxDOT thinks this is an acceptable strategy, but it is one that is seen on many TxDOT road construction projects. For a massive, multi-year project such as this, TxDOT must be able to make fair and reasonable commitments to stakeholders whose property or businesses are taken.

The document “State of Texas Landowner's Bill of Rights” provides “Your property cannot be taken without adequate compensation. Adequate compensation includes the market value of the property being taken. It may also include certain damages if your remaining property’s market value is diminished by the acquisition itself or by the way the condemning entity will use the property.” TxDOT appears to ignore this statement. There is no restriction on paying compensation for business relocation and business losses to business renters as well as business owners. These persons should not have to rely on business owners to share their compensation.

**Segment 1: This segment of NHHIP already has small signs delineating a no-trucks for this lane. There are also a few metered ramps. CTC recommends that the RDEIS make reference to studies examining metering and truck restrictions as performance measures.**

CTC observes that these restrictions are often ignored by drivers on this Segment 1 portion, but meters and truck lane restrictions may make this Segment work better.

This same remark is applicable to Segment 2.

**Segment 3: While Scenario Planning is Voluntary Under FAST Regulations, It is Necessary For Segment 3.**

Scenario planning and optimization must be considered to minimize interchange construction impacts for downtown. As mentioned above, TxDOT should work with HNTB to prepare an addition to its Constructability Technical Memo to analyze construction impacts. It should work backward to see if the Constructability memo needs to be modified. CTC remarks that in accordance with MAP-21 and FAST Transportation Planning and Collaboration requirements, TxDOT must meet with local officials and business stakeholders and explain in detail the construction sequence, construction congestion, the expected completion date of all the various interchange structures to be constructed downtown and the business, financial, and mobility impacts on downtown businesses during the multi-year construction phase.

A new mandate for State departments of transportation (hereafter referred to simply as “States”) and metropolitan planning organizations (MPO) to take a performance-based approach to planning and programming; a new framework for voluntary scenario planning; new authority for the integration of the planning and environmental review processes; and a process for programmatic mitigation plans.

CTC thinks the public and elected officials lack information about the duration or sequencing of the Segment 3 interchange structure construction plans and particularly the ongoing and major financial and mobility impacts arising from the reconstruction of the downtown interchanges because they are not explained in the DEIS. The public and elected officials especially need a clear explanation of the mobility and financial impacts of the construction and gridlock that Segment 3 as designed and sequenced will cause. The public must be made aware that one interchange will not be finished, and then TxDOT will move onto the next. Normally CTC views construction as a temporary impact. But the downtown project segment will have ongoing construction for years, with the last structures being commenced in 2026. Local officials, including the county officials who complained about I-69 congestion, must understand the duration of construction congestion, the failure of the downtown to benefit until the entire Segment 3 is reconstructed, and the financial impacts on businesses and neighborhoods in the Segment 3 area. CTC is concerned about the detriment of the project to our downtown to survive the project. Further the DEIS fails to address at all or adequately many of the major problems and impacts and mitigation plans of the project.

**Segment 3: The DEIS does not discuss performance-related provisions and particularly efficient investment of funds; this is a statutory requirement and a rulemaking is being developed. TxDOT should be out ahead of the rulemaking given the magnitude of this project and its self-oversight.**

CTC , at previous scoping meetings, addressed the lack of forecasted gains in mobility for the NHHIP. With a previous forecast, the gain was to be 4 mph. Now the completed downtown gain is 20 mph. CTC is skeptical but thinks discussion is necessary in the RDEIS as to how the mobility performance is so drastically improved by completion of the Segment 3 interchanges and whether it is, on net, worth the investment. This can be explained in greater detail at the FEIS or TIP level.

MAP-21, and now FAST, requires a performance-driven, outcome-based program that provides for a greater level of transparency and accountability, improved project decision making, and more efficient investment of Federal transportation funds. See, e.g., 23 U.S.C. 150(a). As part of this performance-based approach, recipients of Federal-aid highway program funds and Federal transit funds are required to link the investment priorities contained in the Statewide Transportation Improvement Program (STIP) and Transportation Improvement Program (TIP) to achievement of performance targets. In a series of rulemakings, FHWA and FTA will establish national performance measures in key areas, including safety, infrastructure condition, congestion, system reliability, emissions, and freight movement.

“The Proposed Recommended Alternative (PRA) for Segment 3 includes the complete reconstruction and reconfiguration of the highways that comprise the “Downtown Loop.” When combined, Segment 2 (I-610 to I-10) and Segment 3 function as “one large interchange”. Therefore, it is critical to construct the entire interchange to realize the congestion relief benefits that this alternative offers.”

### **Segment 3: The H-GAC TPC and public should oppose Segment 3 from being moved to the TIP until the issue of mid-term and long-term damage to downtown viability are fleshed out.**

“\$1.3 billion of the estimated construction costs was approved by the Texas Transportation Commission in March 2017. This will cover the first three segments of the “one large interchange” with a letting date of FY 2020 for the starter project. It is anticipated that the remainder of the funding will be approved by the Commission in the August 2017 UTP update.”

