PUBLIC COMMENT RESPONSE MATRICES

Project Name	North Houston Highway Improvement Project (NHHIP)	Date:
Project CSJ	0912-00-146	
Technical Report Name	Biology Technical Report	
Technical Report Comment Period	6/20/18 – 7/20/18	
TxDOT Reviewers	M. Fisher	

Entity/Individual Providing Comment	Comment	Response
Lower Brazos Riverwatch	The Draft Biological Resources Technical Report (the Report) is extremely general and contains little detail relating to the resource to be impacted. There is no comprehensive list of species observed during the 2017 field surveys or any detailed description of the habitats encountered. The report provides us with a list of six common mammals, and then states that "a number of birds, snakes, frogs, and insects would also be expected to occur within the project area". No effort is made to describe what these species might be.	The commenter is correct that the report is general with limited detail of all biological resources. This is consistent with TxDOT's approach to focus biological review on legally protected Threatened or Endangered (T&E) species and Species of Greatest Conservation Need (SGCN) as identified by the Texas Parks and Wildlife Department (TPWD). This general requirement does not require an itemized assessment of each species potentially present.
Lower Brazos Riverwatch	The biology report concludes no impacts to EFH are anticipated. The commenter states there is no communication with NOAA (the regulatory authority for EFH).	As stated in Section 7 of the FEIS, if adverse impacts to EFH are anticipated once designs are finalized then coordination with NMFS would occur.
Lower Brazos Riverwatch	Other than to briefly discuss, in tables, Rafinesque's big-eared bat and the southeastern myotis, there is no mention here of bats, which frequent a number of bridges in the area of the project. There is a mention of no evidence of bats being observed in the bridges in the project area in December 2017,	Consistent with TxDOT's SGCN and listed species focus, only two bat species (Rafinesque's big eared and southern myotis) are identified on TPWD's Rare, Threatened, and Endangered Species of Texas (RTEST) list of tracked species for Harris County, Texas.

Entity/Individual Providing Comment	Comment	Response
	however there is no information provided to indicate that TPWD urban biologists were consulted. Anecdotally, the bridges in the vicinity of Sesquicentennial Park were occupied by small bat colonies in 2016 and early 2017. Possibly winter observations, post Harvey, are not representative of typical conditions. This should be reevaluated prior to any disturbance.	Coordination with TPWD was completed on Dec. 1, 2016 consistent with the Memorandum of Understanding (MOU) between TxDOT and TPWD. The MOU process establishes a single point of coordination with TPWD. TxDOT assumes TPWD coordination reflects all appropriate internal TPWD coordination regarding state fish and wildlife resources. As stated in Table 3-17, BMPs applicable to bat species have been agreed upon and coordinated with TPWD for state-listed and
		SGCN species. This included bat surveys in suitable habitat areas prior to construction.
Lower Brazos Riverwatch	There is no evidence presented that an effort was made to determine what bird species actually use the areas of habitat to be impacted by the project. There is no reference to the Audubon CBCs for the vicinity or any breeding bird data.	As noted above, TxDOT does not itemize each species potentially in the area of a TxDOT project. Only T&E and SGCN species are individually addressed.
Lower Brazos Riverwatch	Other than to note that there were "unidentified small fish" observed during the December 2017 field work, no mention is made of fish species occurring in the waters to be impacted, or of these fish providing an urban sport fishery. The icthyofauna is quite diverse in the impacted streams and all of the impacted perennial waters are used for fishing. This needs to be expanded and the fish species present actually identified, as well as locations where fisherman access the waters in the project area.	As noted above, TxDOT does not itemize each species potentially in the area of a TxDOT project. Only T&E and SGCN species are individually addressed. Fish are considered to be mobile and actively avoid the project area during construction. If there is any work in the water, coordination with TPWD would be required. See species impact table specifically detailing this requirement for American eel and creek chubsucker. This coordination would result in permitting as appropriate by TPWD to ensure protection of state fish and wildlife resources.
Lower Brazos Riverwatch	In species tables, the Report discusses the alligator snapping turtle and acknowledges	TxDOT depends on the TPWD's Natural Diversity Database (NDD) and coordination

Entity/Individual Providing Comment	Comment	Response
	that it is potentially present. The tables also indicate that the last recorded observation in the project area was in 1968 with a ten mile buffer distance from the project right-of-way. This species should be regarded as present in all of the perennial waters impacted by the project. It has been documented as being present in Buffalo Bayou at least to downtown, by the Turtle Survival Alliance (TSA) and has been observed in lower White Oak Bayou and Greens Bayou. On September 12, 2017 the Houston Chronicle ran an article documenting the rescue of a large individual from Memorial Drive. The TSA is referenced in the article as having documented the species presence to downtown. Evidence indicates that this is a viable reproducing population. It is concerning that the Report makes no mention of this. While the mitigation measures suggested in the Report may provide some margin of protection during construction, the presence of this species should be regarded as confirmed. Surveys immediately prior to disturbance should be conducted and efforts made to relocate individuals from the impact area.	with TPWD under the 2013 MOU for current records of T&E and SGCN species. TxDOT appreciates the additional information regarding alligator snapping turtle and continues to consider that the species may be impacted by the project. To minimize these potential impacts TxDOT is implementing the Aquatic Reptile Best Management Practices (BMPs) under the TxDOT-TPWD MOU's Best Management Practices Programmatic Agreement (http://ftp.dot.state.tx.us/pub/txdot-info/env/toolkit/300-01-pa.pdf).
Lower Brazos Riverwatch	The species tables also discuss the American and arctic peregrine falcons as being species that might make incidental use of the project area. There is a wintering population of peregrine falcons in downtown Houston. They do actively forage in the project area. While unlikely to be seriously disturbed by the project, they are more than an incidental user of the project area and are observed feeding on birds that roost in the area bridges and	TxDOT continues to consider the project to have no impact on peregrine falcons as any use by the species would be limited to incidental seasonal foraging in a very small portion of the potential foraging area for the species.

Entity/Individual Providing Comment	Comment	Response
	overpasses and on emerging bats. Again, it is concerning that this is not noted and addressed in the Report.	
Lower Brazos Riverwatch	The tables also reference three species of freshwater mussels as being potential occurrences; the Louisiana pigtoe, sandbank pocketbook, and Texas pigtoe. The Report notes that these species are state listed, as threatened, but does not recognize that the Louisiana pigtoe is under review for potential Federal listing under the ESA. The choice of these species also seems to be based on county rather than watershed. Another concern is the failure to include the smooth pimpleback (Quadrula houstonensis), a candidate species for Federal listing that is known to occur on the San Jacinto watershed. Howells (1996) includes Harris County in the likely range for this species.	All perennial waters impacted by the project are presumed to have suitable substrate for these species. TPWD MOU BMPs will be implemented for this species, which includes conducting a survey where suitable habitat exists when work is in the water.
Lower Brazos Riverwatch	The Report is insufficiently complete and detailed to be the technical support for an Environmental Impact Statement. It relies almost entirely on database information from databases that appear to be substantially out of date. There is virtually no site specific information provided, no real characterization of the wildlife and fisheries resources in the project area, and minimal detail in description of impacted habitats. There is no evidence that people and organizations with knowledge of the area were consulted, or that more detailed documents were reviewed. Some of this information was provided in earlier comments on the DEIS, but there is no evidence here that it was considered in the production of the Report.	TxDOT followed all applicable regulatory procedures and best practices in conducting its analyses and feels the adequacy is sufficient to support the project decision. TxDOT reviewed and considered comments on the Draft EIS. Responses to comments on the Draft EIS are included in the Final EIS.

Entity/Individual Providing Comment	Comment	Response
METRO	Why were the fish unidentified? The type of fish can indicate invertebrate ecology, likelihood of other T&E species being present (e.g. life cycle dependent on fish availability), and overall stream health.	As noted above, TxDOT does not itemize each species potentially in the area of a TxDOT project. Only T&E and SGCN species are individually addressed. Fish are considered to be mobile and actively avoid the project area during construction. If there is any work in the water, coordination with TPWD would be required. See species impact table specifically detailing this requirement for American eel and creek chubsucker. This coordination would result in permitting as appropriate by TPWD to ensure protection of state fish and wildlife resources.
METRO	Migratory birds were observed during field work per the discussion under Water Resources on page 5. This section appears to ignore that portions of the project area are foraging habitat.	Migratory birds are protected under the MBTA, regardless of foraging or nesting habitat. EPICS are included for both general Bird BMPs as coordinated with TPWD and for compliance with the Migratory Bird Treaty Act (MBTA).
METRO	Mollusks: Areas of potential water impact should be surveyed as part of this study to determine presence/absence with species specific surveys occurring when more detail design/construction impacts are known.	All perennial waters impacted by the project are presumed to have suitable substrate for these species. TPWD MOU BMPs will be implemented for this species, which includes conducting a survey where suitable habitat exists when work is in the water. Section 7 includes applicable mussel BMPs that have been agreed and coordinated with TPWD.
METRO	Red-cockaded woodpecker: Loblolly pines were observed in the study area as discussed in the vegetation section. Yet the justification does not mention the presence or suitability (or not) as habitat.	The biological technical report states that the occasional loblolly pine (Pinus taeda) or oak species was present as a landscaped overstory component within the project areas but was not an integral species in these communities. This is consistent with the species impact table's no effect determination for this species.

Project Name	North Houston Highway Improvement Project (NHHIP)	Date:
Project CSJ	0912-00-146	
Technical Report Name	NHHIP COTAQA	
Technical Report Comment Period	6/20/18 – 7/20/18	
TxDOT Reviewers	Tim Wood and Jackie Ploch	

Entity/Individual Providing Comment	Comment	Response
Carol Caul Esq	There is no Draft Traffic Noise Technical Report, although the Carbon Monoxide report contains traffic numbers. I note that the 2040 predicted traffic numbers either are vastly understated or the road is being vastly overbuilt compared to the 610 Loop and IH-10 projects. This understatement may be to keep the quantities of air pollutants lower to avoid findings of significant impacts.	Traffic volumes for the NHHIP are documented in the comprehensive traffic study conducted for the project. The traffic study was completed in 2014 and utilized the 2040 H-GAC travel demand model.
Carol Caul Esq	Several of the Technical Reports rely almost exclusively on data from other agencies, such as the CO and MSAT modeling reports and Waters of the US Reports. This does not mean that I agree with the methodology of analysis or conclusions reached, but rather it helps explain why separate reports were published.	Noted.
Carol Caul Esq	Segment 3 was not a part of the extensive and long-running scoping meetings. I want to know what is going on and what the hurry for doing Segment 3 is, and whether the numbers really bear out the purpose and need of the	On the question of air pollution, the Final EIS addresses construction emissions and prevention activities in Section 7.6. The community impacts report also identifies other

Entity/Individual Providing Comment	Comment	Response
	project. The FHWA should examine this question; otherwise, the public may be harnassed with a 15-year construction project. How many years will the public suffer more congestion, air pollution, and flooding downtown while this is being built.	potential construction related prevention activities that overlap with air quality.
Carol Caul Esq	The public sees the construction impacts of the complex US290/610. For years people have been sitting in crushing traffic, wasting time. The time wasted and additional pollution generated by wasted idling fuel have probably offset years of the benefits of 290. I can foresee this exact same problem with the Segment 3 design.	In response to public comment, TxDOT provided supplementary information in Appendix D of the CO TAQA and Appendix C of the MSAT Technical Reports, regarding: 1) overall status of air quality in the greater Houston area, 2) mobile source air emission projections for Harris County, 3) ambient air monitoring for NAAQS and air toxics for the greater Houston area, 4) TCEQ toxicology assessment for the greater Houston area, 5) EPA Study Assessing Outdoor Air Near Schools, and 6) national near-road monitoring data. This supplementary information documents both historical monitoring trends that demonstrate improvements in air quality and future projections of continued improvement in air quality. Also, in response to public comment, TxDOT is developing a program to monitor for carbon monoxide, particulate matter, nitrogen dioxide and MSAT for a minimum of 5 years during construction. For additional information, please see Sections 5.9.3.6 and 6 in the Community Impacts Assessment Technical Report in the Final EIS.
Carol Caul Esq	There is no Traffic Noise Analysis. The CO Analysis Contains Traffic Predictions and Marks Them Both For CO and Noise.	Although traffic data is developed for both air and noise purposes, the noise analysis is not part of the CO TAQA technical report. Please

Comment	Response
The CO Analysis is the only place where forecast Traffic Volumes are tabulated. Appendix A contains Traffic Volumes for Noise Analysis. If forecast numbers are really as low as predicted, the project is not necessary, and only the unsafe interchanges (including the Pierce Elevated) should be rebuilt. I question the numbers; are they a way to avoid air pollution and noise impact	refer to the Noise Technical Report for information on that analysis. Traffic volumes for the NHHIP are documented in the comprehensive traffic study conducted for the project. The traffic study was completed in 2014 and utilized the 2040 H-GAC travel demand model.
The DEIS as usual does not have a separate noise analysis that describes how noise impacts are modeled. The noise data do not belong buried in the CO Analysis.	
Noise is one of the most disturbing impacts of a highway project, and is one type of impact for which there is a numerical path for abatement of impacts. Unabated noise impacts must be subject to a mitigation plan by law. The CO impact analysis has receptor points	
The carbon monoxide (CO) analysis is usually treated as a localized impact, but there should be more discussion of fuel technologies and cleaner and small vehicles to reduce air pollution and cut oil use to the point where CO and MSAT vehicle based analyses of air pollution will not be necessary.	Cleaner fuel and vehicle regulations in association with local fleet data do account for some of these in the MOVES emission modeling to some extent. At this time, the percent changes beyond current and historic fleet mix are not accounted for, and would be highly speculative. However, an increase in percentages of cleaner vehicles would further reduce the level of emissions projected.
	The CO Analysis is the only place where forecast Traffic Volumes are tabulated. Appendix A contains Traffic Volumes for Noise Analysis. If forecast numbers are really as low as predicted, the project is not necessary, and only the unsafe interchanges (including the Pierce Elevated) should be rebuilt. I question the numbers; are they a way to avoid air pollution and noise impact abatement? The DEIS as usual does not have a separate noise analysis that describes how noise impacts are modeled. The noise data do not belong buried in the CO Analysis. Noise is one of the most disturbing impacts of a highway project, and is one type of impact for which there is a numerical path for abatement of impacts. Unabated noise impacts must be subject to a mitigation plan by law. The CO impact analysis has receptor points that are not appropriate for noise receptors. The carbon monoxide (CO) analysis is usually treated as a localized impact, but there should be more discussion of fuel technologies and cleaner and small vehicles to reduce air pollution and cut oil use to the point where CO and MSAT vehicle based analyses of air

Project Name	North Houston Highway Improvement Project (NHHIP)	Date: February 3, 2020
Project CSJ	0912-00-146	
Technical Report Name	NHHIP Hazardous Materials	
Technical Report Comment Period	2/15/19 – 4/17/19	
TxDOT Reviewers	Terry Dempsey and Mark Norman	

Entity/Individual Providing Comment	Comment	Response
Devon Daniel and Valerie Simpson Daniel— 3312 SAINT EMANUEL STREET - 77004	From the document, my wife and I are unable to understand if the area of my property will be affected or not. I would appreciate clarifications.	3312 Saint Emanuel Street is not identified as a Hazardous Material Site in the Technical Report, and no sites were identified in the immediate vicinity. TxDOT would not anticipate any impacts related to hazardous materials.
FRANCESCO TURCHETTI – 3310 SAINT EMANUEL STREET - 77004	From the document, I am unable to understand if the area of my property will be affected or not. I would appreciate clarifications.	3310 Saint Emanuel Street is not identified as a Hazardous Material Site in the Technical Report, and no sites were identified in the immediate vicinity. TxDOT would not anticipate any impacts related to hazardous materials.
PATRIZIA FIGOLI – 3310 SAINT EMANUEL STREET - 77004	From the document, I am unable to understand if the area of my property will be affected or not. I would appreciate clarifications.	3310 Saint Emanuel Street is not identified as a Hazardous Material Site in the Technical Report. and no sites were identified in the immediate vicinity. TxDOT would not anticipate any impacts related to hazardous materials.
Citizens Transportation Coalition	Pg 1, Paragraph 3: TxDOT must include an analysis of the direct or indirect impacts upon ground and surface waters when hazardous materials are moved, dug up, piled with soils and construction debris, or allowed to be	Hazardous materials/contamination issues are identified early in project development so that impacts can be avoided or minimized. When contamination cannot be avoided, management plans would be developed by

Entity/Individual Providing Comment	Comment	Response
	dumped, or runoff in heavy rains and floods into state or US waters.	environmental professionals. The management plans would include procedures to ensure that hazardous materials are contained and disposed in a manner the does not impact the surrounding environment.
Citizens Transportation Coalition	Pg 2, First full paragraph: The commenter is expressing concerns about runoff of hazardous materials related to rainfall events during the operational phase of the project, particularly as related to flooding, which might be exacerbated by increased impervious cover.	The purpose of the hazardous materials technical report is to document the initial assessment (ISA). The ISA is designed to provide early identification of potential contamination or waste sites that could affect (or be affected by) the transportation project. The hazmat technical report did not identify any unusual surface contamination issues that would be expected to impact highway runoff. Moreover, rainfall runoff and flood control issues would to be addressed in the hydraulic design and storm water pollution prevention planning for the project
Citizens Transportation Coalition	Pg 2, 2cd full paragraph: The Technical Report and DEIS do not even mention or explain briefly to the public the key federal statutory obligations regarding hazardous materials (CERCLA, SARA, RCRA)	While the documents do not explicitly mention or explain these laws, the technical report and DEIS meet the FHWA requirement of identifying and locating potential waste sites regulated under these laws. The DEIS does include a commitment to handle hazardous materials in accordance with applicable regulatory requirements.
Citizens Transportation Coalition	Pg 2, 3 rd full paragraph: The report does not mention how hazardous materials pose an environmental threat to waters and humans, and some of which may require superfund treatment.	Review of final project design requirements and additional environmental assessment will be required to determine specific hazardous materials impacts. When impacts cannot be avoided, management plans will be developed and implemented to mitigate any environmental threats to waters and humans.
Citizens Transportation Coalition	Pg 2, 3 rd full paragraph: The report does not mention the steps TxDOT will require its contractors to use to report incidents, the	Under TxDOT standard specifications, TxDOT contractors are responsible for complying with all legal requirements, including hazardous

Entity/Individual Providing Comment	Comment	Response
	agencies to which TxDOT will report, and avoidance mechanisms for disturbing any hazardous materials in the construction easement and removing and disposing of them in the project alignment.	materials incident reporting, when the hazardous material is introduced by the contractor. When unanticipated hazardous materials are disturbed, the standard specifications require that the contractor contact TxDOT immediately. TxDOT has environmental staff trained in hazardous materials issues to make the appropriate regulatory notifications. TxDOT maintains standing contracts with environmental remediation contractors qualified to handle hazardous materials incidents. Detailing the specific reporting and incident response procedures are outside the scope of the initial hazardous materials assessment.
Citizens Transportation Coalition	Pg 2, 4th full paragraph: NEPA requires at least a few lines of how to enhance the environment, say in low income, flood plain areas in Segment 1, or that this will not be done.	This is out of the scope of the initial hazardous materials assessment, but may be addressed as a community impact.
Citizens Transportation Coalition	Pg 2, 5th full paragraph: Regarding flooding or runoff that may occur during construction or during operation: Not one of these sites was slated or even suggested for cleanup, and most were in low income areas. No mitigation is proposed and the report does not evaluate whether any mitigation is appropriate.	The hazardous materials release sites identified in the report were generally identified because they are already in a regulatory program requiring the responsible party to address cleanup. Detailed mitigation planning is beyond the scope of the initial site assessment, but plans would be developed to mitigate any known hazardous materials anticipated to be disturbed during project construction or operations. Remediation contractors would be available to address any unanticipated contamination.
Citizens Transportation Coalition	Pg 3, 3 rd paragraph: TxDOT notes that "these materials would most likely be encountered during road construction. This is not correct. What is correct is that contractors	As previously indicated, the purpose of the initial hazardous materials assessment is to identify potential hazardous materials sites that could be of concern for the project.