CTC agrees with HNTB’s description of the entire NHHIP project as one large interchange at least for the Segment 3 interchanges and the I-610 /I-45 interchange. CTC almost always supports that road mobility and safety are improved by reconstructing interchanges first rather than last. The interchanges definitely need to be planned first through iterations or directly. Generally completed interchange designs lack capacity to keep traffic from moving at the project design speeds thereby generating bottlenecks that are misconstrued as congestion falsely creating a perceived need for yet greater capacity or road miles on the pancake portions of the road. Further, if roads are going to be built, it is the interchange that should be overbuilt if anything. The interchange should be built with enough capacity to avoid creating automatic bottlenecks due to speed reductions. This is not the sequence that has been followed in most cases.

Discussion and analysis of FAST-required Optimization and sequencing of the projects should be added in the Revised DEIS text or as a supporting exhibit. Incorporating the TECHNICAL MEMO, April 28, 2017 from HNTB to TxDOT styled “Constructability” goes a long way to addressing construction issues, but does not address operability or impact issues.

That Technical Memo focuses more on mobility than safety. These interchanges, taken together or severally, are very complex and pose difficult driving conditions and choices for drivers and unimaginable choices for autonomous vehicles such as automated freight and passenger cars. Optimization needs to consider not only whether the interchanges can be constructed—CTC has absolutely no doubt that they can be—but also how they will operate and how impacts can be minimized so the greatest net gain can be achieved.

As for which interchange in Segment 3 should be rebuilt first, CTC defers to TxDOT, but states that biases in favor of pass through traffic should not dictate the sequence.

## **FAST Regulation 23 CFR Part 450 Requires Funding to Be Committed for the Several Types of Mitigation; It Should Be Earmarked**

FAST regulations have specific requirements for Planning that do not appear to be documented and may not have been investigated internally. Further CTC sees only a minimal amount of coordination with agencies and other entities who will provide transportation facilities of the future.

There are many significant impacts for which a commitment to mitigation should be made at the DEIS level so stakeholders can evaluate the commitments and be assured that mitigation will actually take place. These include, among others, financial commitment and earmarking for (1) drainage, detention, and pumping facilities and associated lighting facilities; (2) proper and prompt compensation for underserved entities, (3) proper and prompt compensation to persons and property owners who have been offered inadequate compensation for their property at entrances and exit ramps (4) financial commitments for transportation alternatives; and (5) ongoing funding for emergency procedures for depressed portions of the freeway. For CTC to support the project, we recommend that funds be cabined, earmarked, and escrowed for these purposes and that a reasonable sinking fund be established.

## **All Segments: Flooding, Drainage, Pumps, Detention, and Changes To Flood Mapping & Prediction; Changes To LIDAR Mapping**

Apart from downtown construction congestion, our currently unmitigated flooding impacts are the greatest safety and evacuation impacts and cause of property damage for the NHHIP corridor. TxDOT's DEIS acknowledges flooding and flood impacts in several places. TxDOT's schemata are drawn in terms of proposed detention ponds, flood ways, and flood plains. The DEIS text mentions the impediment to evacuation, safety, and mobility caused by flooding.

Flood mapping is an official government process. There will be changes to official flood mapping; and, consequently, there may be revised mitigation needs to be presented on the DEIS schemata to meet the project goals of safety and evacuation as well as property damage caused by failure to contain flooding and runoff.

TxDOT has an Emergency Operations Center, but the mitigation topic here is infrastructure. Further, mapping of flood plains and flood ways and TxDOT required infrastructure need to be kept separate. TxDOT is only responsible for TxDOT floods, and the increase in TxDOT impervious surfaces will yield a considerable amount of TxDOT caused flooding and drainage constraints.

Mapping changes represent a foreseeable need to update the DEIS. TxDOT will need to review its flood and drainage mapping to make certain it conforms to new drawings. The requirement may be ongoing until the science settles out, but TxDOT has no basis not to have its drawings conform.

The Homeowner Flood Insurance Affordability Act of 2014 (HFIAA) requires FEMA to implement a flood mapping program, after a review by the Technical Mapping Advisory Committee (TMAC). In several of the FEMA reallocation bills before Congress, recommendations of the TMAC have been followed. Specifically, TMAC recommends that because 26% of flooded properties nationwide are outside of any mapped floodplain, National Flood Insurance Program (NFIP) Flood Insurance Rate Maps (FIRMs) be based upon relative elevations rather than strictly on riverine floodplain maps. The plan is to transition from a 1% annual chance of flooding to a structure-specific flood frequency determination.

New technologies such as Geiger LIDAR will allow rapid assessment and deployment of new FIRMs. Further, TMAC has recommended that FEMA both drive the research and application of the science necessary for this transition.

This presents a problem for Houston, where 65% of homes that flooded are outside mapped floodplains, and for Harris County where that number increases to nearly 70% according to FEMA data (unreported or uninsured flooding would likely make these numbers higher). In July, the NSF/FEMA Committee for Urban Flooding held its meeting in Houston, having identified Houston as one of the worst offenders. It should be clear that the Houston Metropolitan area will be significantly impacted by these changes. By extension, large multi-year projects that both impact the floodplains and are impacted by floodplains should be delayed pending which reallocation bill is adopted.

GAO asked FEMA to evaluate the impact of future conditions on the National Flood Insurance Program. In their report the GAO concluded that by the year 2100 our floodplains will increase by an average 45% nationally, the number of policies will increase by 80% and our average loss per policy will increase by 50% based on today's dollars.

There is a perception that if a roadway is a few feet outside of a floodplain that it is exempt from flooding. It isn't. **This DEIS shows increased impacts on existing floodplains.** HFIAA requires FEMA to look at design for future risk conditions even if TxDOT is not required to do so. Almost surely there will be greater impacts once new FIRMs are released.

## **Segment 1: Impervious Surfaces, Storm Water Runoff, And Flood Detention. Flood Mapping Updates.**

Due to the massive change in the footprint of I-45 for Segment 1, there will be massive changes in the impervious surfaces and storm water runoff in this area.

The DEIS notes that current flooding, and a fortiori expanded footprint flooding, must be mitigated for I-45 to serve as an evacuation route. Mitigation must be provided both for existing and new project caused flooding and any changes in flood mapping.

Such mitigation is also needed to preserve normal mobility during rainstorms and to protect adjacent businesses from runoff due to permitted or unpermitted fill and run off from the highway. In several places, the lands are already low and some construction will take place at or near flood plains and flood ways.

In our low lying area, flood mapping is being updated. DEIS project maps should be checked for a need to update. Mitigation should be updated as necessary and a sinking fund should be set aside for changes in LIDAR and other mapping and forecasting technology; see next topic below.

As stated elsewhere, funding should be committed to and earmarked for the construction adjacent to, or on, floodways. The amount of impervious surface will greatly increase due to the greatly increased amount of concrete. CTC appreciates the TxDOT's decision to avoid the floodway impacts on Little White Oak Bayou that would be posed by Alternative 4. We are sure this avoidance provides an environmental co-benefit.

## **CTC is conflicted about building depressed lanes for Segments 2 and 3 to serve as hurricane evacuation routes.**

CTC appreciates the cantilevered design for our depressed routes on Segments 2 and 3 of the NHHIP. Using this bi-level configuration is an excellent way to increase capacity without extra space. Plus the at grade feeder roads can serve, to an extent, as evacuation routes as long as they are not inundated with ground level run off.

Every road TxDOT builds has as a stated purpose "evacuation" and "safety." CTC does not know if that is serious or if it is an attempt to prevent litigation attacks on the purpose and need of a project. We do not know how many evacuation routes we need: SH99 (all segments), SH288 (which flooded), southern I-45, SH146, local roads in the southern part of H-GAC! Plus we do not have a sustainable policy regarding insurance costs, risk shifting, environmental costs, and land developers encouraging more land development near the coast.

Of interest regarding the magnitude and frequency of our flooding problem is the recent testimony of Scott Edlemann, Senior VP of AECOM, the Senate Banking Oversight Committee. testified,

*We also have a great deal of uncertainty within the calculations. In all actuality, the current 100-year average line shown on the flood insurance maps is perhaps closer to a safe design level of a 10-year event.*

This testimony shows a significant need to harden the equipment for our depressed portions of I-45 if we are serious about I-45 also being an evacuation route.

Given the comment above and the requirement that FEMA rely more on science, it is highly likely that the definition of a 100-year event will also change and TxDOT's obligations will change.

CTC also notes that there are more below-grade lanes than before. Numerous times below grade



lanes along I-10, I-69, and SH-288 have flooded, most memorably during tropical storm Allison when trucks floated in the roadway. This was often cited as the reason the main lanes of I-10 were elevated. While we recognize that aesthetics and noise are improved by below-grade construction, building a hurricane escape route below grade strikes us as questionable, particularly [given clear indications that severe rain events are increasing](#) and [sea levels are rising](#). At the very least, where stacked roadways are planned, the top deck should always be the path leading away from the Gulf.

## **Analysis of Emergencies Re Depressed Freeway Areas.**

**The FAST Act** expands the focus on the resiliency of the transportation system. It newly requires strategies to reduce the vulnerability of existing transportation infrastructure to natural disasters, but also, terrorists, hazmat, and major natural disasters.

The RDEIS should include strategies to reduce the road's vulnerability to these events. These can be strategies developed by 3<sup>rd</sup> party government agencies or others.

## **TxDOT's truck freight plan**

The plan should have some address of TxDOT's new Truck Freight Plan apart from noise from the trucks. Specifically CTC is interested to know the reliance that will be made on the Segment 3 interchanges by truck freight operations.

## **Metering and Access; Truck Only Lanes for Segments 2 and 1; On Off Ramps For Multiple Layers of the Project**

The RDEIS should contain a discussion of metering, truck restrictions, and access from lower to higher (at grade) levels of depressed projects. The metering and truck use restrictions were mentioned above for Segment 1, but there should be a discussion regarding metering or other access provisions for vehicles to come from depressed levels of the project to an at grade level.