Entity/Individual Providing Comment	Comment	Response
	constructing roads would most likely encounter hazmat during construction. Nothing is stated about other cases such as water impacts.	Where impacts are anticipated, detailed management plans would be developed to ensure that hazardous materials are contained and disposed in a manner the does not impact the surrounding environment. Should unanticipated contamination be encountered, procedures are addressed in the contract specifications, and remediation contracts would be in place to respond in a timely manner. Rainfall runoff and flood control issues would to be addressed in the hydraulic design and storm water pollution prevention planning for the project.
Citizens Transportation Coalition	Pg 4, 2cd paragraph: CTCdoes not agree that these procedures and plans are adequate for handling construction related encounters with hazmat. CTC doubts ALL work would cease and there does not appear to be a commitment on the part of TxDOT contractors to report such events to TxDOT or the relevant agency.	TxDOT standard specifications require that the contractor notify TxDOT immediately when unanticipated hazardous materials are encountered. The TxDOT Engineer would suspend work as necessary for TxDOT to address the issue. TxDOT has experienced environmental staff and specialty contractors responsible for environmental compliance and trained in addressing hazardous materials issues, including applicable reporting requirements.
Citizens Transportation Coalition	Pg 4, 2cd paragraph: Asbestos and other abatement should occur at the expense of TxDOT and not as a deduction from any payment made for construction takings.	Abatement for asbestos and other hazardous materials is generally paid from the project budget.
Citizens Transportation Coalition	Pg 4, 3rd paragraph: The report merely lists potential new sites, it does not identify anything in terms of the unstated "multitude of problems".	The purpose of the initial hazardous materials assessment is to identify potential hazardous materials concerns for the project. Additional assessment, avoidance, and mitigation would be addressed, as needed, in later phases of project development.
Citizens Transportation Coalition	Pg 6, 2cd paragraph: CTC holds that a more thorough analysis of the issue of hazardous	The hazardous materials technical report documents the findings of the initial site

Entity/Individual Providing Comment	Comment	Response
	materials, not just during construction, but also during road operation and rain runoff, flooding, and other weather events and specific mitigation plans are required.	assessment. More detailed assessment and management plans would be developed, as needed, during later stages of project development. Implementation of measures to mitigate runoff and flooding issues during road operation would be incorporated into the project plans during the design phase.
METRO	Comments #1&2: Metro facilities and operations need to be maintained during any Hazmat mitigation measuresCoordination with Metro will be required for detours, interruptions, or other modifications to transit operations during mitigation of hazmat sites.	Any detours, interruptions, or other modifications related to hazardous materials assessment or mitigation and affecting transit operations would be coordinated and exchanged through the Houston TranStar system.
METRO	Comment #3: Metro would like to see the Phase 1 ESA results of the locations mentionedprior to a Record of Decision.	The specific location and scope of additional assessment for hazardous materials will be determined based on project design, right of way requirements, and access availability. Assessments may occur after the Record of Decision. All reports would be available from the TxDOT Houston District Office.

Project Name	North Houston Highway Improvement Project (NHHIP)	Date: 1/14/20
Project CSJ	0912-00-146	
Technical Report Name	Draft Historical Resources Survey Report (March 2019)	
Technical Report Comment Period	4/25/19 — 6/25/19	
TxDOT Reviewers	Renee Benn, Bruce Jensen	

Entity/Individual Providing Comment	Comment	Response
Preservation Houston	Objects to demolition of Rossonian cleaners. Request preserving c. 1928 portion of building	TxDOT is looking into the engineering viability of this request- work with property owner and ROW division is ongoing. TxDOT will continue to consult with Preservation Texas and the SHPO regarding this property.
Preservation Houston	APE along IH 610 between IH 45 and McComb St may contain historic properties, associated with Independence Heights	TxDOT conducted further research into this neighborhood based on NRHP criteria and registration requirements established in the existing documentation. The results are contained in the final historic technical report for the FEIS available on the project website-Historical Resources Survey Report- Update September 2019. In September 2019, SHPO concurred with TxDOT's finding that the Independence Heights Historic District boundary does not extend to the area of potential effect for this project.
Preservation Houston	Concerned about possible impacts on potential historic properties along IH 610 and East 32nd St adjacent to APE	TxDOT conducted further research into this neighborhood based on NRHP criteria and registration requirements established in the existing documentation. The results are contained in the final historic technical report for the FEIS available on the project website-

Entity/Individual Providing Comment	Comment	Response
		Historical Resources Survey Report-Update September 2019. In September 2019, SHPO concurred with TxDOT's finding that the Independence Heights Historic District boundary does not extend to the area of potential effect for this project.
Oscar Slotboom	Many properties in the HRSR are not historic	Thank you for your comments. Under the National Historic Preservation Act (NHPA) TxDOT historians consult with stakeholders and consulting parties to determine which properties are historic and meet regulatorily mandated NPS criteria, with Texas Historical Commission concurrence.
Lone Star Legal Aid	Independence Heights (IH) should have been included in HRSR	TxDOT conducted further research into this neighborhood based on NRHP criteria and registration requirements established in the existing documentation. The results are contained in the final historic technical report for the FEIS available on the project website-Historical Resources Survey Report- Update September 2019. In September 2019, SHPO concurred with TxDOT's finding that the Independence Heights Historic District boundary does not extend to the area of potential effect for this project.
Lone Star Legal Aid	DEIS states IH is "historic" but it is not in the HRSR	The definition of "historic" under Section 106 of the National Historic Preservation Act (NHPA) is limited to regulatorily mandated National Register of Historic Properties (NRHP) criteria. The DEIS/FEIS may note that neighborhoods or properties are historic based on age alone. This is not the same criteria used to evaluate properties under Section 106. TxDOT conducted further research into this neighborhood based on NRHP criteria and registration requirements established in the existing documentation.

Entity/Individual Providing Comment	Comment	Response
		The results are contained in the final historic technical report for the FEIS available on the project website- Historical Resources Survey Report- Update September 2019. In September 2019, SHPO concurred with TxDOT's finding that the Independence Heights Historic District boundary does not extend to the area of potential effect for this project.
Lone Star Legal Aid	Greater Mt. Olive Missionary Baptist Church should be considered as historic under Section 106	The National Park Service (NPS) requires that religious properties meet stricter criteria for NRHP-listing (Criteria Consideration A). Further, the church is not historic-age and does not meet the NPS Criteria Consideration G for properties less than 50 years of age. TxDOT is willing to develop documentation of the congregation's history as a component of its environmental impacts to the church. The documentation would provide a foundation for pursuit of an official Texas Historical Marker at the discretion of the property owners. Its history is certainly worth telling, although the new building itself does not meet strict NRHP criteria, as evidenced by SHPO concurrence on eligibility of historic properties in the area of potential effects.
Lone Star Legal Aid	Request MOA to address adverse impacts under Section 106	A Section 106 MOA is not appropriate since no historic properties in Independence Heights would be adversely affected by the project.
Ronnie Self- Third Ward owners at 3308 Saint Emanuel St	New right-of-way (ROW) from 3rd ward	There is no change in ROW at the Third Ward boundary in this location. No new ROW is required from the Third Ward.

Entity/Individual Providing Comment	Comment	Response
Minnette Boesel	Buildings near the intersection of Chartres and Commerce # 733 735 736 in the HRSR should be historic	SHPO previously concurred that these buildings are not individually NRHP-eligible or part of a historic district, see THC to SWCA response letter as part of a Harris County Flood Control District project survey.
Minnette Boesel	#740s-760s could be a historic district	SHPO and TxDOT already concurred this area does not contain a historic district, in coordination dating 12/11/17. This concurrence was reaffirmed in the SHPO letter dating 9/9/19.
Minnette Boesel	Sam Houston Park could be an eligible "Site"	The NPS criteria for moved buildings requires a higher standard for this property to meet NRHP listing requirements. As noted by the commenter, the level of change affects the level of historic integrity required to meet NRHP criteria as a historic park. TxDOT determined the Kellum-Noble house a historic property with its boundary as the house footprint. TxDOT determined that Sam Houston Park is not an NRHP-eligible park. SHPO concurred with these findings in a letter dated 9/9/19.

Project Name	North Houston Highway Improvement Project (NHHIP)	Date:
Project CSJ	0912-00-146	
Technical Report Name	Indirect Impacts Technical Report	
Technical Report Comment Period	6/20/18 – 7/20/18	
TxDOT Reviewers	Nicolle Kord	

Entity/Individual Providing Comment	Comment	Response
METRO	State the two locations that could induce redevelopment	Editorial comment. Edit would not change the analysis or outcome.
METRO	Why weren't the Management Districts given the same land use and vacant land maps as the other agencies surveyed?	Editorial comment. Edit would not change the analysis or outcome.
METRO	Is HHA supposed to be HCFCD?	Editorial comment. Edit would not change the analysis or outcome.
Carol Caul	Flooding could be incorporated alternatively in the Indirect Impact Technical Report. Segment 3 was brought into the project at a late date after extensive scoping of the "pancake" or linear part of the project (Segments 1 and 2). Segment 3 has not yet been subject to sufficient independent scrutiny and to the purpose and need and safety of the preferred alignment particularly after Harvey.	Flooding is discussed in great detail in the floodplains section of the EIS and the Hydraulics Tech Report. No additional information is needed in the indirect tech report.
Carol Caul	Indirect impacts does not mention the great amount of real estate development both downtown and in the 100-year floodplain that will result. TxDOT needs to state that it is incontestable it will.	TxDOT's standard method of analysis and discussion with planning experts dictated the results of the analysis which did not include development in the stated areas; therefore, these areas will not be added.

Entity/Individual Providing Comment	Comment	Response
Carol Caul	The land development benefits and harms could also be reported in the Indirect Impacts analysis if not in the community impact analysis.	Comment was on lack of information on changes in land use. This is discussed in the Community Impacts and Cumulative Impacts tech reports which had not been published at the time of these comments.
Irving and Conner	First, we request that TxDOT follow-up with the agencies and districts that did not respond to the induced growth/land development questionnaire. It is not unreasonable to assume that these districts will identify additional areas of potential project-induced growth and other indirect effects in localized areas. We also ask that the agency take a hard look at any minimization or mitigation proposals identified by these agencies, districts, and other community groups that could reduce the indirect impacts identified in the report.	Multiple attempts were made to contact agencies. No further attempts will be made. Not all development/redevelopment is seen as negative and is often seen as positive. Additionally, there are no requirements for mitigation of the types of indirect impacts anticipated for this project. No additions will be made to the tech report.
Irving and Conner	Despite nearly 5,000 acres of land having the potential for indirect induced growth potential, TxDOT concludes that the requirement for mitigation of environmental impacts would be limited to mitigating only the direct impacts associated with the proposed project. The report proposes no potential mitigation for any of these indirect impacts. We understand that some areas of potential mitigation are outside the control of TxDOT. However, it is critical under NEPA that the agency consider reasonable minimization and mitigation techniques that are available to the agency that could help mitigate these significant indirect impacts. This is especially important for resources that TxDOT has already determined are at risk (e.g., community resources). Courts have been clear that the	Not all development/redevelopment is seen as negative and is often seen as positive. Additionally, some of the mitigation proposed for EJ impacts is intended to offset some indirect impacts. This is documented in the Community Impacts tech report; therefore no changes will be made to the Indirect Impacts tech report.

Entity/Individual Providing Comment	Comment	Response
	type of mitigation available is an issue to consider in evaluating the severity of the indirect impacts of a proposed project.	
Irving and Conner	We also request that TxDOT continue coordinating with other agencies, districts, and community groups who do have control over relevant and reasonable mitigation measures to encourage them to implement those measures.	Continued coordination has been documented in the Community Impacts tech report; therefore, no changes are proposed to the Indirect Impacts tech report.
Irving and Conner	Third, the draft technical report focuses heavily on induced growth impacts. However, the definition of indirect effects is much broader than induced growth and induced growth-related environmental effects. The report should make clear whether any other indirect effects (e.g., encroachment-alteration effects) are reasonably foreseeable as a result of the project. Additionally, for growth-related environmental effects, TxDOT simply includes a single chart at the end of the report after devoting twenty pages to calculating induced growth potential. We request that indirect impacts to these resources be detailed with greater specificity for the public either in the discussion of the resource in the EIS document or in future drafts of the technical report.	Per TxDOT methodology, encroachment impacts are discussed in conjunction with direct impacts in each specific resource tech report. No additions will be made to the Indirect Impacts tech report.

Project Name	North Houston Highway Improvement Project (NHHIP)	Date:	
Project CSJ	0912-00-146	0912-00-146	
Technical Report Name	NHHIP MSAT		
Technical Report Comment Period	6/20/18 - 7/20/18		
TxDOT Reviewers	Tim Wood and Jackie Ploch		
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Entity/Individual Providing Comment	Comment	Response
Air Alliance Houston	While TXDOT's draft analysis appears to comply with FHWA minimum requirements, it falls short of assessing the unique health impacts on the communities that will be affected by the expansion.	In Appendix C of their October 2016 Interim MSAT guidance, FHWA provides rationale that project-specific health impacts cannot be reasonably predicted due to information is incomplete or unavailable. For more detail, see Section 2.0 (Incomplete or Unavailable Information for Project-Specific MSAT Health Impacts Analysis) of the MSAT technical report. In addition, we have added a section to Appendix C of the MSAT technical report (The Role of Health Risk Assessment in a National Environmental Policy Act Context for Highway Projects) with additional supporting clarification of health assessment limitations.
Air Alliance Houston	Aggregating or averaging changes in emissions across the entire study area fails to identify 'hot spots' where hazardous air pollutants are projected to surpass allowed levels. By aggregating emissions across the 8-county transportation network, the assessment does not address the areas along the corridor where MSATs are projected to increase by 5% or more. It is possible that sensitive groups – such as children, the	In this report, TxDOT evaluated MSAT emissions in accordance with FHWA's Interim Guidance on Air Toxic Analysis in NEPA Documents, which explains why FHWA does not perform a project-specific health impacts analysis for MSATs. Please refer to Section 2.0 of the MSAT technical report, Incomplete or Unavailable Information for Project-Specific MSAT Health Impacts, for more information.

Entity/Individual Providing Comment	Comment	Response
	elderly, and people suffering from chronic diseases like asthma or heart disease – congregate in some locations where MSAT concentrations are projected to increase substantially. The analysis fails to disclose baseline MSAT emissions along each segment of roadway. This information is necessary to interpret the significance of a percentage increase or reduction in the likelihood of exposure. The percentage increase is displayed section-by-section on a map (Figure 2, p. 10) without providing estimates of current MSAT emissions at that scale to allow for comparison. It is important to understand whether sensitive populations are located in areas that are already exposed to high levels of toxic air pollution and whether the NHHIP project expects to increase or reduce that exposure.	While the regulations and guidance do not require a hotspot emissions analysis (specific locations along a project), in response to comments TxDOT supplemented the analysis by examining data regarding emissions on a more local level as part of its evaluation of the NHHIP's impact on air quality. In Appendix C of the MSAT TR, TxDOT examined supplementary information regarding localized air impacts, specifically: 1) TCEQ's Air Pollutant Watch List (APWL) for air toxics, 2) TCEQ's Toxicological Review for the area, 3) TCEQ's air toxics monitoring, 4) further elaboration on the role of health-risk assessments for highway projects, and 5) an EPA ambient air school study. EPA conducted ambient monitoring of 14 schools across the U.S. abutting major roadways and found all monitored MSATs were less than thresholds for assessing short-term or long-term health risks.
	A more detailed estimate of exposure to communities is needed. The analysis also fails to provide a more detailed estimate of the percentage increase/decrease of these concentrations beyond the FHWA required ±5%. Based on the May 2018 report, it is impossible to know whether some areas will experience double digit increases or decreases in emissions. This is a particularly important consideration along the NHHIP corridor, because increases in MSAT concentrations would overwhelmingly affect environmental justice communities; and, an	TxDOT considered the supplemental information and data which did not identify a current MSAT impact) and the lower future MSAT projections (both nationally and at the project level). However, unavailable and incomplete information limits the ability to accurately perform MSAT project specific health-impacts, so TxDOT was unable to demonstrate a disproportionate MSAT impact on any population, including minority or lowincome populations, or sensitive populations such as children.