## **CTC strongly supports multimodal transportation and access to mobility for all who cannot drive or who do not have a car. The NHHIP is a very complex project, but it is not a 21<sup>st</sup> Century project in terms of multimodality.**

MAP-21, strengthened by FAST, included provisions to make the Federal surface transportation more streamlined, performance-based, and multimodal.

### **If TxDOT is ever going to get serious about air quality and congestion (and maintain access to funding), it is going to have to use more innovative ways of getting cars off the freeways.**

Multimodality will only result in a highway project either with coordination with agencies utilizing other modes or TxDOT's investment in commuter rail.

It is true that by the time the Segment 3 project is finished, we may well be on our way to driverless, electric cars and automated freight and can claim CMAQ and other Air Quality credits.

**Integration of NHHIP With Bus Transit.** Page 255 of the DEIS quotes in part: "The NHHIP aims to provide congestion relief and added capacity to I-45 in addition to supporting transit operations. Project objectives include "provide expanded transit and carpool opportunities with two-way, all-day service on MaX lanes, and access to METRO Park & Ride facilities".

CTC is not certain how much coordination of planning there was with METRO regarding allowing METRO to use the planned NHHIP structures and whether that meets the 21<sup>st</sup> century spirit of MAP and FAST.

### **Coordination with other agencies and private investors was not discussed in the DEIS.**

**Other modes of automated transit were not discussed.** No space is saved in the interchange alignments for other modes and in particular, no space is saved for a light rail to run along I-10 and through the I-10 interchange to downtown to serve the Texas Central Railway which is currently slated to terminate at METRO's Northwest Transit Center. CTC would think TxDOT would want to play some role in the development of the bullet train and ancillary facilities.

CTC strongly supports multimodality. One of CTC's 10 Transportation Principles is to "Provide access for all. Across the Houston region and the state, Texans want our transportation system to provide safe and affordable access to jobs and neighborhoods for all travelers. Many young people, seniors, and individuals with disabilities need safe alternatives to achieve desired mobility. **One in five adult Texans cannot drive**, and across Texas, more than 280,000 workers

have no access to a car. We must invest in transit, bike paths, and sidewalks that provide access for all. Likewise, we must invest in transportation alternatives – including freight and passenger rail – that make efficient use of scarce resources while preserving quality of life in our communities.

**Segment 3 Design (Long-dated change): CTC questions the need for removing the Pierce Elevated thus destroying efficient westside access to Segment 3. This is a long way off, however. The Pierce should also be considered for evacuation capacity.**

There is really no efficient way for persons coming from the westside of Houston to access the Segment 3 interchanges. Without the Pierce Elevated, persons coming from the westside who want to go south, say to the Airport, or to the eastside of downtown or to the convention center, will have to go north to IH-10 or south to the dreaded I-610 Loop West, then I-69 north into town or stay on IH-610. This is awfully out of the way for such a big class of traffic.

The Pierce, ugly and as bumpy as it is, has some utility as an evacuation route to move people to the west side of the city.

**All Segments: TxDOT must consider and mitigate adverse neighborhood impacts of the NHHIP design. The DEIS fails to identify measures for neighborhoods to mitigate the impact of its design choices.**

Generally, CTC prefers to defer to neighborhood wishes regarding transportation projects and designs especially insofar as the design impacts their homes, safety, and use of local streets. It is after all, often their property that provides the route for the project.

It is a long-standing CTC Application Principle to  
“Abate damage and harms to communities and property owners caused by  
transportation projects such as unlawful noise impacts and disruption of  
established communities and businesses caused by suboptimal project designs.”

Historically, highway projects in Houston have divided neighborhoods; yet neither that history nor the potential for future division of neighborhoods, is adequately addressed in the DEIS. CTC does not know if these suboptimal design flaws are a result of carelessness or lack of any feasible alternative, but feasible mitigation is still necessary.

**Segment 3:** For example, Segment 3 traverses the center of Houston passing through downtown and skirting if not bisecting the city’s oldest and most historic neighborhoods, i.e., First, Second, Third, Fourth, Fifth and Sixth Wards, creating barriers between these historic neighborhoods and downtown.

The current Segment 3 plan includes the addition of managed lanes aimed solely at easing the ability of traffic to pass through the center of the city where not surprisingly traffic is highly congested. The project should be designed to ensure that traffic entering the central and most historic areas of the city is traffic destined for these areas and not traffic whose only intent is to pass through them.

**The DEIS should evaluate as an alternative the impact of eliminating pass through traffic from the central and most historic areas of the city.** Failure to design the NHHIP to eliminate pass through traffic from the city's center and most historic neighborhoods will impose many adverse impacts that are not adequately addressed, e.g., noise, air quality, visual, water quality and flooding, without identifying any benefit that clearly outweighs these adverse impacts.