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	analysis of the impacts to these communities is also a requirement of the NEPA process.	The data table with the emission calculations for this project will be uploaded to the project file.
		Also in response to public comment, TxDOT is developing a program to monitor for MSAT for a minimum of 5 years during construction. For additional information, please see Sections 5.9.3.6 and 6 in the Community Impacts Assessment Technical Report in the Final EIS.
Air Alliance Houston	These oversights should be resolved by: 1. adding additional categories to the quantitative analysis (beyond 0%-5% and 5% or more) to demonstrate the distribution of	TxDOT evaluated MSAT emissions in accordance with FHWA's Interim Guidance on Air Toxic Analysis in NEPA Documents.
	higher levels of MSAT emissions; 2. making all information used to perform the quantitative analysis public – including the model, data, and shapefiles used to create Figure 2: Affected Network Roadway Links (p.10); and, 3. conducting further investigation into the distribution of MSAT increases to determine if the project reinforces conditions of environmental inequality.	In Appendix C of their October 2016 Interim MSAT guidance, FHWA indicates that information is incomplete or unavailable to reasonably predict the project-specific health impacts. For more detail, see Section 2.0 (Incomplete or Unavailable Information for Project-Specific MSAT Health Impacts Analysis) of the MSAT technical report.
		The model data is based on the lookup tables developed form MOVES and is located in TxDOT's compliance toolkit website. The data table with the emission calculations for this project will be uploaded to the project file. This data table includes the affected link information from the Shapefiles. Travel demand model network Shapefiles belong to the MPO and are within their purview to release.

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		Air Alliance Houston suggestions were considered by TxDOT providing supplemental information in Appendix C of the MSAT TR. TxDOT considered this supplemental information and data (which did not identify a current MSAT impact) and the lower future MSAT projections (both nationally and at the project level). However, unavailable and incomplete information limits the ability to accurately perform MSAT project-specific health impacts, so TxDOT was unable to demonstrate a disproportionate MSAT impact on any population, including minority or low-income populations or sensitive populations such as children. Also in response to public comment, TxDOT is developing a program to monitor for MSAT for a minimum of 5 years during construction. For additional information, please see For additional information, please see Sections 5.9.3.6 and 6 in the Community Impacts Assessment Technical Report in the Final EIS.
Air Alliance Houston	Finally, Air Alliance Houston has been funded to perform a Health Impact Assessment (HIA) of the NHHIP. A HIA is an objective methodology designed to establish ways in which a proposed policy or project could benefit and/or harm community health. We encourage TXDOT's participation in the assessment process and strongly recommend incorporating the assessment findings and recommendations into the Final EIS.	In response to public comments and to your HIA, TxDOT provided supplementary information in Appendix D of the CO TAQA and Appendix C of the MSAT Technical Reports, regarding: 1) overall status of air quality in the greater Houston area, 2) mobile source air emission projections for Harris County, 3) ambient air monitoring for NAAQS and air toxics for the greater Houston area, 4) TCEQ toxicology assessment for the greater Houston area, 5) EPA Study Assessing Outdoor Air Near Schools, and 6) national near-road monitoring data. This

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		supplementary information documents both historical monitoring trends that demonstrate improvements in air quality and future projections of continued improvement in air quality.
		TxDOT considered the supplemental information and data (which did not identify a current MSAT impact) and the lower future MSAT projections (both nationally and at the project level). However, unavailable and incomplete information limits the ability to accurately perform MSAT project-specific health impacts, so TxDOT was unable to demonstrate a disproportionate MSAT impact on any population, including minority or lowincome populations or sensitive populations such as children.
		Also in response to public comment, TxDOT is developing a program to monitor for MSATs for a minimum of 5 years during construction. For additional information, please see Sections 5.9.3.6 and 6 in the Community Impacts Assessment Technical Report in the Final EIS.
Carol Caul Esq	Several of the Technical Reports rely almost exclusively on data from other agencies, such as the CO and MSAT modeling reports and Waters of the US Reports. This does not mean that I agree with the methodology of analysis or conclusions reached, but rather it helps explain why separate reports were published.	Noted.
Carol Caul Esq	Segment 3 was not a part of the extensive and long-running scoping meetings. I want to	On the question of air pollution, the Final EIS addresses construction emissions and

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	know what is going on and what the hurry for doing Segment 3 is, and whether the numbers really bear out the purpose and need of the project. The FHWA should examine this question; otherwise, the public may be harnassed with a 15-year construction project. How many years will the public suffer more congestion, air pollution, and flooding downtown while this is being built.	mitigation activities in Section 7.6. The community impacts report also identifies other potential construction related EJ mitigation activities. As discussed in Section 1.1 of the Final EIS, the North-Hardy Corridor planning studies identified a need for additional lanes between Downtown Houston and Beltway 8 North. Downtown Houston is a major employment center and trip destination. The I-45/Beltway 8 North interchange is a frequent trip destination, given its proximity to residential neighborhoods and places of employment in the Greenspoint area. Additionally, the I-45/Beltway 8 North interchange does not need any redesign in order to implement the proposed project, as it was completed in 1999 and continues to meet current design standards. The proposed project originally had a southern limit at the SH 288 and US 59/1-69 interchange south of Downtown Houston. During the alternatives analysis process, it was determined that extending the project along US 59/I-69 to Spur 527 would be necessary to accommodate transitioning the proposed improvements to the existing US 59/I-69 depressed roadway. Therefore, the limits of the proposed project were adjusted for transitions, and the current project limits are US 59/I-69 at Spur 527 and I-45 at Beltway 8 North. The project termini, therefore, are rational endpoints identified for construction and for review of the environmental impacts.
Carol Caul Esq	Climate change could be part of the Flooding or MSAT analysis since it is climate change	Section 4 of the Final EIS includes the evaluation of Greenhouse Gas Emissions and

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	that is bringing about flooding and tailpipe emissions, methane, nitrous oxide, and carbon dioxide, that are the greenhouse gases contributing to the flooding.	references the Statewide On-Road GHG Emissions Analysis and Climate Change Assessment Technical Report.
	Climate change is one environmental effect that may be appropriate for managers of federal lands to consider when undertaking environmental analysis as part of the National Environmental Policy Act (NEPA) review process. In many ways, consideration of climate change is similar to the consideration of any other environmental effects. Considerations related to climate change include: 1. The effects of a project on climate change (through greenhouse gas emissions or carbon sequestration). 2. The effects of climate change on a proposed project. In other words, how climate change may influence the purpose and need for projects in the shortterm (within the next 10 to 15 years).	In September 2018, the National Oceanic and Atmospheric Administration (NOAA) released a study, published as NOAA Atlas 14, Volume 11 Precipitation-Frequency Atlas of the United States, Texas, that found increased rainfall frequency values in Houston, resulting in changes to the rainfall amounts that define 100-year events, which are those that on average occur every 100 years or have a one percent chance of happening in any given year. Anticipating that drainage design criteria will be changing based on NOAA Atlas 14 data, TxDOT is incorporating updated rainfall frequency values and/or additional safety factors in the final design of the NHHIP.
Carol Caul Esq	The public sees the construction impacts of the complex US290/610. For years people have been sitting in crushing traffic, wasting time. The time wasted and additional pollution generated by wasted idling fuel have probably offset years of the benefits of 290. I can foresee this exact same problem with the Segment 3 design.	In response to public comment, TxDOT provided supplementary information in Appendix D of the CO TAQA and Appendix C of the MSAT Technical Reports. This supplementary information documents both historical monitoring trends that demonstrate improvements in air quality and future projections of continued improvement in air quality.
		Also in response to public comment, TxDOT is developing a program to monitor for MSATs for a minimum of 5 years during construction. For additional information, please see Sections 5.9.3.6 and 6 in the Community

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		Impacts Assessment Technical Report in the Final EIS.
Carol Caul Esq	This report should quantify the varying levels of avoided pollution the stakeholders would benefit from if better fuels and vehicles were used. This report is too static as to fuels. The report should also break out and quantify any avoided levels of pollution that would benefit from better numbers of mass transit (not using diesel) on the HOV lanes, better little cars and car trains, and less congestion on the interchanges. This report is based largely on data from H-GAC; collecting such data is part of H-GAC's responsibilities. The MSAT Report examines the issue of regional and wind disbursed pollution based on traffic count forecasts and weather forecasts but does not treat the issue of how much pollution impacts could be reduced by fuel switching.	Tables 1 and 2 of the MSAT technical report address the reduction of each priority MSAT in relationship to the base year MSAT emissions. The MOVES emissions model already accounts for improvements from cleaner vehicles and cleaner fuels over time as fleets turn over. Although changes in ridership beyond what H-GAC accounts for in the travel demand model would require speculation that is not required under NEPA, increased mass transit ridership would further reduce projected emissions.
Carol Caul Esq	The following are the major pollutants from fossil-fueled motor vehicles: Particulate matter (PM), Hydrocarbons (HC) Nitrogen oxides (NOx) Carbon monoxide (CO) Sulfur dioxide (SO2) Hazardous air pollutants (toxics) Several of the above comprise major greenhouse gases These are modeled by H-GAC based on traffic counts, vehicle classes, and fuel.	Noted.
Carol Caul Esq	The MSAT Report does not begin Project Specific Information until page 6 of the report where it reaches the improbable conclusion	Tables 1 and 2 of the Quantitative MSAT Technical Report indicate that the no-build alternative has slightly less total MSAT than

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	that toxic pollutants will actually be reduced given the increased amounts of traffic and VMT because of the greater speeds and traffic flow given the same gasoline and diesel vehicle types! I find this an outrageous conclusion but one TxDOT often puts forward: go faster and there will be less pollution. Maybe, but the go faster part does not work in practice. Page 6 states TxDOT's conclusion regarding toxic pollutants in part: "This increase in VMT would lead to higher MSAT emissions for the preferred action alternative along the roadway corridor, along with a corresponding decrease in MSAT emissions along the parallel routes. The emissions increase is offset somewhat by lower MSAT emission rates due to increased speeds; according to EPA's MOVES2014 model, emissions of all of the priority MSAT decrease as speed increases. Also, regardless of the alternative chosen, emissions would likely be lower than present levels in the design year as a result of EPA's national control programs that are projected to reduce annual MSAT emissions by over 90 percent between 2010 and 2050." It appears that H-GAC may have provided the traffic predictions and the vehicle mix as it typically would, but I do not believe that H-GAC concurs in the conclusion that building the project will result in less toxic pollutants given current and forecasted fossil fuel vehicle mixes.	the build alternative in both 2035 and 2040, likely due to increased VMT of the build alternative in those years. TxDOT's conclusion is that regardless of the build or no-build alternative, MSAT emissions are projected to decline by over 70% from the base year to the future years analyzed. This is due largely to a combination of EPA's national vehicle and fuel control programs and fleet turnover. These controls are the reason MSAT emissions are projected to be less in the future even as VMT is projected to increase. The downward trend predicted by the quantitative MSAT analysis is consistent with EPA projections that their MSAT rule should reduce MSAT by 330,000 tons nationally by 2030. For more detail, see the EPA Fact sheet titled: Control of Hazardous Air Pollutants from Mobile Sources: Final Rule to Reduce Mobile Source Air Toxics, EPA420-F-07-017, February 2007. EPA incorporated these fleet and fuel controls into the MOVES model that was used in the project's quantitative MSAT analysis.

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	TxDOT should clarify this conclusion and state it clearly and expressly in the EIS.	
CTC	Climate Change especially as to Segment 3. TxDOT should show bravery and appreciation for science as engineers and include the topic of climate change either as a separate technical report but at least as an indirect and cumulative impact that will affect not only our planet but also the way the freeway will operate to serve its mobility functions. If not a separate report, Climate change could be part of the Flooding or enhancements to the MSAT analysis since it is climate change arising from tailpipe emissions, methane, nitrous oxide, and carbon dioxide, that are the greenhouse gases (apart from surface air toxins) contributing to the flooding.	Section 4 of the Final EIS includes the evaluation of Greenhouse Gas Emissions and references the TxDOT Statewide On-Road Greenhouse Gas Emissions Analysis and Climate Change Assessment Technical Report.
СТС	The MSAT Report (Draft Mobile Source Air Toxics (MSAT) Quantitative Technical Report) should be revised and put to scientific scrutiny. The present report is based largely on data from H-GAC; collecting such data is part of H-GAC's responsibilities. With a 20-year design period, updated forecasts should be used. Reduction of air pollution and benefits from better vehicles and fuels and more mass transit ridership should be stated. The TxDOT report is too static, and depressing, as to fuels. The report should break out and quantify any avoided levels of pollution that would benefit from better numbers of mass transit (not using diesel) on the HOV lanes, better little cars and car trains, and less congestion on the interchanges.	The MSAT report is based on FHWA's October 2016 Interim MSAT Guidance. FHWA scrutinized a body of scientific research on MSAT in preparing this interim guidance. They, in turn, relied largely on EPA's MSAT rule and National Air Toxics Analysis, which have their own internal scientific scrutiny. The analysis itself used emission rates developed from EPA's MOVES emission model. Both FHWA national projections and these project level MSAT projections indicate a downward trend in emissions over time, even with increasing VMT. In addition, TxDOT supplemented these analyses with actual monitoring data (see PM2.5 data in Appendix D of CO TAQA tech report) and toxicological evaluations of Harris County by TCEQ (see benzene trends in Appendix C of MSAT tech report) also complement this conclusion. The monitoring

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		data also demonstrate a downward trend in emission levels since 2000.
		The MSAT analysis, it's design period, and forecast are consistent with FHWA guidance.
		Tables 1 and 2 of the MSAT technical report address the reduction of each priority MSAT in relationship to the base year MSAT emissions. The MOVES emissions model accounts for improvements from cleaner vehicles and cleaner fuels over time as the fleet turns over. Although changes in ridership beyond what H-GAC accounts for in their travel demand model would require speculation that is not required under NEPA, increased mass transit ridership would further reduce projected emissions.
I&C	We support and incorporate the comments submitted on behalf of Air Alliance Houston on the Draft Mobile Source Air Toxics (MSAT) Quantitative Technical Report.	Noted.
I&C	The draft report notes that there may be localized areas where ambient concentrations of MSAT could be higher under the Build Alternative than the No Build Alternative, but the magnitude and duration of these increases cannot be reliably quantified due to incomplete or unavailable information. The report aggregates emissions across the 8-county transportation management area network and fails to address more localized areas where MSATs may increase by 5% or more. It is important to understand these localized areas because they may house sensitive receptors, including schools,	In Appendix C of their October 2016 Interim MSAT guidance, FHWA provides rationale that project-specific health impacts cannot be reasonably predicted due to information that is incomplete or unavailable. For more detail see Section 2.0 (Incomplete or Unavailable Information for Project-Specific MSAT Health Impacts Analysis) of the MSAT technical report. Please also see the added section to Appendix C of the MSAT technical report (The Role of Health Risk Assessment in a National Environmental Policy Act Context for Highway

Entity/Individual Providing Comment	Comment	Response
Entity/Individual Providing Comment	communities already exposed to higher levels of air pollution, and areas used for outdoor activity. We are particularly concerned with the intersection of air pollution, public health, and environmental justice. Since the EIS must analyze impacts to environmental justice communities, it is important that the final report attempt to quantify in greater detail the expected air quality impacts (and difference between no-build and build alternatives) on these communities.	Projects) with additional clarification of health assessment limitations. In response to public comments, TxDOT provided supplementary information in Appendix D of the CO TAQA and Appendix C of the MSAT Technical Reports, regarding: 1) overall status of air quality in the greater Houston area, 2) mobile source air emission projections for Harris County, 3) ambient air monitoring for NAAQS and air toxics for the greater Houston area, 4) TCEQ toxicology assessment for the greater Houston area, 5) EPA Study Assessing Outdoor Air Near Schools, and 6) national near-road monitoring data. This supplementary information documents both historical monitoring trends that demonstrate improvements in air quality and future projections of continued improvement in air quality. TxDOT considered the supplemental information and data (which did not identify a current MSAT impact) and the lower future MSAT projections (both nationally and at the project level). However, unavailable and incomplete information limits the ability to accurately perform MSAT project-specific health impacts, so TxDOT was unable to demonstrate a disproportionate MSAT impact on any population, including minority or lowincome populations or sensitive populations such as children.
		is developing a program to monitor for MSATs

Entity/Individual Providing Comment	Comment	Response
		for a minimum of 5 years during construction. For additional information, please see Sections 5.9.3.6 and 6 in the Community Impacts Assessment Technical Report in the Final EIS.
I&C	We ask that TxDOT make all data used to perform its quantitative analysis public, including, but not limited to, the shapefiles used to create Figure 2 in the draft report. We also request that the final report includes more detailed and readable images, especially for areas for which the MSAT emissions may exceed a 5% difference.	The model data is based on the lookup tables developed form MOVES and is located in TxDOT's compliance toolkit website. The data table with the emission calculations for this project will be uploaded to the project file. This data table includes the affected link information from the Shapefiles. Travel demand model network Shapefiles belong to the MPO and are within their purview to release.

Project Name	North Houston Highway Improvement Project (NHHIP)	Date: Responses as of 7/9/2020
Project CSJ	0912-00-146	
Technical Report Name	Draft Traffic Noise Technical Report 2019	
Technical Report Comment Period	February 15, 2019 – April 17, 2019	
TxDOT Reviewers	Meredith Worthen	

Entity/Individual Providing Comment	Comment	Response
Ronnie Self	Electronic submission dated June 26, 2018	
Ronnie Self	Duplicate freeway retaining walls that exist on 59/69 between Hazard Street and Montrose Blvd for all depressed freeway portions north of Montrose Blvd. However, OMIT high/tall sound barrier walls in the area from Wheeler to McGowan Streets.	Comment noted.
Ronnie Self	Pursue acoustic treatment of freeway roadway itself.	Longitudinally-tined pavement is proposed as a best management practice to reduce noise levels.
Matthew Donovan	Electronic submission dated June 27, 2018	
Matthew Donovan	I live at 2228 Ann st. The proposal that you have created appears to create much more flooding and noise risk for my community.	Receivers and noise mitigation are considered at properties directly adjacent to the proposed project right of way per TxDOT Guidelines for Analysis and Abatement of Roadway Traffic Noise. The indicated property is not directly adjacent to the proposed ROW. A nearby receiver on the Buffalo Bayou trail close to the proposed ROW was predicted to have an increase in future noise levels, but it was not identified as

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		an impact, so noise mitigation was not considered.
Jonathan P. Brooks - LINK Houston and attached memo from CSTI Acoustics	Letter dated March 15, 2019	
Jonathan P. Brooks – LINK Houston	Segment 1 Site R5 is shown about 250 ft from nearest edge of the main lanes and has a predicted sound level of 74 dBA (Table 3.2). Segment 1 Site R49 is shown about 375 ft from the nearest edge of the main lanes and has a predicted sound level of 66 dBA (Table 3.2). These calculations indicate that for Segment 1, noise impacts are possible at about 375 ft from the nearest main lanes and possibly even further away. Not all of the residential areas within 350 ft of the highway main lanes have been evaluated.	Receivers and noise mitigation are considered at properties directly adjacent to the proposed project right of way per TxDOT Guidelines for Analysis and Abatement of Roadway Traffic Noise.
Jonathan P. Brooks – LINK Houston	The residences east of I-45 between W. Mount Houston and W. Gulf Bank shown on Exhibit 2, Page 5 are not modeled. They are set back about 350 ft from the nearest main lane of the future highway.	There is commercial property between these residences and the right of way. Mitigation is considered at properties directly adjacent to the right of way per TxDOT Guidelines for Analysis and Abatement of Roadway Traffic Noise. Therefore, they are not modeled.
Jonathan P. Brooks – LINK Houston	The residences west of I-45 from a little north of W. Mount Houston to a little south of W. Gulf Bank shown on Exhibit 2, Page 5 are not modeled. They are set back about 350 ft from the nearest main lane of the future highway.	There is commercial property between these residences and the right of way. Mitigation is considered at properties directly adjacent to the right of way per TxDOT Guidelines for Analysis and Abatement of Roadway Traffic Noise. Therefore, they are not modeled.
Jonathan P. Brooks – LINK Houston	Rittenhouse Village neighborhood east of I45 and just north of Rittenhouse St. are not modeled, which is about 300 ft from the main lanes of I45.	There is commercial property between these residences and the right of way. Mitigation is considered at properties directly adjacent to the right of way per TxDOT Guidelines for Analysis and Abatement of Roadway Traffic Noise. Therefore, they are not modeled.