**Segment 2:** An additional example of how the proposed project will further divide and adversely impact existing neighborhoods is evidenced on the segment between I-610 and Beltway 8, which includes the edge of the historic African-American Acres Homes neighborhood where TxDOT proposes widening I-45. Apart from suboptimal design, this presents an Environmental Justice issue. Unlike higher income areas of town, or even the area between I-10 and I-610, TxDOT does not propose to build the widened freeway in this area below grade.

**Segment 1:** TxDOT's proposal to widen the freeway immediately north of downtown also threatens significant community impact by further dividing the **Woodland Heights and Near Northside** communities. Moreover, the project's proposal to **eliminate North Street** will eliminate a significant low volume neighborhood connection across I-45. Another example of an adverse dividing impact is **Polk Street, whose connection to downtown will be eliminated** despite its role as a critical east-west connector between downtown and routes to the East End and Third Ward, **traditionally Hispanic and African-American neighborhoods.**

The proposed project will not only exacerbate physical barriers between neighborhoods, it will also separate low-income neighborhoods from economic opportunities by displacing dozens of single family homes, hundreds of multifamily housing units (including many public housing units), houses of worship, schools, jobs, and social services.

**On the east side of downtown** where TxDOT proposes to build the highway below grade, the project will nevertheless exacerbate existing divisions between downtown and the historically Hispanic Second Ward and the historically African-American Third Ward by creating a massive trench that will double the width of the freeway. Although the DEIS refers to the potential for deck parks to be built above depressed sections of the freeway, the DEIS does not identify any entity or party who has agreed to take responsibility for funding, creating, or maintaining deck parks. While the possibility of building deck parks may help mitigate the further divisions and loss of connectivity resulting from the project, mitigation will occur only if the decks and parks are fully funded by the project, and the parks are not separated from the neighborhoods by the high speed access roads contemplated by the DEIS. Unless the project is designed and built to carry the weight of the potential deck parks, and unless residents of the adjacent neighborhoods can safely access the parks, any the potential benefit offered by such parks is illusory.

**Segment 1:** At Chenevert, not only is TxDOT taking many of a condo's parking spaces to build a ramp, but it is also taking their trash dumpster. Then it low balled the residents for the taking. This is just wholly unnecessary and is not in the spirit of the US or Texas constitutions or the document "State of Texas Landowner's Bill of Rights" which is used by TxDOT as a guidance for takings.

Ramp entrances and exits should be reviewed at all locations to check their operability and to locate any impacts particularly to safety, but also to neighborhood mobility. A ramp that requires trucks to drive through neighborhoods or past schools or an entrance or exit that requires U-turns in congested areas needs to be redesigned or relocated to eliminate those constraints.

## **Environmental Justice Situations For Neighborhoods: The DEIS omits any identification of, or suggestion regarding, mitigating measures.**

Environmental Justice situations often arise when the highway agency is really just shifting costs of a highway project the agency should pay for out of public funds, to the affected poor or underrepresented.

Regarding environmental justice, the DEIS just states: "All alternatives would cause disproportionate high and adverse impacts to minority or low-income populations." The DEIS does not propose any mitigation strategy for the noted high and adverse environmental justice impacts. Executive Order 12898 requires that Federal agencies make achieving environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of programs, policies, and activities on minority populations and low-income populations. The Federal Highway Administration delegated to TxDOT their Federal and NEPA compliance responsibilities; the DEIS fails to explain how TxDOT will fulfill this responsibility with regard to this project.

## **Preservation of City Parklands:**

**TxDOT must provide all possible planning to avoid impacts and to mitigate unavoidable impacts to the affected public Parklands. There are procedural steps that must be followed to insure all possible planning and all reasonable and feasible mitigation is made if use of the parklands cannot be avoided. These steps are not being followed. As a result, the public and city are being deprived of mitigation possibilities and the City's right to concur or object to the determination.**

**Contrary to TxDOT's claim, the public is entitled to public participation regarding these impacts. A mitigation plan for each park must be proposed in an RDEIS. The city must be**

## **actively involved in order to represent and protect the parklands.**

The parklands have special legal protections which CTC wants to comment on. CTC will leave to experts and the public the substance of how to make sure that “**all possible planning has been done to minimize harm**” to the parklands. 23 U.S. Code § 138 – “Preservation of parklands” and implementing regulations and guidances.

TxDOT acknowledges the **all possible planning** requirement in the DEIS in 3.18.1 REGULATORY OVERVIEW and 4.1.17 SECTION 4(F) RESOURCES and has tabulated what it considers to be the 4(f) resources affected by this project

3.18.1.1 Description of Section 4(f) Properties: being

Table 3-32 Publicly Owned Parks and Recreational Facilities,

which are Segment 1: 1 park; Segment 2: 2 parks; and Segment 3: 19 parks. All of these parks appear to be “significant”; none of them are pocket parks. CTC leaves to the experts to discuss in public meetings whether these parks are purely recreational or whether parts of the parks are passive, which entitles those parts to special protections.