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Jonathan P. Brooks – LINK Houston	Homes east of I45 just north of W. Twickerham Trail, which are less than 200 ft from the main lanes I45. A barrier is proposed for the block just south of this, but is not clear if the analysis considered the blocks to the north where no receivers were designated.	There is commercial property between these residences and the right of way. Mitigation is considered at properties directly adjacent to the right of way per TxDOT Guidelines for Analysis and Abatement of Roadway Traffic Noise. Therefore, they are not modeled.
Jonathan P. Brooks – LINK Houston	Homes east of I45 on W. Wellington St and W. Brenda St. Trail are not modeled, which are less than 250 ft from the main lanes of I45. A barrier is proposed for the block just south of this, but it is not clear if the analysis is considered the blacks to the north were no receivers were designated. The Villa Nueva Apartments just south of the homes are about 200 ft from the main lanes and also have not been evaluated.	There is commercial property between these residences and the right of way. Mitigation is considered at properties directly adjacent to the right of way per TxDOT Guidelines for Analysis and Abatement of Roadway Traffic Noise. Therefore, they are not modeled.
Jonathan P. Brooks – LINK Houston	Homes and a motel east of I45 on Werner St., E. Witcher Ln., and Foxglove Ln are not modeled. The homes are about 300 ft from the main lanes and the motel is about 100ft from the main lanes.	There is commercial property between these residences and the right of way. Mitigation is considered at properties directly adjacent to the right of way per TxDOT Guidelines for Analysis and Abatement of Roadway Traffic Noise. Therefore, they are not modeled.
Jonathan P. Brooks – LINK Houston	Homes and apartments east of I45 on Marable Dr. south of Bizerte St are not modeled. The homes are about 250 ft from the main lanes of I45, and the apartments are directly adjacent to the highway and may have to be totally or partially demolished. A barrier is proposed for the block just north of this, but it is not clear if the analysis considered the blocks to the south where no receivers were designated.	Receivers and noise mitigation are considered at properties directly adjacent to the proposed project right of way per TxDOT Guidelines for Analysis and Abatement of Roadway Traffic Noise. The apartment complex would be a right of way impact under the proposed alignment.
Jonathan P. Brooks – LINK Houston	Homes on Amasa St. south of Stokes St. and east of I45 are not modeled. This is a section where the highway and ramp connections to	There is commercial property between these residences and the right of way. Mitigation is considered at properties directly adjacent to

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	Although a barrier is proposed for the south half of this street (where homes are taken for the highway expansion), the barrier ends about halfway up the block. A barrier on the west side of Amasa would shield the homes on the east side of Amasa, and the commercial land west of Amasa is currently accessed from Stokes (a small gap could be left in the barrier if necessary for a driveway).	the right of way per TxDOT Guidelines for Analysis and Abatement of Roadway Traffic Noise. The proposed barrier is along TxDOT proposed right of way. Noise barriers must be built within TxDOT ROW, so a wall on Amasa St. isn't possible since it is outside of the ROW.
Jonathan P. Brooks – LINK Houston	Homes on Reid St. north of 610 and east of Fulton are not modeled, which are about 250 ft from the main lanes of 610. A barrier could be built on the south side of Reid, possibly with some gaps for driveways to the businesses to the south of Fulton, though these have access from the frontage road.	Receivers and noise mitigation are considered at properties directly adjacent to the proposed project right of way per TxDOT Guidelines for Analysis and Abatement of Roadway Traffic Noise.
Jonathan P. Brooks – LINK Houston	Neighborhood east of I45 south of Eichwurzel are not modeled, which are less than 200 ft from expanded main lanes and connecting ramps to 610. A barrier is proposed for the block just north of this, but it is not clear if the analysis considered the blocks to the south down to Link Rd. where no receivers were designated. At the Link Rd. overpass, a low barrier on the edge of the main lanes might be most appropriate.	Receivers and noise mitigation are considered at properties directly adjacent to the proposed project right of way per TxDOT Guidelines for Analysis and Abatement of Roadway Traffic Noise. Adjustments to noise barrier locations, such as placement along mainlanes, may occur during final design, if reasonable and feasible.
Jonathan P. Brooks – LINK Houston	Homes on Bristol St. east of I45 and south of Cavalcade are not modeled, which are less than 250 ft from the main lanes of I45. A barrier could be built on the west side of Bristol, possibly with some gaps for driveways to the businesses to the west of Bristol, though these have access from the frontage road.	There is commercial property between these residences and the right of way. Mitigation is considered at properties directly adjacent to the right of way per TxDOT Guidelines for Analysis and Abatement of Roadway Traffic Noise. Therefore, they are not modeled.

Entity/Individual Providing Comment	Comment	Response
Jonathan P. Brooks – LINK Houston	In some locations, such as the commercial property between residential areas and the highway right of way, building a barrier may not be feasible. These are locations where justification for treatments to quiet the pavement at the sources and/or 6'-8' barriers between main lanes and frontage roads are justified.	Receivers and noise mitigation are considered at properties directly adjacent to the proposed project right of way per TxDOT Guidelines for Analysis and Abatement of Roadway Traffic Noise. Adjustments to noise barrier locations, such as placement along mainlanes, may occur during final design, if reasonable and feasible. Longitudinally-tined pavement is proposed as a best management practice to reduce noise levels.
Jonathan P. Brooks – LINK Houston	Segment 3-I10 Sites R7 and R8 are the Hogg Park and the Castillo Community Center. The TxDOT noise modeling shows sound levels of 60 to 65 dBA, with no noise impact with no recommended treatments. In fact, they show a 2 to 3 dBA reduction from current sound levels. As shown in Exhibit 2 Pages 17 & 18, this location is at the northeast corner of the intersection of I-10 and I45 and is about 300 ft from major ramps. It seems very unlikely that there would be no noise impact at this location. Noise barriers at grade would probably be ineffective due to the topography with the highway and ramps elevated well above grade, but 6-ft barriers at the edge of the ramps and main lanes could be very effective.	TxDOT confirmed the predicted future noise level reduction, which is due to changes in future roadway and traffic configurations.
Jonathan P. Brooks – LINK Houston	Segment 1 Site R33 is an apartment complex that is shown to be about 300ft west of the proposed main lanes of I45 just north of the E. Tidwell overpass. The predicted sound level of 64 dBA seems unlikely as well as the increase of only 4 dBA with the highway moving much closer to this site.	TxDOT confirmed the predicted future noise level reduction, which is due to changes in future roadway and traffic configurations.
Jonathan P. Brooks – LINK Houston	Segment 3 I-10 Site R18 is a University of Houston Downtown facility directly adjacent to	An increase in predicted noise of 10 dBA to 47 dBA does not meet the TxDOT Guidelines

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	the realigned, combined I-10 and I-45. An increase of 10 dBA is predicted indoors, but this is still 1 dBA below the defined relative impact. A double highway will be built within 100ft of a school where none existed before at a façade that is currently shielded from noise from the existing highway, and yet, no noise impact is assessed. This seems unlikely.	for Analysis and Abatement of Roadway Traffic Noise impact criteria. It has to be more than 10 dBA or reach the interior criteria of 52 dBA to be considered an impact.
Jonathan P. Brooks – LINK Houston	At the neighborhood east of I45 and south of E. Crosstimbers (Segment 1 R42 to R47A) the predicted change in sound level from existing to predicted is -2 to +4 dBA despite the increase in traffic and the highway getting much closer to the neighborhood. How does it get 2-dBA quieter at R43 without any treatments?	TxDOT confirmed the predicted future noise level reduction, which is due to changes in future roadway and traffic configurations.
Jonathan P. Brooks – LINK Houston	At Bruce Elementary School (Segment 3-I10 Site R34) there is only a 1 dBA increase in sound levels despite the significant increase in traffic volume and the main lanes and ramps getting closer to the school. This does not seem reasonable. This is a location where barriers at the edge of the main lanes and ramps would be beneficial.	TxDOT confirmed the predicted future noise level reduction, which is due to changes in future roadway and traffic configurations.
Jonathan P. Brooks – LINK Houston	The speed of the traffic that was modeled is not indicated in the report. This should be the expected maximum speed of the majority of traffic, not the posted speed limit or an expected speed that may increase in the future.	Existing speed limits are in Segment 2.1 of Noise Technical Report—Only Segment 1 and 2 have existing speeds listed. Posted speed limits are used in all segments of NHHIP TNM noise models.
Jonathan P. Brooks – LINK Houston	Knowing predicted sound levels without mitigating elements/barriers would have been useful to understand how much reduction the barriers provide (see Table 3.2 and Exhibit 2).	Table 3.2 of the Noise Technical Report has Predicted 2040 sound levels without barriers. Noise barriers must be able to reduce noise level at greater than 50% of impacted, first row receivers by at least 5 dBA and must be

Entity/Individual Providing Comment	Comment	Response
		able to reduce the noise level at least one impacted, first row receiver by at least 7 dBA.
Jonathan P. Brooks – LINK Houston	In Exhibit 2 it appears that sites can be marked green (benefited) even if sound levels are projected to increase with the construction of the project. An additional color should be used to indicate where sound levels will be higher than current but lower than they would be without the proposed treatments.	Colors of receivers in Exhibits are set by TxDOT in Guidelines for Analysis and Abatement of Highway Traffic Noise.
Jonathan P. Brooks – LINK Houston	Segment 1 R42-R47A neighborhood is like many others where barriers are proposed. The report says that only 8 residences are benefitted, but it appears that the barrier would benefit more residences and should be found cost-effective. The gaps in the barrier for roads may be the problem.	First row-receivers are counted as benefited (at least a 5 dBA reduction) for the purposes of meeting the feasibility criterion. Second row receivers are less often benefited due to the additional distance from the barrier, but if they are benefited, they must be counted for the cost effectiveness determination.
Jonathan P. Brooks – LINK Houston	I believe that the policy of TxDOT is to maintain all road rights-of-way where the local road intersects the frontage road. The disadvantage of this is that gaps in noise barriers are needed for intersecting roads, and this may make the noise barrier either ineffective (not feasible or cost effective by TxDOT requirements) or not as effective as it could be, though still meeting the TxDOT requirements.	The proposed barriers are based on the proposed alignment within TxDOT right of way.
	The City of Houston may have a policy where streets could be closed, probably involving consultation with local homeowners. This could result in a better noise barrier or a barrier that meets the TxDOT noise requirements for feasibility and cost effectiveness that are not met when there are gaps in the barrier.	
	At the following location, a barrier currently has not been found to be acceptable but	

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	might be acceptable if the barrier extended across the road where it meets the frontage road: • Exhibit 2. Page 11 - Westfield St. and possibly Oddo St. and Theron St. on the east side of I-45.	
Jonathan P. Brooks – LINK Houston	At the following locations, a segmented barrier currently has been found to be acceptable and might be even more effective if the barrier extended across (and closed) the following roads where they meet the frontage road. The costs and benefits of closings should be looked into, possibly by the City of Houston. In some cases, such a closure might be worthwhile for the added noise reduction if the effects on traffic are not too detrimental • Exhibit 2. Pages 7 and 8. East side of I45.	The proposed barriers are based on the proposed alignment within TxDOT right of way.
	 W. Riverwood Dr., W. Rocky Creek Rd. Exhibit 2. Page 8. East side of I45. Obion Rd and Troy Rd. if they connect with Northline Dr. at their east end. 	
	Exhibit 2. Page 13. Norland St. at the northeast corner of I-45 and 610. • Exhibit 2. Page 8. West side of I45. W. Obion Rd, W. Troy Rd.	
	• Exhibit 2. Page 13. Norland St. at the northeast corner of I-45 and 610.	
	• Exhibit 2. Page 14. The gaps at Delaney St. and Leon St. could be removed if the west end of Delaney could be curved to conned to Leon just inside the proposed noise barrier. This might require acquiring one more house lot near the southeast corner of Delaney and Leon to accommodate the connecting road.	

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	Exhibit 2. Page 14. At the southwest corner of I45 and 610, a continuous barrier from Sylvester Rd extending south just past Robert Lee Rd would best protect this neighborhood (and future bike route) from noise but would require making Robert Lee, Eichwurzel, and Enid into dead-end streets.	
	• Exhibit 2. Page 16. Near northwest corner of I45 and I10, extending the barrier to block either Wrightwood or Quitman.	
	• Exhibit 2. Pages 22 & 23. Syndor St., Bayou St., Grove Ct., and Cage St. just south of I-10 and east of 59/69.	
	• Exhibit 2. Page 28. East side of I69. McIlhanney St., Dennis St., and Drew St.	
	• Exhibit 2. Page 31. East and west sides of 288 at cross streets that do not extend under 288.	
Jonathan P. Brooks – LINK Houston	Noise barriers about 16-ft tall are proposed for the east side of I-69 where it is below grade just east of downtown. The proposed location for the barriers is just east of the frontage road and Chartres. This will effectively reduce noise but also block views of downtown from the first and second floors of buildings to the east. Changing the barrier location to between the main lanes of I-69 and the frontage road would still reduce sound levels from the main lanes and would allow for a better view of downtown, especially if the wall could be reduced in height, possibly to 10 to 12ft. This applies from Gray St to Holman or Alabama St.	Placing noise barriers between the frontage road would cause noise reflections limiting the noise walls effectiveness. This reflection makes it extremely difficult to obtain one 7dBA reduction for a reasonable and feasible wall per TxDOT Guidelines for Analysis and Abatement of Roadway Traffic Noise.
Jonathan P. Brooks – LINK Houston	At the University of Houston Downtown, an increase of 10 dBA is predicted, which is just 1 dBA below the relative criterion. A double	An increase in predicted noise of 10 dBA to 47 dBA does not meet the TxDOT Guidelines for Analysis and Abatement of Roadway

Entity/Individual Providing Comment	Comment	Response
	highway will be built within 100 ft of a school where none existed before, and yet, no impact is assessed and no noise control is proposed. This may be an ideal location for partial-height barriers at the edges of the main lanes (as discussed later in this memorandum), as they work well for elevated highways (the west part of this segment) and below-grade highways (the east part).	Traffic Noise impact criteria. It has to be more than 10 dBA or reach the interior criteria of 52 dBA to be considered an impact.
Jonathan P. Brooks – LINK Houston	The area adjacent to North Main just north of the proposed highway alignment is being developed as a residential and mixed-use area. There is a light rail stop within a few hundred feet of the proposed alignment. Noise from the highway will certainly impact whatever is developed in this area. This may be an ideal location for partial-height barriers at the edges of the main lanes (as discussed later in this memorandum), as they work well for elevated highways (the west part of this segment) and below-grade highways (the east part).	Noise barriers must be able to reduce noise level at greater than 50% of impacted, first row receivers by at least 5 dBA and must be able to reduce the noise level at least one impacted, first row receiver by at least 7 dBA. This area doesn't have an adjacent impacted receiver. Per the FHWA noise standard in 23 CFR 772, TxDOT cannot determine impacts and proposed abatement for currently undeveloped properties, unless the undeveloped land is permitted for development as evidenced by an issued building permit.
Jonathan P. Brooks – LINK Houston	Further east, the combined traffic will be funneled into the same right of way currently used for just I-10. The only barrier currently planned is on the north side of Providence St. at Hennessy/St. Arnold Park. A better option would be to have the barrier on the south side of Providence St. This would be directly adjacent to the below-grade main lanes, which is an ideal location for a barrier. Perhaps the barrier could be lower, effectively blocking noise while still allowing a view of downtown. Ideally, such a wall would extend on both sides of this combined highway section north of downtown.	Noise barriers must be able to reduce noise level at greater than 50% of impacted, first row receivers by at least 5 dBA and must be able to reduce the noise level at least one impacted, first row receiver by at least 7 dBA.

Entity/Individual Providing Comment	Comment	Response
Jonathan P. Brooks – LINK Houston	Section 5.0 of the original Traffic Noise Technical Report for the project stated that noise barriers would be located along the outside of the frontage road within right-of-way could be continuous and that noise barriers could also be located between main lanes and frontage road. However, the recent draft report does not provide any recommendations for barriers between the main lanes and feeder roads, and report does not provide any recommendations for barriers between the main lanes and feeder roads, and there is also no indication that these were evaluated or even considered for locations where they might be effective. For some projects, noise barriers that are only 6-ft to 8-ft tall have been built at the edge of the main lanes instead of at the edge of the frontage roads. TxDOT implemented such barriers on I-610 West through Bellaire and found them beneficial.	Receivers and noise mitigation are considered at properties directly adjacent to the proposed project right of way per TxDOT Guidelines for Analysis and Abatement of Roadway Traffic Noise. A noise barrier must be able to reduce noise level at greater than 50% of impacted, first row receivers by at least 5 dBA and must be able to reduce the noise level at least one impacted, first row receiver by at least 7 dBA. Tested noise barriers that met both acoustic reduction criteria and that were cost effective were proposed in the Noise Tech Report. Adjustments to noise barrier locations, such as placement along mainlanes, may occur during final design, if reasonable and feasible.
Jonathan P. Brooks – LINK Houston	Barrier between the main lanes and feeder roads should be considered at west side of I45 by sites R1-R6 (Exhibit 2, Page 11) Barrier between the main lanes and feeder roads should be considered at north side of 610 between Airline and N. Main (Exhibit 2, Page 12) Barrier between the main lanes and feeder roads should be considered at west side of I45 adjacent to bike path along Little White Oak Bayou, could protect Segment 2 Residences R43 to R47 (Exhibit 2, Pages 14/15).	Receivers and noise mitigation are considered at properties directly adjacent to the proposed project right of way per TxDOT Guidelines for Analysis and Abatement of Roadway Traffic Noise. A noise barrier must be able to reduce noise level at greater than 50% of impacted, first row receivers by at least 5 dBA and must be able to reduce the noise level at least one impacted, first row receiver by at least 7 dBA. Tested noise barriers that met both acoustic reduction criteria and that were cost effective were proposed in the Noise Tech Report. Adjustments to noise barrier locations, such as placement along mainlanes, may occur during final design, if reasonable and feasible.