**TxDOT only tabulated facilities “within 500 feet” of the project. There is no regulatory basis for this 500 foot test.** Part 771 requires TxDOT to look at all direct, indirect, and cumulative impacts on parklands. CTC does not know if there are other parkland facilities that might be more than 500 feet from the project right of way (which is not far from an elevated highway) and calls on other commenters to address the location of other parks that might be impacted by traffic noise or other nonphysical invasions. TxDOT must address its regulatory basis for not considering any parklands beyond 500 feet of the ROW regardless of the indirect and cumulative impacts. TxDOT also has an explicit responsibility to abate existing as well as project noise impacts.

There is an exception to the 23 USC §138 requirements for impacts that are determined (not unilaterally by TxDOT) to be *de minimis*.

23 USC §138 (b) De Minimis Impacts.—sets forth the requirements for a finding of de minimis impacts.

**23 USC §138 (b) De Minimis Impacts.** (1) Requirements.

(B)Requirements for parks, recreation areas, and wildlife or waterfowl refuges. —

The requirements of subsection (a)(1) shall be considered to be satisfied with respect to an area described in paragraph (3) if the Secretary determines, in accordance with this subsection, that a transportation program or project will have a *de minimis* impact on the area.

Nowhere does this statute say that no public involvement is needed, and no presentation of mitigation is not required. Regulations for the de minimum finding are discussed below.

TxDOT takes the position that no public involvement is necessary and it has notified the city of its intent to make a *de minimis* finding.

This is not adequate to satisfy legal requirements of a *de minimis* finding:

1. No mitigation plan has been proposed so the DEIS is not sufficient. A mitigation plan must be put forward in an RDEIS.
2. A de minimus finding must be the result after the mitigation plan is applied. It is not sufficient to say we might have a plan later
3. Coordination with officials and the public is required;
4. Written concurrence by the city or other governmental organization is required.

TxDOT cannot assert that the DEIS provided a NEPA document for comment about mitigation because no mitigation was offered. No claim is made the agency intends to get city concurrence in acceptance of the mitigation plan and that any remaining impacts are *de minimus*.

State highway agencies insisted on these streamlined steps and must follow them. In the past TxDOT has not. For example, TxDOT never got the city to sign a Programmatic “Net Benefit” Agreement for a parkland land swap when the I-610 Loop was being rebuilt. Sometimes TxDOT does not do any sort of 4(f) analysis or mitigation plan at all, e.g. for noise and other impacts on Memorial Park arising from the IH-10, Katy Freeway, reconstruction.

Noise abatement, the improper 500-foot restriction, plans to mitigate other impacts such as loss of access, loss of parkland acreage all must be addressed in an RDEIS. CTC makes a special request to other commenters to address the issue of highway traffic noise.

The regulations behind these steps are found in 23 CFR Part 774 and, among others, include §774.3(b) and its coordination requirements:

§ 774.5 Coordination. (b) Prior to making de minimus impact determinations under §774.3(b), the following coordination shall be undertaken:

(2) For parks, recreation areas, and wildlife and waterfowl refuges:

(i) Public notice and an opportunity for public review and comment concerning the effects on the protected activities, features, or attributes of the property must be provided. This requirement can be satisfied in conjunction with other public involvement procedures, such as a comment period provided on a NEPA document.

(ii) **The Administration shall inform the official(s) with jurisdiction of its intent to make a de minimus impact finding. Following an opportunity for public review and comment as described in paragraph (b)(2)(i) of this section, the official(s) with jurisdiction over the Section 4(f) resource must concur in writing** that the project will not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection. This concurrence may be combined with other comments on the project provided by the official(s).

Some of the 22 identified project parklands may qualify for a Programmatic Agreement, but TxDOT has to identify which parks and get proper documentation. Public involvement and notice to the city is still required.

CTC as a transportation group, thinks it is better to leave specific mitigation measures to experts and even residents near the local parks, but we take a position about the treatment and protection of the parklands generally.

The city has a number of civic stakeholder groups that work tirelessly, raise money for, support before the city officials, and represent the parklands. Their efforts should be strongly supported and not ignored by the city. We call on the city to take an active role in park protection and scrutiny of the park impacts caused by the project. We hope with our new parks director there will be a shift in attitude toward the issue of TxDOT or other governmental agencies and highway building and our parks.

CTC is not certain it agrees with positions of commenters who address “net loss” of parklands. There is a “net benefit” programmatic agreement that the city must sign off on after public comment, but CTC thinks that “net benefit” applies to each individual park, not a group of parks whose acreage losses are lumped together.

Again, here CTC is more interested that mitigation must be specified in an RDEIS, and that the full process be followed rather than that any particular mitigation plan be adopted.

## **Houston’s Complete Streets Executive Order and Houston’s Bike Plan are not mentioned in Section 7.3 of the DEIS.**

Local Interfaces with NHHIP project Entrances & Exits should be coordinated as to safe design and safe operation with these city guidances.

Separated bike and pedestrian facilities (e.g. sidewalks) should be built at interfaces and across bridges.

All bridges should have space available for separated bike and pedestrian facilities with adequate lighting and designs in conformance with the Complete Streets and Bike Plan guidances. And at grade crosswalks should be timed accordingly. To enhance neighborhoods and preserve community, bridges should be compatible with the historic fabric of the neighborhood much like along the current I-69 leading into downtown or like bridges crossing freeways in Colorado.