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	Barrier between the main lanes and feeder roads should be considered at west side of I45 north and south of Patton St. overpass Segment 2, R43-R50 (Exhibit 2, Page 15). Barrier between the main lanes and feeder roads should be considered at northeast corner of I45 and I10 to protect neighborhood on either side of Quitman, the Castillo Community Center, and Hogg Park (Exhibit 2, Pages 16/17). Barrier between the main lanes and feeder	
	roads should be considered at northwest corner of I45 and I10 to protect White Oak Park. Barrier at edge of ramp from I45 South to I10 west may be most beneficial (Exhibit 2, Page 18).	
Jonathan P. Brooks – LINK Houston	Currently, noise barriers are proposed for the east and west sides of 288 from about Southmore to Alabama. The barriers are at grade, and the effectiveness is hindered by the highway being elevated and by the necessary gaps for intersecting roads and garages. It would be more effective to locate the barriers on the east and west edges of the main lanes. The barrier height could probably be reduced to 8 ft. It would not protect the neighborhoods from traffic noise of the frontage road, but that is minor compared to highway noise. It would be beneficial if the barrier included the section on the east side between Barbee and Cleburne where a senior housing project and community center are currently being planned.	A receiver (Seg3_I69_R65 1, map page 31) was added for the senior housing project (since construction will be starting this summer); it was predicted to have a noise impact and noise abatement was considered. The analysis indicated that a barrier at this location would be feasible and reasonable; therefore, the noise tech report was updated to add this proposed barrier. Adjustments to noise barrier locations, such as placement along mainlanes, may occur during final design, if reasonable and feasible.

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Jonathan P. Brooks – LINK Houston	The noise report states that "Best management Practices (BMPs) that will be implemented to reduce noise levels of the project include but are not limited to the use of tined pavement. Potential noise reductions from the use of longitudinally-tined pavement, which is quieter than traditional concrete pavement, have not been quantified for this project." It is very unclear if this is a commitment to use tined pavement everywhere, only at some locations, or only if some sort of evaluation shows it to be effective. The text says it "will be implemented". TxDOT should explicitly describe what factors will affect the decisions to use or not use quiet pavement and what guidelines will be used to determine their use.	The longitudinal-tined pavement will be placed on all non-elevated structures. Structures such as overpasses and elevated connectors will not have the longitudinal-tined pavement.
Bakeyah S. Nelson – Air Alliance Houston	Letter dated April 17, 2019	
Bakeyah S. Nelson – Air Alliance Houston	One area of concern is the usage of TNM 2.5 to model the noise levels; TNM 3 was recently released and can more accurately assess noise levels. The TNM 2.5 was released in 2004 and no longer meets modern standards of interface design or software maintenance. We strongly urge TxDOT engineers to complete a secondary noise pollution model using the TNM 3 for comparison.	The FHWA-approved version of TNM 3.0 has not been released. The website referenced was last updated in May 2017. TNM 2.5 is the most current version available and approved by FHWA for use by state DOTs.
Bakeyah S. Nelson – Air Alliance Houston	Overall, the averages are very informative of existing levels, but analyzing more traffic noise levels at different points of the day or different days would provide better analysis. Traffic levels should be measured more extensively in order to provide a framework for construction work. It's impossible to fully eliminate construction noise, but if traffic levels and existing noise levels are studied	The TNM Traffic Noise Model was performed in accordance with the TxDOT Noise Guidelines approved by the Federal Highway Administration.

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	extensively, a schedule can be created in order to avoid an excessive amount of construction noise pollution. We strongly recommend TxDOT conduct further analysis in order to coordinate construction times in order to mitigate noise pollution.	
Beth White – Houston Parks Board	Letter dated March 13, 2019	
Beth White – Houston Parks Board	At Freed Nature Park (R6) the analysis indicates a slight noise reduction resulting from the project though the ramp system has moved approximately 200 closer to and over a corner of the park. Hogg Park (R8) shows a remarkably high noise level drop of 11 db despite the combined I-10 and I-45 lanes pressed to the south side of the bayou across from the park. The apparent drop in noise level in these locations merit further explanation.	R6 (Freed)—TxDOT checked and corrected the future results (increase instead of decrease); abatement would still not be feasible/reasonable. R8 (Hogg)—TxDOT confirmed the predicted future noise level reduction at R8, which is due to changes in future roadway and traffic configurations.
Beth White – Houston Parks Board	The report offers no noise readings along the White Oak Bayou Greenway between Hogan Street and UHD. However, the project will remove trees buffering highway on the south side of the Greenway, push the highway within the southern bank of the Greenway and relocate seven new overpasses across the Greenway. Despite this lack of highly relevant impact disclosure on parkland, readings taken along the south side of the highway, opposite the Greenway, show projected db readings of 75 (R10), 70 (R12), 76 (R14) and 72 (R15). All those readings far exceed the FHWA noise abatement criteria of 67 db for active sports areas and parks. Given the like proximities, one would expect similar if not higher readings on the north side of the highway along the Greenway itself.	We did not place receptors along the White Oak Bayou Greenway between Hogan and UHD due to the floodway and because the greenway bike trail is not directly adjacent to TxDOT right-of-way. While removal of vegetation will affect visual line of sight to the roadway, vegetation is not usually considered in a noise analysis because it is variable throughout the year and rarely sufficiently thick and dense enough to change noise levels by a perceptible amount.

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Beth White – Houston Parks Board	Finally, where noise impacts are acknowledged along White Oak Bayou Greenway at Freed Nature Park and White Oak Park, mitigation is not recommended.	In the Noise Tech Report, noise impacts for receivers Seg3_I10 R2 and Seg3_I10 R6 were analyzed for noise mitigation. Noise barriers at these locations would exceed the reasonable cost-effective criteria.
Dexter R. Handy – Citizens' Transportation Coalition (CTC)	Letter dated April 17, 2019	
Dexter R. Handy – Citizens' Transportation Coalition (CTC)	Piers. CTC does not like elevated projects because they throw out noise onto neighborhoods, and TxDOT is notorious for under-correcting the noise even though there are federal funds to do so.	Per the TxDOT noise guidelines, a noise barrier must be able to reduce noise levels at greater than 50% of impacted, first row receivers by at least 5 dBA and must be able to reduce the noise level at least one impacted, first row receiver by at least 7 dBA. A noise barrier must meet cost effectiveness criteria and be safely constructable. Noise barriers that do not meet these criteria are not eligible for federal-aid funding.
Dexter R. Handy – Citizens' Transportation Coalition (CTC)	Noise Abatement Structures. TxDOT should apply to the FHWA to allow TxDOT to adopt appropriate procedures to use pavement surfacing as one aspect, but not the only one, for noise abatement.	FHWA does not currently allow state DOTs to consider pavement as a formal noise abatement measure in the Traffic Noise Technical Report. However, in addition to proposed noise barriers, longitudinally-tined pavement is proposed as a best management practice to reduce noise levels. This pavement treatment will be placed on all non-elevated structures. Structures such as overpasses and elevated connectors will not have the longitudinal-tined pavement.
Dexter R. Handy – Citizens' Transportation Coalition (CTC)	An effective noise abatement method is needed for elevated structures. TxDOT refuses to put walls on elevated structures or to create elevated tunnels. 19th Century noise walls are not pretty, and are not appropriate for an organization that can design and construct a 5 layer interchange, but they are	Noise barriers on structures such as bridges are often limited to due to structural weight limits, wind load, and other safe engineering requirements. Per the TxDOT noise guidelines, a noise barrier must be able to reduce noise levels at greater than 50% of impacted, first row

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	better than nothing. There is a noise abatement statute and there are extensive regulations providing for abatement of highway noise impacts. Merchants along the highway should not be able to dictate the design features.	receivers by at least 5 dBA and must be able to reduce the noise level at least one impacted, first row receiver by at least 7 dBA. A noise barrier must meet cost effectiveness criteria and be safely constructable. Before a recommended noise barrier is implemented, noise workshop meetings will be held with affected adjacent property owners. A noise barrier will only be constructed if a majority of the adjacent property owners desire the noise barrier.
Rebecca Reyna – Greater Northside Management District	Letter dated April 17, 2019	
Rebecca Reyna –Greater Northside Management District	We have concerns about the potential for more noise at the locations adjacent to the current and proposed freeways, especially as more lanes are added. However, as the subject is very technical in nature we will defer to Link Houston's comments on the Draft Noise Technical Report and the technical memorandum by CSTI Acoustics Inc.	Comment noted.
Ronnie Self and Bernard Bonnet	Electronic submission dated April 14, 2019	
Ronnie Self and Bernard Bonnet	The document is difficult to decipher but I believe I am concerned by Receivers R29, R32 and R34 for Segment 3 – I-69 that would correspond to the 3300 block of Saint Emanuel Street. I understand there will be a "noise impact" of 2 to 4 dB which is significant. I understand a sound wall to be "Cost-effective Stand Alone." For reasons listed below related to views I would not favor a tall sound wall. I suggest that the design of the freeway retaining walls, the materials used for the surface of the freeway itself,	A noise barrier must be able to reduce noise levels at greater than 50% of impacted, first row receivers by at least 5 dBA and must be able to reduce the noise level at least one impacted, first row receiver by at least 7 dBA. Before a recommended noise barrier is implemented, noise workshop meetings will be held with affected adjacent property owners. A noise barrier will only be constructed if a majority of the adjacent property owners desire the noise barrier.

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	lower sound walls, and other possibilities be studied to decrease noise levels. I request that the owners in the area be consulted regarding the implementation and design of any sound walls or other solutions for sound abatement.	
Patrizia Figoli	Electronic submission dated April 17, 2019	
Patrizia Figoli	The document is difficult to decipher but I believe I am concerned by Receivers R29, R32 and R34 for Segment 3 – I-69 that would correspond to the 3300 block of Saint Emanuel Street. I understand there will be a "noise impact" of 2 to 4 dB which is significant. I understand a sound wall to be "Cost-effective Stand Alone." For reasons listed below related to views I would not favor a tall sound wall. I suggest that the design of the freeway retaining walls, the materials used for the surface of the freeway itself, lower sound walls, and other possibilities be studied to decrease noise levels. I request that the owners in the area be consulted regarding the implementation and design of any sound walls or other solutions for sound abatement.	A noise barrier must be able to reduce noise levels at greater than 50% of impacted, first row receivers by at least 5 dBA and must be able to reduce the noise level at least one impacted, first row receiver by at least 7 dBA. Before a recommended noise barrier is implemented, noise workshop meetings will be held with affected adjacent property owners. A noise barrier will only be constructed if a majority of the adjacent property owners desire the noise barrier.
Devon Daniel and Valerie Simpson Daniel	Electronic submission dated April 16, 2019	
Devon Daniel and Valerie Simpson Daniel	The document is difficult to decipher but I believe I am concerned by Receivers R29, R32 and R34 for Segment 3 – I-69 that would correspond to the 3300 block of Saint Emanuel Street. I understand there will be a "noise impact" of 2 to 4 dB which is significant. I understand a sound wall to be "Cost-effective Stand Alone." For reasons listed below related to views I would not favor a tall sound wall. I suggest that the design of	A noise barrier must be able to reduce noise levels at greater than 50% of impacted, first row receivers by at least 5 dBA and must be able to reduce the noise level at least one impacted, first row receiver by at least 7 dBA. Before a recommended noise barrier is implemented, noise workshop meetings will be held with affected adjacent property owners. A noise barrier will only be

Entity/Individual Providing Comment	Comment	Response
	the freeway retaining walls, the materials used for the surface of the freeway itself, lower sound walls, and other possibilities be studied to decrease noise levels. I request that the owners in the area be consulted regarding the implementation and design of any sound walls or other solutions for sound abatement.	constructed if a majority of the adjacent property owners desire the noise barrier.
Francesco Turchetti	Electronic submission dated April 15, 2019	
Francesco Turchetti	The document is difficult to decipher but I believe I am concerned by Receivers R29, R32 and R34 for Segment 3 – I-69 that would correspond to the 3300 block of Saint Emanuel Street. I understand there will be a "noise impact" of 2 to 4 dB which is significant. I understand a sound wall to be "Cost-effective Stand Alone." For reasons listed below related to views I would not favor a tall sound wall. I suggest that the design of the freeway retaining walls, the materials used for the surface of the freeway itself, lower sound walls, and other possibilities be studied to decrease noise levels. I request that the owners in the area be consulted regarding the implementation and design of any sound walls or other solutions for sound abatement.	A noise barrier must be able to reduce noise levels at greater than 50% of impacted, first row receivers by at least 5 dBA and must be able to reduce the noise level at least one impacted, first row receiver by at least 7 dBA. Before a recommended noise barrier is implemented, noise workshop meetings will be held with affected adjacent property owners. A noise barrier will only be constructed if a majority of the adjacent property owners desire the noise barrier.
TxDOT	Additional changes to Traffic Noise Technical Report that occurred after public comment period	
TxDOT	Design change on I-69/US 59 near Post Oak High School please examine proposed barrier.	Design change would no longer require proposed ROW at Post Oak High School. Proposed barrier is no longer recommended for receivers Seg3 I69 R38 and Seg3 I69 R39.

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TxDOT	Please examine Saint Arnold Brewing Company outdoor beer garden for noise impact.	Saint Arnold outdoor beer garden analysis resulted in a proposed noise barrier for receiver Seg3 I10 R20-1.
TxDOT	The noise analysis report shows reasonable and feasible noise barriers, placed along the existing and/or proposed ROW line. In order to allow maximum flexibility during the design-build process for this project, add statement to report after preliminary barrier proposal table that "Adjustments to noise barrier locations may occur during final design."	Added note to bottom of Table 3.3 "Adjustments to noise barrier locations may occur during final design."
Ronnie Self and Bernard Bonnet	Electronic submission dated May 8, 2019 (comment on draft HRSR)	
Ronnie Self and Bernard Bonnet	It is important that the views over the freeway from the properties on the 3300 and 3400 blocks of Saint Emanuel that back onto Chartres Street/Feeder Road be preserved. Sound walls or plantings should not obstruct the view. Perhaps a lower sound wall could go between the main, depressed lanes of the freeway and the Feeder Road.	A noise barrier is proposed as abatement for predicted noise impacts in this area (R29, R32, and R34). Before a recommended noise barrier is implemented, noise workshop meetings will be held with affected adjacent property owners. Adjustments to noise barrier locations may occur during final design. A noise barrier will only be constructed if a majority of the adjacent property owners desire the noise barrier.
Ronnie Self and Bernard Bonnet	I suggest pushing Chartres Street/Feeder Road between Alabama and Elgin Streets as far away from the neighborhood as possible for the noise and visual impact.	Comment noted.

Project Name	North Houston Highway Improvement Project (NHHIP)	Date: 2/24/2020
Project CSJ	0912-00-146	
Technical Report Name	Draft Addendum 1 to Visual Impact Assessment (July 2018)	
Technical Report Comment Period	2/15/2019 – 4/17/2019	
TxDOT Reviewers		
	•	

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Air Alliance Houston	Air Alliance Houston has several areas of concern regarding the Visual Impact Assessment Technical Report. One major concern is the lack of diverse viewer groups. There is a larger emphasis on the commuters rather than residents that are in the area of the project. Each segment has a distinct community and the lack of images and maps as suggested in. 5.2.2 and 5.3.3¹ of FHWA VIA Guidelines prevents proper viewshed input. Furthemore, there is no input from viewer groups regarding their opinion of the existing visual character of the Area of Visual Effect (AVE). Viewer Sensitivity is considered low in Segments 1 and 2 preferred designs, but all segments have neutral visual impacts. The lack of input from diverse groups and analysis renders these measurements inadequate. The technical report states that viewer sensitivity is considered low in many viewer groups because they have become accustomed to construction/expansion. Section 6 of FHWA addresses that attention correlates with routine. "The more routine the scene is to a viewer, the less sensitive the viewer is to it or conversely, the more unique a scene is to the viewer, the more sensitive	The Visual Impact Assessment Technical Report (February 2017) included with the Draft EIS defines viewer groups as neighbors and travelers. Neighbors include viewers who occupy or would occupy land adjacent or visible to the proposed project corridor. Neighbors are further defined by their land use. Viewer groups consisting of neighbors can be residential, retail, commercial, industrial, agricultural, recreational or civic in nature. The 2017 assessment and the Draft Addendum 1 to Visual Impact Assessment Technical Report (July 2018) included consideration of many types of viewers and views along the project corridor. Input regarding existing visual conditions and potential impacts was received from residential groups, organizations, individuals, and others and taken into consideration in the analysis for the Final EIS.

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	the viewer will be to the scene." We strongly recommend TxDOT conduct further analysis on viewer sensitivity with a broader scope of diverse viewer groups. The Community Impact Assessment (CIA) Statement places a strong emphasis on receiving input from a wide variety of members of the community and the VIA is extension of the CIA; however, unlike the CIA, the VIA report does not properly acknowledge the groups mentioned in the CIA Report. We urge TxDOT to address this oversight. 1 Under 5.3.3 of the FHWA VIA Guideline it states that "Authors should use the map produced for the establishment phase of the AVE and its associated landscape units as a base. Use graphics to highlight and label the locations of viewer groups, organizing them according to land use. Augment the labels with brief descriptions of each viewer groups' visual preferences based on their self-interests."	Due to the nature of land use planning in this area, several types of viewers can be located in the same area. Mapping is a tool for graphically displaying information, as commenter noted. As commenter noted, the FHWA VIA Guidelines cited in the comment provide suggestions but are not requirements for approaches and methodologies for a visual impact assessment. The visual impact assessment conducted for the NHHIP considered many factors including viewer groups, viewer sensitivity, viewsheds, and more.
Daniel, Devon Daniel, Valerie Simpson	It is important that the views over the freeway from the properties on the 3300 and 3400 blocks of Saint Emanuel that back onto Chartres Street/Feeder Road be preserved. Sound walls or plantings should not obstruct the view. I suggest pushing Chartres Street/Feeder Road between Alabama and Elgin Streets as far away from the neighborhood as possible for the noise and visual impact. Find means to reduce the speed of cars on this segment of Chartres Street/Feeder Road. While I can see that making the Feeder Road accessible at Alabama Street makes sense, it will undoubtedly make for significantly more traffic on Chartres Street/Feeder Road. Slower traffic on the	Noise barriers are proposed along a portion of the project right-of-way along Chartres St. The Traffic Noise Technical Report with reasonable and feasible noise mitigation proposals for impacted receptors is included in the Final EIS. The Traffic Noise Technical Report documents the updated analysis of noise impacts and evaluates mitigation measures. Any subsequent project design changes may require a re-evaluation of preliminary noise barrier proposals. The final decision to construct the proposed noise barriers will not be made until completion of the

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	Feeder Road would be better. It should be designed more as a city street rather than a feeder road. From current plans it appears that the exit bridge from northbound 288 toward Chenevert and midtown has been removed. This seemingly would mean that Chartres street will provide access for midtown and downtown destinations which would make it even more trafficked and thus more important to slow the traffic. Design and treatment of this portion of the depressed freeway similar to that in the area of Woodhead, Dunlavy, Mandell, etc. would be welcomed. That said, I also suggest that the current design in this area allow for a future cap over the depressed freeway from roughly Holman Street northward toward downtown similar to what is planned near the George R. Brown to allow a park in this area like the one currently planned near downtown.	proposed project design, utility evaluation, and polling of adjacent property owners. TxDOT will apply the Green Ribbon themes to the proposed project, including landscaping and hardscaping elements. A detailed landscaping plan will be developed as part of the final design process. TxDOT will coordinate with local groups and agencies to accommodate enhancements to standard landscaping. Since Segment 3 of the project area has not had traditional frontage roads but instead has a typical street network crossing the freeways with typical city blocks that are signalized, the City of Houston design standards will be used for street design.
		The proposed cap behind the George R. Brown Convention Center cannot extend further south from Lamar St. due to conflicts with the relocated I-45 reconnecting to I-45 Gulf Freeway. The area south of Pierce Elevated will be reconstructed with aesthetic bridges replacing the existing McGowen, Tuam and Elgin bridges. These bridges will have bike/pedestrian accommodations.
Figoli, Patrizia	It is important that the views over the freeway from the properties on the 3300 and 3400 blocks of Saint Emanuel that back onto Chartres Street/Feeder Road be preserved. Sound walls or plantings should not obstruct the view.	Noise barriers are proposed along a portion of the project right-of-way along Chartres St. A Traffic Noise Technical Report with reasonable and feasible noise mitigation proposals for impacted receptors is included in the Final EIS. The

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	I suggest pushing Chartres Street/Feeder Road between Alabama and Elgin Streets as far away from the neighborhood as possible for the noise and visual impact. Find means to reduce the speed of cars on this segment of Chartres Street/Feeder Road. While I can see that making the Feeder Road accessible at Alabama Street makes sense, it will undoubtedly make for significantly more traffic on Chartres Street/Feeder Road. Slower traffic on the Feeder Road would be better. It should be designed more as a city street rather than a feeder road. From current plans it appears that the exit bridge from northbound 288 toward Chenevert and midtown has been removed. This seemingly would mean that Chartres street will provide access for midtown and downtown destinations which would make it even more trafficked and thus more important to slow the traffic.	Traffic Noise Technical Report documents the updated analysis of noise impacts and evaluates mitigation measures. Any subsequent project design changes may require a re-evaluation of preliminary noise barrier proposals. The final decision to construct the proposed noise barriers will not be made until completion of the proposed project design, utility evaluation, and polling of adjacent property owners. TxDOT will apply the Green Ribbon themes to the proposed project, including landscaping and hardscaping elements. A detailed landscaping plan will be developed as part of the final design process. TxDOT will coordinate with local groups and agencies to accommodate enhancements to standard landscaping.
	Design and treatment of this portion of the depressed freeway similar to that in the area of Woodhead, Dunlavy, Mandell, etc. would be welcomed. That said, I also suggest that the current design in this area allow for a future cap over the depressed freeway from roughly Holman Street northward toward downtown similar to what is planned near the George R. Brown to allow a park in this area like the one currently planned near downtown.	Since Segment 3 has not had traditional frontage roads but instead has a typical street network crossing the freeways with typical city blocks that are signalized, the City of Houston design standards will be used for street design. The proposed cap behind the George R. Brown Convention Center cannot extend further south from Lamar St. due to conflicts with the relocated I-45 reconnecting to I-45 Gulf Freeway. The area south of Pierce Elevated will be reconstructed with aesthetic bridges replacing the existing McGowen, Tuam

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		and Elgin bridges. These bridges will have bike/pedestrian accommodations.
Greater Northside Management District (GNMD)	The Greater Northside Management District (GNMD) again appreciates the opportunity to comment on the Texas Department of Transportation's (TxDOT) proposal for the North Houston Highway Improvement Project (NHHIP). As we have commented before, this is a project that covers most of our District and will have an everlasting impact on our area. We want to acknowledge the ongoing efforts that the TxDOT Houston office has made to meet with us and listen to our concerns. We feel that TxDOT has made attempts to listen to the community and, for that, we are very grateful. Our comments on the Draft Addendum I to Visual Impact Assessment Technical Report and Draft Noise Technical Report are as follows:	Comment noted.
GNMD (cont.)	Existing Visual Quality Segment 3 We disagree with the assessment that the visual quality of Segment 3 is moderate. The views of Downtown along White Oak Bayou are iconic for the City skyline and have been featured in many professional photographs and marketing materials for the City. Iconic and tourist destination views are also experienced from the Quitman Street bridge, the Hogan Street bridge, the Leonel Castillo Community Center, the Residences at Hardy Yards and various points along White Oak Bayou. We would suggest the existing visual quality be of high value.	Although the skyline is unique and visible for many, it does not compose the entire viewscape for this area. The visual quality assessment also includes considering viewpoints not facing the skyline, such as views from parks and trails, residential homes, and workers.
GNMD (cont.)	Impacts of the Build Alternatives Segment 1 It is important to reiterate that the impact of the current proposed alternative design of Segment 1 is	The final Addendum 1 to VIA Technical Report (March 2020) included in the Final EIS includes updated information regarding mitigation measures to reduce

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	troubling. The roughly doubling of the footprint and the 246 acres of Right of Way (ROW) acquisition have tremendous and unnecessary negative impacts to all concerned. This would include a negative visual impact of the proposed frequency. The transformative	the visual impacts of the proposed project. Some of these are discussed in this response.
	impact of the proposed freeway. The transformative nature of this project requires that the design go beyond minimizing impacts and standard mitigation efforts. This project has the opportunity to be restorative to the area and bring what is currently a low-visual quality to a higher standard.	TxDOT will design the project in consideration of visual aesthetics. TxDOT will coordinate with the community to integrate aesthetic enhancements in the project design, in all segments of the project. TxDOT will apply the Green Ribbon Program themes to the proposed
	Segment 2	project, including landscaping and
	The widening of the freeway in Segment 2 will remove existing landscaped areas between the mainlines and the frontage roads. This would impact the visual quality for people driving as well as eliminate visual and noise protection for people walking and on private property. In addition, there are 44 acres of ROW acquisition that would increase	hardscaping elements. A detailed landscaping plan will be developed as part of the final design process. TxDOT will coordinate with local groups and agencies to accommodate enhancements to standard landscaping.
	the footprint of the freeway and add to the negative visual impact.	In the Segment 3 area where the project crosses White Oak Bayou, bridges will be designed in consideration of visual
	Segment 3 While the overall visual impact on Segment 3 is characterized as "neutral" as a whole, it would not be so if divided into smaller sections. If Segment 3 were broken into sections by cardinal points, the Northside	aesthetics, including minimizing bridge columns and optimizing open space by aligning substructure for multiple roadways where feasible.
	would become a significant negative impact due to an increase of travel lanes, the footprint and the height of the freeway while all other sections get neutral or positive impacts by removing or depressing the freeway. This benefits all other	TxDOT will consider options for "signature" bridges to distinguish the Near Northside neighborhood and improve the visual quality of the proposed project area. The design of the bridges will be
	neighborhoods around Downtown at the expense of a more substantial visual barrier, noise and pollution to the Northside. This would also have an impact on the quality of life and economic development of the	conducted as a collaboration between the Greater Northside Management District and TxDOT. TxDOT will consider options for a "signature bridge" over Sam Houston

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	expect the volume be closer to Table 1 – Vi	visual impact of the following t	ummary Segm	Northside to	Park and Buffalo Bayou and will collaborate during design with the management districts or neighborhood groups. Funding for "signature" bridges would be determined in a later phase of project development.	
	LU#	Visual Quality – No Build Alternatives	Visual Quality - Build Alternatives	Existing Viewer Sensitivity	The VIA mentions, for all Segments, that areas located closer to I-45 tend to have lower cultural order, which reduces the overall visual quality at these locations. For Segment 3, the segment is analyzed	
	3 – Northside	High	Low	High		
GNMD (cont.)	Some of the the North sid Street bridge Castillo Con Yards and v The visual ir	de are the greate, the Hogan Sonmunity Cente various points ampact of the acceptance	relopment ets of the south at view from th Street bridge, the r, the Resident along White Oa dded columns the ability to enjore	e Quitman he Leonel ces at Hardy ak Bayou. would affect	In the area where the project crosses White Oak Bayou, bridges will be designed in consideration of visual aesthetics, minimizing bridge columns, and optimizing open space by aligning substructure for multiple roadways where feasible. Existing hike/bike trails would remain.	

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	bike trails and the area's level of desirableness for new residents and economic development.	If the project was at-grade in this area, it could divide existing recreational facilities. TxDOT did not find research to confirm a link between the visual impact of columns and community health. TxDOT will coordinate with the City of Houston to accommodate space for future bike trails as shown on the City of Houston Bike Plan. During detailed design, TxDOT will coordinate with entities who desire to create open spaces or develop trails and connections in the proposed project area, and will accommodate plans by others, if feasible.
GNMD (cont.)	Mitigation Strategies We believe the visual impact to this section to be negative and to require significant mitigation; however, the proposed mitigation strategies are neither specific enough nor adequate. As described under NEPA (40 CFR 1508.20), mitigation includes:	In addition to mitigation measures discussed in the final Addendum 1 to Technical Report that is in the Final EIS, TxDOT plans to develop additional strategies to address visual impacts that will be refined at the detail design stage to address site-specific conditions and local community's input.
	 Avoiding the impact altogether by not takin g a certain action or parts of an action. Minimizing impacts by limiting the degree or magnitude of the action and its implementation. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action. Compensating for the impact by replacing or providing substitute resources or environments. 	One goal of the proposed improvements in Segment 3 is to separate the driver's decision points outside of the Downtown freeway system, which will reduce the weaving movements and improve traffic flow into and around Downtown. An element of this concept includes separating the local and through traffic along I-10. The I-10 Express Lanes will allow for traffic desiring to pass through downtown to do so without interacting with the local movements. This will be supplemented by a signing and driver

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	We suggest reviewing and reducing the number of redundant lanes for some facilities in this segment. Downtown connectors could be shortened by branching off the main lanes closer to Downtown and not Hogan Street. In addition, the I-10 Max lanes could terminate at Downtown and not continue through to the Fifth Ward. This would allow the remaining lanes to be more compact and limit the visual impact on the Northside. On this suggested cross section, both I-45 and I-10 main lanes could be depressed at McKee and have much lessened visual impact for the areas of Hardy Yards and Saint Arnold Brewing Company. As stated above, fewer lanes would "[minimize] impacts by limiting the degree or magnitude of the action and its implementation." We appreciate that proposed detention areas are being evaluated as potential green spaces. In addition to simply being green spaces, we request that TxDOT commit to be the lead agency in securing funding and implementing them as community parks. Even if TxDOT legally can't use funds on some mitigation strategies, it should still be the lead agency in securing funding and implementation.	communication plan to alert drivers of the decision points. It is not feasible to depress the roadways in this area. Below grade would require more ROW and cause significant impacts and displacements. Also, Buffalo Bayou would parallel the depressed section and would cause drainage and flooding concerns. TxDOT analyzed numerous engineering alternatives that would address the project purpose and need. Traffic modeling and analysis conducted for this project indicates that the proposed design/configuration, including the number of lanes, is the best solution for achieving the project's mobility goals. Proposed detention areas on the project are being evaluated as potential open spaces. TxDOT will apply the Green Ribbon themes to the proposed project, including landscaping and hardscaping elements. A detailed landscaping plan will be developed as part of the final design process. TxDOT will coordinate with local groups and agencies to accommodate enhancements to standard landscaping and recreation use of open space in and around storm water detention areas, where feasible. The detention areas will not be designated as parks as their primary use is for drainage and flood mitigation. TxDOT will perform routine

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		maintenance operations that include street sweeping and litter removal.
GNMD (cont.)	Rendered Images and 3D Video We would like to see the rendered images without extraneous edits - color enhancements, people, benches, landscaping enhancements, etc. for a more accurate comparison of existing and proposed conditions for all three segments. In addition, we would like to see more renderings from these Key Viewpoints: (5) Burnett Transit Center, (6) Residences at Hardy Yards, (7) North Main at Rothwell looking north, (8) the Hogan Street bridge looking south and (9) the Quitman Street bridge looking south. (Figure 1 is included with comment letter) In addition, the current 3D video visualization contains a gap. The section of Segment 3 that aligns parallel to White Oak Bayou is not visible since the camera pans to the south to highlight the Downtown connectors. When the video resumes, it is past Quitman Street. We would like to request an interactive model be available to the public to assess other areas of visual impact.	TxDOT does not plan to develop more renderings at this time. TxDOT also created a video showing the simulated project based on the design in 2017. The simulations help in understanding the proposed project. but it is not feasible to develop visualizations to cover all views in the project area. TxDOT will coordinate with the community to integrate aesthetic enhancements in the project design, in all segments of the project. At meetings, it will be possible to show (on a monitor or screen) views of project elements from various locations.
GNMD (cont.)	Clarification on DEIS Please note that the numbers for ROW acquisition area on the VIA are different (and higher) from the DEIS. Please verify and correct on the Supplemental DEIS. We would request to be provided with the correct acreage.	The change in acres of proposed ROW is due to the identification of storm water detention basins and design changes. The detention areas are most of the increase in ROW. Section 2.3.6 of the Final EIS discusses the design changes, including the proposed locations of storm water detention areas.

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	We respectfully ask that the agency review the impact that this project will have on present-and-future inner-city neighborhoods and economic growth. Our vision for the Northside is to improve its economic development while retaining its historical features. We have concerns that this project will have significant impacts on both.	The Community Impacts Assessment Technical Report in the Final EIS includes the updated assessments of neighborhood impacts and economic impacts, and mitigation measures and other commitments to reduce impacts.
	We recommend that you find innovative opportunities to improve the quality of life of the Greater Northside. We look forward to continuing to work with you to ensure the best transportation project for all concerned.	
	If you have any questions or concerns, please feel free to contact me directly.	
Turchetti, Francesco	It is important that the views over the freeway from the properties on the 3300 and 3400 blocks of Saint Emanuel that back onto Chartres Street/Feeder Road be preserved. Sound walls or plantings should not obstruct the view.	Noise barriers are proposed along a portion of the project right-of-way along Chartres St. A Traffic Noise Technical Report with reasonable and feasible noise mitigation proposals for impacted receptors is included in the Final EIS. The
	I suggest pushing Chartres Street/Feeder Road between Alabama and Elgin Streets as far away from the neighborhood as possible for the noise and visual impact. Find means to reduce the speed of cars on this segment of Chartres Street/Feeder Road. While I can see that making the Feeder Road accessible at Alabama Street makes sense, it will undoubtedly make for significantly more traffic on Chartres Street/Feeder Road. Slower traffic on the Feeder Road would be better. It should be designed more as a city street rather than a feeder road. From	Traffic Noise Technical Report documents the updated analysis of noise impacts and evaluates mitigation measures. Any subsequent project design changes may require a re-evaluation of preliminary noise barrier proposals. The final decision to construct the proposed noise barriers will not be made until completion of the proposed project design, utility evaluation, and polling of adjacent property owners.
	current plans it appears that the exit bridge from northbound 288 toward Chenevert and midtown has been removed. This seemingly would mean that	TxDOT will apply the Green Ribbon themes to the proposed project, including landscaping and hardscaping elements. A

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	Chartres street will provide access for midtown and downtown destinations which would make it even more trafficked and thus more important to slow the traffic.	detailed landscaping plan will be developed as part of the final design process. TxDOT will coordinate with local groups and agencies to accommodate enhancements to standard landscaping.
	Design and treatment of this portion of the depressed freeway similar to that in the area of Woodhead, Dunlavy, Mandell, etc. would be welcomed. That said, I also suggest that the current design in this area allow for a future cap over the depressed freeway from roughly Holman Street northward toward downtown similar to what is planned near the George R. Brown to allow a park in this area like the	Since Segment 3 has not had traditional frontage roads but instead has a typical street network crossing the freeways with typical city blocks that are signalized, the City of Houston design standards will be used for street design.
	one currently planned near downtown.	The proposed highway cap behind the George R. Brown Convention Center cannot extend further south from Lamar St. due to conflicts with the relocated I-45 reconnecting to I-45 Gulf Freeway. The area south of Pierce Elevated will be reconstructed with aesthetic bridges replacing the existing McGowen, Tuam and Elgin bridges. These bridges will have bike/pedestrian accommodations.
Houston Parks Board (HPB)	Following are the Houston Parks Board's [HPB] comments regarding TxDOT's recent release of the Visual Impact Assessment and Draft Noise Technical Report of the NHHIP. These comments support the Make I-45 Better Coalition's further comments regarding these technical reports and the accompanying Noise and Hazardous Materials report.	The Draft EIS is compliant with the requirements of the Council on Environmental Quality, FHWA, and TxDOT. The Draft EIS, by nature, is a preliminary analysis based on best available information at the time. TxDOT notes that there is a great deal of public interest in NHHIP, and that public commenters have asked for more
	As detailed in the Irvine Connor letter dated July 20, 2018 after last summer's release of technical reports, all this information should have been included in the NHHIP Draft EIS [DEIS]. Release of key technical	opportunity to review the analyses that TxDOT prepares. Accordingly, TxDOT decided to make available on the project website the draft technical reports as they

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	reports after publication of the DEIS fails to meet NEPA's technical requirements or its intent that the DEIS provide comprehensive disclosure to inform public comment. Understanding the visual and noise impacts of major highway projects is fundamental to a DEIS. Had the information been provided as part of the DEIS, it would have greatly influenced the ability of the public to understand the impact of the project.	became available and to accept comments on them for a minimum of 30 days. Additionally, TxDOT will provide another 30-day comment period once the Final EIS is published.
	Furthermore, additional technical reports that should have been part of the DEIS, including those related to community impacts and cumulative impacts, have yet to be released. Therefore, the Houston Parks Board maintains its position that the DEIS comment period should remain open until all technical reports are released or that a supplemental DEIS be provided at the completion of all technical reports so that the comprehensive impacts of the NHHIP can be fully understood and commented upon. HPB retains the right to comment on any aspect of the project until all the reports are released.	
HPB (cont.)	Visual Impacts to Parks HPB will focus its comments on the visual impacts to parkland, though the visual impacts of the project as a whole remain significant through the length of the project north of UH Downtown [UHD]. It is unclear how these impacts could be mitigated as TxDOT defers any landscaping plans until after the EIS.	TxDOT will apply the Green Ribbon themes to the proposed project, including landscaping and hardscaping elements. A detailed landscaping plan will be developed as part of the final design process. TxDOT will coordinate with local groups and agencies to accommodate enhancements to standard landscaping.
	The limited proposed detention areas¹ are described as potential greenspace and recreation areas "where feasible" while expressly stating that, "they will not be parks." Overall, the report considers the visual quality of Segment 1 as "Moderately low" and Segment 2 "Moderate" without acknowledging the existing	The final Addendum 1 to VIA Technical Report (March 2020) included in the Final EIS includes updated information regarding mitigation measures to reduce the visual impacts of the proposed project.