There are federal funds to pay for such coordination: the FAST Act continues the Highway Safety Improvement Program (HSIP) with minor revisions. If safety is one of the three goals of the project, this is an area that would benefit from investigation of these funds to be applied for at grade facilities and interfaces with other pedestrian and bike facilities.

**Complete Streets.** Houston’s Complete Streets policy aims to build local streets and crossings that are safe for all users. Yet, there is no indication in the DEIS that TxDOT intends to design the project’s highway-urban interfaces to comply with Houston’s Complete Streets policies.

**Houston Bike Plan.** The DEIS includes no reference to the extensive, citywide Houston Bike Plan. At a minimum all bridges over the freeway, and all street crossings under the freeway

should provide for a minimum 6' unobstructed sidewalk, a minimum 6' protected bike lane, and NACTO criteria should be incorporated into all highway/surface street intersections.

In short, all intersections in the proposed plan should be designed for safe crossing for pedestrians and bicyclists.

## **TxDOT's policy toward applying for Clean Water Act §404 permits is not in the spirit of CWA or FAST.**

To CTC, Clean Water is as important to the health and economic and social well being of our city and region as is Clean Air. There are just not any federal CMAQ funds associated with Clean Water so there is an inappropriate dismissiveness of the issue of clean water.

**But Clean Water Act permits is a huge issue** for all segments of the project, particularly Segment 3. The Segment 3 Constructability Technical Memo, p1, states that

“The Segment 3 PRA is massive in size and complexity and construction for this project will require large amounts of materials such as over 8 million cubic yards of excavation, 1 million cubic yards of embankment, 1.5 million square yards of pavement, over 2 million square feet of retaining walls and over 9 million square feet of bridge.”

Requests for Jurisdictional Determinations and/or §404/401 Permits to cross navigable waters or to dredge and fill in areas where there would be runoff should be identified and applied for now to avoid noncompliance and holdups to Project Delivery. A 909 grading permit may be required in other than just Segment 3.

If the Preferred Alternatives are known, all of these permits should be evaluated in an exhibit to the RDEIS. The only exception should be where design changes will not be mere refinements, but rather adoption of another alternative.

On page 246 of the DEIS, TxDOT states its intent to wait to apply for Clean Water Act, §404 permits “until the final design is completed.” Section 404 permits would be needed for discharge of any pollutants, including dredged or fill material, to “navigable waters” or Waters of the United States. There will be a lot of such fill. Waters of the United States is much broader than water into which you can put a canoe, but less broad than a gravel pit that may fill up with water occasionally. Permits would be needed for many bridge structures (elevated on piers) for wetlands and stream crossings that feed into Buffalo or White Oak Bayous. (There is a proposed rulemaking that proposes to rescind the 2015 definition of Waters of the United States and revert to the pre-2015 definition. The NPRM states that the rulemaking would not affect governmental agencies.)

Applying for the 404/401 permits is a matter of compliance. It causes much more problems not to apply. CTC does not want to read the DEIS that TxDOT only intends to seek out these permits for crossings of actually navigable portions of White Oak and Buffalo Bayou and would probably only be looking at Segment 3. CTC asserts this is not correct from a legal standpoint,

nor is it timely in terms of FAST planning and project delivery requirements. Permits also have to be acquired for dredge and fill that may cause runoff to navigable waters. With a large construction project in an area with a lot of water, multiple dredge and fill permits will likely be required. If TxDOT does not wish to apply for permits now, it can at least make a list of navigable waters, being more than literally navigable water and commence seeking a jurisdictional determination (JD) whether a particular water in the project's alignment is navigable in terms of permitting processes.

As for a 909 permit, there is a two-step process, so it is harder to evade permitting: a pre-construction meeting shall be done prior to the issuance of a Grading Permit to discuss compliance with NPDES Storm Water Program. So construction cannot begin until the pre-construction meeting.

Past practice seems to be that notwithstanding TxDOT's excellent environmental staff, it is a common TxDOT practice in the Houston District to defer application for a 404 or 404/401 permit for major highway projects until after construction has begun if at all. For the Grand Parkway, TxDOT's deferring applying for a 404 dredge and fill permit held funding up and generated environmental litigation. For the 290/610 project, TxDOT was constructing a bridge across White Oak Bayou and dropping construction materials in the water for well over a year. CTC is still not certain whether a permit was ever acquired for crossing Buffalo Bayou when the I-610 Loop West was reconstructed. Because the USACE does not have real transparency of its processes, it is hard for the public to determine when a permit has been applied for or granted except for a narrow window of time. The two bayous and feeding streams will be crossed many times for this very large NHHIP project and a lot of fill will be required for segments 1 and 2, as well as segment 3, above.

FAST requires that for Acceleration of Project Delivery: "To the extent practicable all Federal permits and review for a project shall rely on a single document prepared under NEPA. TxDOT has some excellent and experienced environmental staff, and that department ought to start compiling lists of where it will need the permits.