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	highway as contributing to negative visual qualities in the affected communities.	Some of these are discussed in this response.
	¹ Note that TxDOT has not committed to mitigate the cumulative impacts of the completely rebuilt NHHIP. We have recommended that TxDOT commit to this level of mitigation as well as immediately address historic flooding issues in communities like Independence Heights directly resulting from the existing interstate highway system. Such mitigation would greatly expand the projects detention requirements while creating new potential park and alternative transportation opportunities. See HPB's Near Northside Open Space and Connectivity Plan.	TxDOT will design the project in consideration of visual aesthetics. TxDOT will coordinate with the community to integrate aesthetic enhancements in the project design, in all segments of the project. TxDOT will apply the Green Ribbon Program themes to the proposed project, including landscaping and hardscaping elements. A detailed landscaping plan will be developed as part of the final design process. TxDOT will coordinate with local groups and agencies to accommodate enhancements to standard landscaping.
		In the Segment 3 area where the project crosses White Oak Bayou, bridges will be designed in consideration of visual aesthetics, including minimizing bridge columns and optimizing open space by aligning substructure for multiple roadways where feasible.
		TxDOT will consider options for "signature" bridges to distinguish the Near Northside neighborhood and improve the visual quality of the proposed project area. The design of the bridges will be conducted as a collaboration between the Greater Northside Management District and TxDOT. TxDOT will consider options for a "signature bridge" over Sam Houston Park and Buffalo Bayou and will

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		collaborate during design with the management districts or neighborhood groups. Funding for "signature" bridges would be determined in a later phase of project development.
		The VIA mentions, for all Segments, that areas located closer to I-45 tend to have lower cultural order, which reduces the overall visual quality at these locations. For Segment 3, the segment is analyzed as a whole because areas are proximate to Downtown. Due to responses from northside residents and agencies, in the Addendum 1 to VIA Technical Report and examined impacts to the northside in more detail and acknowledged visual impacts not reported in the VIA Technical Report included in the Draft EIS.
		Specifically in the area where the project crosses White Oak Bayou, bridges will be designed in consideration of visual aesthetics, minimizing bridge columns, and optimizing open space by aligning substructure for multiple roadways where feasible.
		In addition, TxDOT plans to develop additional strategies to address visual impacts that will be refined at the detail design stage to address site-specific conditions and local community's input.
HPB (cont.)	A. Sam Houston Park and Buffalo Bayou Park The report states that "the project would significantly reduce the highway foot print in the area of Sam	The removal of existing elevated structures, to be replaced by fewer lanes and elevated structures, will enhance the

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	Houston Park and Buffalo Bayou Park, creating opportunities for additional greenspace." However, no visual impact analysis is provided to support that claim.	visual quality for those viewers in the area of the parks. TxDOT's visualization (video) shows this area of the project; it was reviewed during this assessment.
HPB (cont.)	B. White Oak Bayou Greenway The EIS remains flawed in failing to acknowledge White Oak Bayou Greenway north of UHD as public parkland, thereby triggering the requirements of Section 4(f) of the U.S. Department of Transportation Act of 1966. Per the Federal Transit Administration:	The bikeways and open spaces along the bayous are not subject to Section 4(f) status because the primary uses of these areas are not for recreational purposes. Even so, efforts have been made to maintain bike paths and existing open spaces.
	Section 4(f) of the U.S. Department of Transportation (USDOT) Act of 1966 prohibits the FTA and other USDOT agencies from using land from publicly owned parks, recreation areas (including recreational trails), wildlife and water fowl refuges, or public and private historic properties, unless there is no feasible and prudent alternative to that use and the action includes all possible planning to minimize harm to the property resulting from such a use. See 23 CFR Part 774.	Generally for this segment, the visual quality is moderate. Some areas may have higher visual quality than others, but the analysis did not identify views with high visual quality in this segment. The amenities shown in the visual simulations were not considered as part of the analysis.
	Section 4(f) has since been recodified but it is still referred to as Section 4(f) today. The report states that, "The existing visual quality on the Heights Bike Trail at White Oak Bayou is moderate, as no large elevated transportation facilities obstruct the view of Downtown (figure 5);	The locations the simulations provided with your comments indicate lower visual quality; however, there are several other locations in the segment which show improved visual quality. The analysis acknowledges those areas closest to the project, including areas of the White Oak Bayou, would have negative impacts.
	however, the bayou has moderate to moderately low quality visual appeal because there are no improvements to the bayou or concrete drainage system to enhance the quality of landscaping in the area." However, since the bayou has grass and wild flowers to its edge in this area (not concrete), and there is a line of trees that blocks the view of the	The project will be developed under TxDOT's Green Ribbon Program, which allocates funds for trees and plants within roadway ROW. A detailed landscaping plan will be developed as part of the final design process. TxDOT will coordinate

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	current alignment of I-10, we contend that the current view of Downtown from the trail (Figure 5) is high visual quality. As it pushes a combined I-10 and I-45 against the very edge of White Oak Bayou's southern shoreline, the NHHIP project obliterates the tree line that currently blocks views of present 1-10 looking toward downtown. Along with the new	with local groups and agencies to accommodate enhancements to standard landscaping and recreation use of open space in and around storm water detention areas, where feasible. The detention areas will not be parks.
	elevated overpasses, this changes the view quality from high to low. The report's Figures 5 and 6 do show that impact even as it distracts the analysis with images of park benches and canoes. Nor are the before and after views comparable. The canoes and water shown in Figure 6 would not be visible without realigning the bayou, which to our	Aesthetic design is part of TxDOT's project development process and will be performed during detailed design, which is the final design stage of the project development process.
	understanding is not planned and therefore should not be shown in the rendering.	Many of the elements that impact landscape and aesthetic design overlap into all parts of the final design process. Typically these areas include:
	While the project eliminates the I-10 overpass	bridge design
	adjacent to UHD, that present alignment is massed with the UHD buildings and Main Street minimizing	•lighting design
	the overall impact. However, The NHHIP reroutes 20	•roadway design
	lanes of highway with some 7 new overpasses directly over the presently open parkland upstream of	•hydraulics
	UHD. That impact is far more significant both	•environmental mitigation
	qualitatively and in its overall scope and scale than what would be removed. HPB had previously noted a net impact to 18 acres of open space. The report's Figure 4 illustrates the new overpasses as a distant image, unrelated to the parkland it impacts. "Miscellaneous aesthetic improvements" are offered as mitigation.	TxDOT will continue to consider the physical and cultural landscape of the project site through the during detailed design process, with the goal of fitting the project into the adjacent landscape in a way that is complementary to, and enhances, the existing landscape. TxDOT
	HPB had commissioned its own visual impact analysis of NHHIP at White Oak Bayou Greenway Park (Exhibit A). We have shown it to a number of community groups over the past year. At each showing it elicits strong reactions of surprised shock.	will work with City of Houston and local groups to incorporate suggestions into final design, where feasible.

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	Again, the visual impact analysis should have been included in the DEIS so that the public could understand the significant impact during the main comment period.	
HPB (cont.)	C. Freed Nature Park The report's analysis misrepresents the impact at Freed Art and Nature Park. The photos in Figures 7 and 8 are taken looking downstream along Little White Oak Bayou. The Greenway trail bridge is visible in the middle distance; the park to the right. Figure 8 suggests that the highway will remain in its present alignment, south of the bridge and away from the park. However, TxDOT's own plans show the ramps crossing north of the bridge over Little White Oak Bayou and over a corner of the park (Exhibit B). Thus, the ramp would be much more in the foreground of the exhibit 8 photo. D. Hogg Park As shown in Figures 9 and 10, NNHIP impacts Hogg Park and Lionel Community Center also as it again monopolizes the south side of the Greenway and significantly changes the park experience.	As stated in the draft VIA Technical Report, the views in Figures 7 and 9 are from east of the park, not from the park. It is acknowledged in the report that the visual quality in the area would be reduced because of the proposed elevated structures. After the draft report was prepared, TxDOT revised the design of the proposed elevated ramp nearest the park, and it will not cross over the park. This can be viewed in the updated design schematics (December 2019). TxDOT will continue to consider the physical and cultural landscape of the project site through the during detailed design process, with the goal of fitting the project into the adjacent landscape in a way that is complementary to, and
		enhances, the existing landscape. TxDOT will work with City of Houston and local groups to incorporate suggestions into final design, where feasible.
HPB (cont.)	We maintain our position that TxDOT has not met its responsibilities under Section 4(f) to avoid and mitigate impacts on parkland as the DEIS and the recent additional technical reports fail to acknowledge these impacts. The impacts to parkland	The project complies with relevant regulations and guidance, including 23 C.F.R. pt. 774 and Section 4(f) of the Department of Transportation Act of 1966. All Section 4(f) impacts are addressed in the Section 4(f) Evaluation.

Entity/Individual Providing Comment	Comment	Response
	are not just visual and noise but extend to habitat, flooding and water quality as well. Even where TxDOT has the opportunity to mitigate through landscape or use of detention as parkland, the analysis minimizes or dismisses the opportunity. HPB continues to implore TxDOT to acknowledge the NHHIP's impacts to parks, and therefore to avoid and mitigate impacts to parks per Section 4(f). HPB has constructively provided TxDOT with a plan for a Little White Oak Bayou Greenway. While that proposal does not directly mitigate the impacts to White Oak Bayou Greenway, it would help mitigate the interstate system's multiple impacts of flooding, broken connectivity, noise and visual degradation that have long affected communities through segments 1 and 2 while providing them with a distinct park amenity. HPB encourages TxDOT to lead implementation of the Little White Oak Bayou Greenway proposal to offset the negative impacts of the existing highway system and the proposed NHHIP.	TxDOT understands there is a vision to extend trails along Little White Oak Bayou. The proposed opening at the Little White Oak Bayou crossing of I-45 south of North St. provides an opportunity for a trail to connect Woodland Park and Moody Park, which does not exist today. TxDOT will propose an opening conducive to bicycle/pedestrian crossings at Little White Oak Bayou under I-45 just north of Patton St. The size of the opening would be a Harris County Flood Control District (HCFCD) decision since this could result in impacts downstream. TxDOT will propose an opening conducive to bicycle/pedestrian crossings at Little White Oak Bayou under I-610. The size of the opening will be coordinated with HCFCD, taking in to account upstream and downstream impacts. TxDOT will continue to work with HCFCD on these elements during detailed design.
METRO	Coordination with METRO will be required to mitigate any visual impacts to bus stops, other facilities and signage.	TxDOT will continue to coordinate with METRO during project development, including during detailed design, to minimize and mitigate potential visual impacts to bus stops, other facilities and signage.

Project Name	North Houston Highway Improvement Project (NHHIP)	Date:
Project CSJ	0912-00-146	
Technical Report Name	Waters of US; Water Resources	
Technical Report Comment Period	6/20/18 - 7/20/18	
TxDOT Reviewers	Mario Mata	

Entity/Individual Providing Comment	Comment	Response
Irvine & Conner PLLC	C. Water Resources, Biological Resources, and Waters of the United States We support and incorporate the comments submitted on behalf of The Lower Brazos Riverwatch on the Draft Water Resources Report, the Draft Biological Resources Report, and the Draft Waters of the United States Report. First, the floodplains analysis continues to analyze impacts in the existing right-of-way and proposed right-of-way in terms of 100-year floodplain impacts. Previous comments on the DEIS requested that TxDOT analyze impacts in terms of the 500-year floodplain. We reassert that request here. Given, in part, the devastating effects of flooding in the Houston area, Harris County and the City of Houston have shifted their thinking when considering project plans and construction activities to the 500-year floodplains. TxDOT is aware of this fact, as other draft technical reports acknowledge that Harris County has adopted new floodplain regulations within the 500-year floodplain. See Draft Indirect Impacts Technical Report at 8. We ask that	Response to Floodplains commentTxDOT will coordinate with the Harris County Floodplain Administrator on this project. Response to impacts to watersTxDOT will coordinate with the U.S. Army Corps of Engineers for any fill placed below the OHWM of a stream/bayou or any fill placed in a wetland. TxDOT will submit for a Section 404 permit from the Corps of Engineers and if stream/mitigation is required, TxDOT will provide mitigation to satisfy the requirements of the permit. Response to BMPs commentsTxDOT will comply with Section 401 Water Quality certification from the TCEQ. Response to MS4 commentTxDOT will comply with Section 402 TPDES MS4 regulations on this project.

Entity/Individual Providing Comment	Comment	Response
	TxDOT's engineering standard for this project	
	shift accordingly, and that future floodplains	
	impact analysis and the future detailed	
	hydraulic study analyze 500-year floodplain	
	impacts and design for these impacts	
	accordingly.	
	Second, the information provided in the Water	
	Resource Report is very general, incomplete,	
	and includes little project-specific information	
	or analysis. As just a few examples:	
	There is no specific discussion about the	
	conditions of waters in the area of impact or	
	the nature of these impacts for surface water.	
	 There is no detail provided as to what 	
	best management practices (BMPs) will be	
	implemented at specific major water crossings	
	or potential unavoidable effects despite the	
	use of construction BMPs.	
	There is no specific information	
	provided related to the project's impact on the	
	City's MS4 or effects of the additional load on	
	the receiving waters. A pollutant loading	
	analysis should be performed.	
	This is information and analysis standardly	
	included in technical reports for transportation	
	projects. We refer the agency to The Lower	
	Brazos Riverwatch's report for additional	
	deficiencies.	
	Third, there is very little to no project-specific	
	detail provided. TxDOT should collect and	
	review any available information regarding	
	existing storm drainage and combined sewer	
	systems, combined sewer overflow reduction	
	plan documents, detailed maps of existing	
	combined sewer systems, frequency and	
	volumes of combined sewer overflow events,	
	current uses of waterbodies impacted by the	
	project, and third-party data to identify	

Entity/Individual Providing Comment	Comment	Response
	possible pollutants of concern for surface	
	water. There are many available sources of	
	information that could inform the agency of	
	potential impacts to surface water. TxDOT	
	should also undertake its own study and	
	analysis, as is standard in the preparation of	
	DEISs and FEISs, to provide project-specific	
	information on impacts and proposed	
	mitigation.	
	Fourth, we request that any supporting	
	materials used in these reports be disclosed	
	and made available to the public.	
	Fifth, TxDOT should provide existing drainage	
	configurations for segments near waterbodies	
	that will be affected by the project. For other	
	projects, departments of transportation have	
	provided maps of these configurations,	
	including any storm overflow structures,	
	shared combined sewer overflow structures,	
	stormwater outfalls, and percentage of	
	pollution-generating impervious surface. The	
	agency should then provide proposed	
	drainage configurations for each alternative	
	along these segments of concern.	
	Sixth, TxDOT should also undertake further	
	drainage analysis for waterbodies that will be	
	impacted by the project. A recent study,	
	attached to these comments for TxDOT's	
	review and consideration, determined that the	
	proposed I-45 project could potentially	
	increase the 100-year WSE in White Oak	
	Bayou by 0.12 feet. For a large channel like	
	White Oak Bayou, 0.12 feet of rise in WSE is	
	significant and could require significant	
	measures to mitigate and meet the zero rise	
	requirements. More study may be needed to	
	determine potential rise in WSE in	
	waterbodies affected by the project.	

Entity/Individual Providing Comment	Comment	Response
	Seventh, the information in the Draft Biological Resources Report is similarly too general and insufficient to fully inform TxDOT or the public as to the impacts to biological resources. We request that further disclosure be made related to the December 2017 field survey and request that another survey be made to better determine what specific species use different areas of habitat that will be impacted by the project.	
	Many comments were made previously in response to the DEIS on the issues of water resources and biological resources. It is not clear if TxDOT has addressed any of these comments in the preparation of these draft technical reports. NEPA mandates a broad dissemination of information to the public and government agencies. This broad dissemination is designed to encourage public comment and participation, to which the agency (or other applicant) must be responsive. The level of analysis in these draft technical reports, especially given the scale of this project, is wholly inadequate. The failure to consider relevant comments submitted in response to the DEIS well in advance of the publication of these technical reports is unjustifiable. We request that TxDOT consider all relevant comments previously submitted in response to the DEIS as it prepares future drafts of these technical	
	reports.	
Lower Brazos Riverwatch	Draft Technical Report on Waters of the United States In general, the Draft Waters of the United States Technical Report (the Report) appears to be done appropriately. The methodology	TxDOT will coordinate with the U.S. Army Corps of Engineers for any fill placed below the OHWM of a stream/bayou or any fill placed in a wetland. TxDOT will submit for a Section 404 permit from the Corps of

Entity/Individual Providing Comment	Comment	Response
	employed seems appropriate for the level of access currently available. It is assumed that the data will be supplemented with complete field delineations, once access to all parcels is acquired, and that such field work will look at the entire right-of-way and not just ground truth the remote sensing work provided here. There is no discussion of how impacts to Waters of the United States will be mitigated. At least some idea of the proposed mitigation methodology should be provided for inclusion in the FEIS, in order to adequately assess the actual impacts of the project. The ultimate mitigation should be based on the final numbers for impacts, as determined by the complete field delineation of the project. TXDOT appears, in the tabular listing of Waters of the United States and in discussion, to be determining that some of the identified waters are not jurisdictional. While we understand and agree with this position in regard to the water fountain, we believe that the determination of the jurisdictional status of the remaining waters, including the detention basins, should not be presumed and should be determined by the Corps of Engineers	Engineers and if stream/mitigation is required, TxDOT will provide mitigation to satisfy the requirements of the permit.
	Surface Water The surface water section provides a general review of the water bodies potentially impacted by the project, their stream segment numbers, and their state category designation. It specifies which of the waters have TMDLs established and for what general parameter the waters are considered impaired. There is no specific discussion about the condition of the waters in the specific areas of impact or about the nature of the specific impacts. While some of this	TxDOT will comply with Section 401 Water Quality certification from the TCEQ and Section 402 TPDES MS4 regulations on this project.