## Conclusion

### **There are legal, environmental, and business needs for an Revised Draft Environmental Impact Statement.**

Too much information about too many issues, and in particular crucial information regarding long-term, choking construction impacts on downtown Houston and its viability, and mitigation commitments regarding flooding, detention, and runoff, is missing from the DEIS to proceed straight to an FEIS.

City and county officials, as well as downtown stakeholders and the entire area public, should demand more information about Segment 3. They must also become active in the planning of alternate local street routes so persons can access the downtown during the multi-year construction period.

Moving to an FEIS and including the missing information in the FEIS precludes meaningful public participation and scrutiny.

TxDOT stated on the face of the DEIS that it intended next to publish an FEIS with a possible combined Record of Decision. That is not a stage when decisions can easily be modified or when the public has any meaning chance of public scrutiny, participation, and comment. TxDOT as FHWA's assignee under the TxDOT/FHWA MOU would in effect move to an FEIS and approval thereof by issuing a ROD without further scrutiny.

This DEIS is so inadequate as to key issues as to preclude meaningful analysis. 40 C.F.R. § 1502.9(a) provides: "If a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised draft of the appropriate portion." *Id.* (emphasis added). Correcting these deficiencies will require significant new analyses and the incorporation of high quality and accurate information regarding the Project's impacts.

The agency must allow public scrutiny of the omitted analysis and resulting changes, if any, in a Revised or Supplemental DEIS. An RDEIS should be prepared, presented and submitted for comments.

Public meetings must be held regarding the downtown construction impacts, the number of businesses that will fail, the number of jobs that will be lost, and other negative impacts. Only the issuance of a revised or supplemental DEIS that thoroughly analyzes this missing information will satisfy NEPA's public comment procedures, which "[encourage] public participation in the development of information during the decision making process." *Half Moon Bay Fishermans' Mktg. Ass'n v. Carlucci*, 857 F.2d 505, 508 (9th Cir. 1988).

Simply adding this missing information in the FEIS is insufficient, as it does not allow the same degree of meaningful public participation. *Id.* (citing *California v. Block*, 690 F.2d 753, 770-71 (9th Cir.1982) ("It is only at the stage when the draft EIS is circulated that the public and outside agencies have the opportunity to evaluate and comment on the proposal.... No such right exists upon issuance of a final EIS.")). 40 CFR § 1500.1(b).

## **TxDOT should consider breaking the NHHIP project in two projects (e.g. NHHIP-I and NHHIP-II) for environmental clearance and construction.**

TxDOT should reassess breaking the project in two for environmental clearance: (Project 1) Segments 1 and 2; and (Project 2) Segment 3 and commencing Project 1 first. CTC urges TxDOT to consider flipping the construction schedule and building Segments 1 and 2 first to give more bang for the buck in the shortest time and with least interference with mobility. To that end, CTC strongly supports reconstruction of the I-610 /I-45 interchange first as both a mobility and safety measure. For those segments, our especial concern is environmental justice for Segment 1 and need to set aside business impact mitigation funds for owners and renters of businesses and need to optimize entrances and exits to minimize shifting of impacts to neighborhoods for Segment 2. Neighborhood impacts are issues for Segment 2 (as well as Segment 3). CWA Permitting will be required for all segments.

## **Important concerns CTC has with respect to Segment 3 need to be resolved in an RDEIS.**

Specific major concerns CTC has with Segment 3 include these and other issues in our comments above:

- Long-dated construction processes and multi-year construction gridlock downtown: Keeping at least one lane open does little to offset this and is a highly unsatisfactory solution. If TxDOT knows there will be multi-year gridlock, it must explicitly state this so business owners and elected officials can plan for the worst.
- Adequacy of real estate devoted to the interchanges to maintain design speed and to avoid built in bottlenecks; TxDOT states it will start with I-69 and I-10 because ROW is being acquired. However, this is not an adequate reason to bring those interchanges to the front of the project. TxDOT should reexamine its change in design speed and advise what year that will happen.
- Need for city officials to coordinate with TxDOT and to plan local street routes stakeholders may use to access the city during Segment 3 interchange reconstruction
- Possible to probable intervening radical changes in road use and vehicle types including automated freight handling and driverless cars reducing the amount of lane miles needed for mobility and reducing ozone precursors.
- Difficulty of average drivers using the complex interchanges, once completed, both for current and future vehicles.
- Space for highly visible signage, metering at entrances, better control of unnecessary weaving.
- Drainage and flooding, pumping and air circulation equipment, and funding earmarks.
- Segment 3 has significant unmitigated neighborhood impact issues and Environmental Justice concerns.
- Safety issues: the capacity additions from cantilevered projects are desirable, but adequate exit plans from the lower levels have to be put in place or at least blocking of entrance during major rain storms and terrorist alerts.

Not only should TxDOT conduct further analysis and studies and publish an RDEIS with attachments to the public, but also Segment 3 impacts should be reviewed formally or informally by FHWA as an independent set of eyes.

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Best Regards,

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