Entity/Individual Providing Comment	Comment	Response
	information can be gleaned from the Draft	
	Technical Report on Waters of the United	
	Sates, it is also quite general and lacks	
	sufficient specificity to determine impacts to	
	the waters. TXDOT does not address, or	
	appear to consider at all any recreational use	
	of the water bodies impacted.	
	The project includes portions of the TPWD	
	approved Buffalo Bayou Paddling Trail and	
	portions of the proposed Greens Bayou	
	Paddling Trail.	
	In discussing short term water quality impacts,	
	the report mentions that a SW3P would be	
	developed, and generally discusses the	
	potential BMPs for water quality protection. It	
	provides no detail at all as to approaches to	
	be employed for specific major water	
	crossings. There is no discussion of the	
	nature of the habitat at the area of impacts or	
	how TXDOT intends to address and mitigate	
	water quality impacts. There is merely a	
	general statement that BMPs will be	
	employed and that contractors will be in	
	compliance with applicable laws and	
	regulations for waste disposal.	
	In discussing long-term impacts to water	
	quality TXDOT provides a very general	
	statement concerning the types of pollutants	
	to be expected from roadways. Without any	
	quantification of current conditions, or	
	modeling of future conditions, the report	
	makes a conclusory statement that the	
	impacts of the project to surface waters would	
	be minor and localized. As provided to	
	TXDOT in comment on the DEIS, we request	
	that current conditions be quantified through	
	sampling and future conditions be modeled to	
	assure that the project, as proposed, will not	

Entity/Individual Providing Comment	Comment	Response
	result in further degradation of water quality in already impaired waters and will not contribute to exceeding of the TMDLs or be detrimental to water quality management strategies. TXDOT lists as potential pollutants particulates from tire wear, oils and greases, and urban litter much of which is either light (specific gravity less than 1.0) or floatable. They then assert that the detention basins will provide for settling of particulates and the consequent reduction of pollutants being conveyed to receiving waters. TXDOT, in this section, uses volumes and concentrations interchangeably, which results in potential erroneous conclusions. For example, without specific oil and grease and floatables control, the upper layer discharge to the receiving waters could actually have increased pollutant concentrations, though the total volume of discharge and particulates may be reduced. We suggested floatables control for detention and discharge in our comments on the DEIS, but there is no evidence here that they are being included. We reiterate that suggestion here. This section is excessively general, does not discuss actual conditions at locations to be impacted, and ignores public use of the waters. It does not appear that previous suggestions have been considered of incorporate	
	Groundwater comments	TxDOT will comply with Section 401 and Section 402 regulations to protect all groundwater.
	Floodplain comments.	TxDOT will coordinate with the Harris County Floodplain Administrator.

Entity/Individual Providing Comment	Comment	Response
	MS4 comments	TxDOT will comply with Section 402 and TPDES and MS4 regulations.
	CZMP	If the project is located within the CMP boundary, TxDOT will coordinate with the Texas General Land Office to ensure the project is consistent with the goals and policies of the CMP. If any coastal natural resources are impacted, TxDOT will coordinate with the appropriate resource agency.
METRO	Water Resources comments Table Showing the water segments 6 4.1 with the segment numbers on the Exhibit 2 map would help. 8 Table Thicken border between 2012 4.2 and 2014 in heading column	Comments noted
	Waters of the U.S. comments 4 3.0 Second Is the word supposed to be "areal"? To avoid confusion with "aerial" rephrase to "estimating area of extent" 6 Table 2 Label total miles as "Combined Total" 7 Table 3 Add border above "Total" heading	Comments noted

Project Name	North Houston Highway Improvement Project (NHHIP)	Date: 4/1/2020	
Project CSJ	0912-00-146		
Technical Report Name	Draft Community Impacts Assessment Draft Cumulative Impacts Assessment		
Technical Report Comment Period	• •	Draft Community Impacts Assessment: 12/11/2019 – 2/7/2020 Draft Cumulative Impacts Assessment: 12/19/2019 – 2/7/2020	
TxDOT Reviewers	Christine Bergren, Terri Dedhia, Nicolle Kord, Tim Wood, Jackie Ploch, Meredith Worthen, Spencer Ward, Carlos Swonke		

NOTE: The Comment Response Matrix follows this List of Commenters, and public comments follow the Comment Response Matrix.

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Steven Gopon	1⊿
Valerie Hawkins	14
Deaglen Hendershot	1⊿
Clair Hopper (1 of 2)	1⊿
Clair Hopper (2 of 2)	1⊿
Glecerio Jumawan	1⊿
Barbara Kertz	1⊿
Nick Killian	15
H.D. Lee	15
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Fitz Madu	15
Dennis Malloy	15
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Brett Martino	15
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Meredith McCain	15
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Kelly Taylor	17
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Entity/Individual Providing Comment	Response
Lydia Afeman	The analyses for the project evaluated these issues and identified the project impacts and mitigation to address health and safety.
	TxDOT is continuing to develop and design this project and will continue to coordinate with stakeholders and the public.
CHI - Robert Eury	TxDOT is continuing to develop and design this project and will continue to coordinate with stakeholders and the public.
	Issues regarding cross streets will also involve coordination with the City of Houston (COH).

Entity/Individual Providing Comment	Response
HDMD – Robert Eury	TxDOT is continuing to develop and design this project and will continue to coordinate with stakeholders and the public.
	The southeast quadrant of Downtown / IH-45 & IH-69 interchange would be included in considering detention basins as potential green space. TxDOT will apply the Green Ribbon themes to the proposed project, including landscaping and hardscaping elements. A detailed landscaping plan will be developed as part of the final design process. TxDOT will coordinate with local groups and agencies to accommodate enhancements to standard landscaping and recreation use of open space in and around storm water detention areas, where feasible.
	These specific suggestions will be considered as the project is developed further.
Houston City Council District H – Karla Cisneros	The analyses for the project evaluated these issues and identified the project impacts and mitigation to address impacts to safety, congestion, air quality, and community resources.
	TxDOT is continuing to develop and design this project and will continue to coordinate with stakeholders and the public.
	TxDOT plans to follow up with COH and city council members regarding the issues raised.
Sierra Club – Brandt Mannchen	TxDOT followed all applicable regulatory procedures and best practices in conducting its analyses and feels the adequacy is sufficient to support the project decision.
METRO – Ujari Mohite	TxDOT is continuing to develop and design this project and will continue to coordinate with stakeholders and the public.
	TxDOT will continue to coordinate with METRO on these and other relevant issues.
METRO – (Community Impact Assessment comments)	The METRORail stations were added to the Super Neighborhood figures in Section 5 of the Community Impacts Assessment Technical Report.
	The discussions and commitments about advance notifications for changes to transit, such as bus stops, has not been changed in the Community Impacts Technical Report because TxDOT and METRO are still coordinating the D-B contract terms. The information included in the technical report is based prior input from METRO, and TxDOT understands that METRO's notification and coordination requirements may change over time.

Entity/Individual Providing Comment	Response
	A note has been added to Tables 6-1, 6-2, and 6-3: Some of these items will be subject to changes and updates as project development and coordination continues. The most updated version of the project mitigation and commitments will be found in the Final EIS and Record of Decision.
	TxDOT will continue to coordinate with METRO on these and other relevant issues.
METRO – (Cumulative Impact comments)	TxDOT will continue to coordinate with METRO on these and other relevant issues.
Bike Houston – Clark Martinson	TxDOT is continuing to develop and design this project and will continue to coordinate with stakeholders and the public.
	TxDOT is coordinating with the COH regarding the specific design of the city street network adjacent to and crossing the NHHIP. TxDOT is working with the COH to incorporate the COH Bike Plan and desired bicycle/pedestrian accommodations on city streets.
	The proposed project considers trails, and will accommodate or replace existing trails and allow for planned future trails. During detailed design, TxDOT will coordinate with entities who desire to create open spaces or develop trails and connections in the proposed project area, and will accommodate plans by others, if feasible.
Amy Boyers	TxDOT followed all applicable regulatory procedures and best practices in conducting its analyses and feels the adequacy is sufficient to support the project decision.
	The analyses for the project evaluated these issues, and identified the project impacts and mitigation to address them.
Trevor Reichman	TxDOT followed all applicable regulatory procedures and best practices in conducting its analyses and feels the adequacy is sufficient to support the project decision.
	Comments have been noted and will be considered as the project moves forward.

Entity/Individual Providing Comment	Response
Mary Schultz	Comments have been noted and will be considered as the project moves forward.
	The analyses for the project evaluated these issues, and identified the project impacts and mitigation to address them.
	The results of air monitoring will be taken into consideration and adjustments will be considered as needed.
TNL Associates - Bala Viswanath	TxDOT is continuing to develop and design this project and will continue to coordinate with stakeholders and the public.
	Final placement of noise barriers is yet to be determined. Input from adjacent property owners will be solicited.
GPCC - Kerry Whitehead	Thank you for following up on the noted statement in the Community Impacts Assessment Technical Report. After further research, TxDOT found that we accidentally coded a meeting with the Lindale Park Civic Club (LPCC) as being held with Glen Park Civic Club (GPCC). TxDOT agrees that we do not have a record of meeting with GPCC as a separate entity. TxDOT also has not met with any developers regarding the noted Little White Oak Bayou opening under I-45.
	TxDOT and its consultants had the opportunity to talk with several GPCC homeowners at the 2020 City of Houston Facilitation Team public meetings and better understand GPCC's concerns about removing the North St. bridge. From what we heard, Glen Park residents and likely a few others surrounding the Glen Park area who are zoned to Travis Elementary School on the west side of I-45 normally utilize North St. as the current access route to pick up and drop off students. Having to use N. Main St. as the access route to Travis Elementary versus North St. was also a concern.
	Throughout the alternatives development, we looked at every option to retain the North St. bridge over I-45, but the improvements required to raise I-45 out of the floodplain and to provide enhanced access from Quitman St. conflicted with the elevation of the bridge.
	To enhance circulation between the east and west side of I-45 without the North St. bridge, TxDOT added a new northbound frontage road between Quitman St. and N. Main St. This will

Entity/Individual Providing Comment	Response
	allow residents of Glen Park and other neighborhoods on the east side of I-45 to access Travis Elementary School and other points of interest on the west side of I-45 by traveling N. Main St. to Houston Avenue. Travel from west of I-45 to the east side would be either following Beauchamp St. or Houston Ave. north to N. Main St. or south to White Oak Dr./Quitman St. and then north along the new northbound frontage road, without having to enter I-45 at Quitman St. and exit soon after at N. Main St., as you do today.
	TxDOT also checked the distance and travel time to Travis Elementary from the Glen Park area and it shows to be exactly the same (0.4 miles and 5 minutes of travel time) using North St. or N. Main St.
	TxDOT welcome the opportunity for a specific meeting with the GPCC officers.
Air Alliance Houston and others: LINK Houston Monti Beach Civic Club	TxDOT followed all applicable regulatory procedures and best practices in conducting its analyses and feels the adequacy is sufficient to support the project decision.
Bayou Preservation Association	Comments have been noted and will be considered as the project moves forward.
Stop TxDOT Coalition Super Neighborhood 83 Fifth Ward Super Neighborhood Hermann Park Conservancy Asakura Robinson Houston Freedman's Town Conservancy Texas Appleseed Friends of Woodland Park, Inc. Avenue CDC	In 2018, the National Oceanic and Atmospheric Administration (NOAA) released revised precipitation-frequency data for Texas, termed "Atlas-14" data. TxDOT is using the updated precipitation-frequency estimates when designing new construction projects. During final design, final drainage and mitigation analyses will be performed, and will be reviewed by regulatory agencies to confirm that adequate measures have been incorporated into the design to ensure that the proposed project does not increase the risk of flooding to adjacent properties. TxDOT is coordinating with Harris County Flood Control District and the COH regarding regional drainage and flooding issues. See Section 3.8.3 of the Final EIS for additional information about studies that will be conducted by TxDOT during project design.
Email from Bakeyah Nelson	
Riverside Terrace Alliance- Rachel Paxton	TxDOT is continuing to develop and design this project and will continue to coordinate with stakeholders and the public.
	Final placement of noise barriers is yet to be determined. Input from adjacent property owners will be solicited.

Entity/Individual Providing Comment	Response
State Senator Carol Alvarado	TxDOT is continuing to develop and design this project and will continue to coordinate with stakeholders and the public.
	TxDOT will continue to look for ways to minimize the impacts to residences.
	Additionally, TxDOT will continue to develop its mitigation efforts related to air quality, flooding, and noise issues.
Bayou Preservation Association- Sarah Bernhardt	TxDOT followed all applicable regulatory procedures and best practices in conducting its analyses and feels the adequacy is sufficient to support the project decision.
	TxDOT is continuing to develop and design this project and will continue to coordinate with stakeholders and the public. TxDOT would welcome future input from the BPA.
	In 2018, the National Oceanic and Atmospheric Administration (NOAA) released revised precipitation-frequency data for Texas, termed "Atlas-14" data. TxDOT is using the updated precipitation-frequency estimates when designing new construction projects. During final design, final drainage and mitigation analyses will be performed, and will be reviewed by regulatory agencies to confirm that adequate measures have been incorporated into the design to ensure that the proposed project does not increase the risk of flooding to adjacent properties. TxDOT is coordinating with Harris County Flood Control District and the COH regarding regional drainage and flooding issues. See Section 3.8.3 of the Final EIS for additional information about studies that will be conducted by TxDOT during project design.
White Oak Bayou Association-Robert S. Lee	TxDOT followed all applicable regulatory procedures and best practices in conducting its analyses and feels the adequacy is sufficient to support the project decision.
	TxDOT is continuing to develop and design this project and will continue to coordinate with stakeholders and the public. TxDOT would welcome future input from the WOBA.
	In 2018, the National Oceanic and Atmospheric Administration (NOAA) released revised precipitation-frequency data for Texas, termed "Atlas-14" data. TxDOT is using the updated precipitation-frequency estimates when designing new construction projects. During final design, final drainage and mitigation analyses will be performed, and will be reviewed by

Entity/Individual Providing Comment	Response
	regulatory agencies to confirm that adequate measures have been incorporated into the design to ensure that the proposed project does not increase the risk of flooding to adjacent properties. TxDOT is coordinating with Harris County Flood Control District and the COH regarding regional drainage and flooding issues. See Section 3.8.3 of the Final EIS for additional information about studies that will be conducted by TxDOT during project design.
LINK Houston- Jonathan Brooks	TxDOT followed all applicable regulatory procedures and best practices in conducting its analyses and feels the adequacy is sufficient to support the project decision.
	The analyses for the project evaluated these issues, and identified the project impacts and mitigation to address them.
Commissioner Adrian Garcia	The analyses for the project evaluated these issues, and identified the project impacts and mitigation to address impacts to safety, air quality, communities, and other resources.
	TxDOT is continuing to develop and design this project and will continue to coordinate with stakeholders and the public.
	TxDOT will continue to look for ways to minimize the impacts to residences.
	TxDOT appreciates the concern regarding air quality and would refer to the air quality technical reports for information about project impacts and mitigation.
	In 2018, the National Oceanic and Atmospheric Administration (NOAA) released revised precipitation-frequency data for Texas, termed "Atlas-14" data. TxDOT is using the updated precipitation-frequency estimates when designing new construction projects. During final design, final drainage and mitigation analyses will be performed, and will be reviewed by regulatory agencies to confirm that adequate measures have been incorporated into the design to ensure that the proposed project does not increase the risk of flooding to adjacent properties. TxDOT is coordinating with Harris County Flood Control District and the COH regarding regional drainage and flooding issues. See Section 3.8.3 of the Final EIS for additional information about studies that will be conducted by TxDOT during project design
Arnold Abramson	Comments have been noted and will be considered as the project moves forward.
Eric Ayala	A TxDOT representative has responded to your request for information.

Entity/Individual Providing Comment	Response
Rene Bell	The analyses for the project evaluated these issues, and identified the project impacts and mitigation to address them.
Kathy Boulte	Comments have been noted and will be considered as the project moves forward.
Linda Cantu	Comments have been noted and will be considered as the project moves forward.
Leah Chambers	Comments have been noted and will be considered as the project moves forward.
Kyrlyn Chatten	The analyses for the project evaluated these issues, and identified the project impacts and mitigation to address them.
Jennifer Clay	Comments have been noted and will be considered as the project moves forward.
Stephanie Coates	The analyses for the project evaluated these issues and identified the project impacts and mitigation to address impacts.
David Collins	The analyses for the project evaluated these issues, and identified the project impacts and mitigation to address them.
David Crossley	Comments have been noted and will be considered as the project moves forward.
Katherine Culbert	TxDOT followed all applicable regulatory procedures and best practices in conducting its analyses and feels the adequacy is sufficient to support the project decision.
Michelle Dupuy	A TxDOT representative has responded to your request for information.
Troy Dutton	The analyses for the project evaluated these issues, and identified the project impacts and mitigation to address them.
Neal Ehardt	TxDOT is continuing to develop and design this project and will continue to coordinate with stakeholders and the public.
	The analyses for the project evaluated these issues, and identified the project impacts and mitigation to address them.
Ashley Ellis	The analyses for the project evaluated these issues, and identified the project impacts and mitigation to address them.
Sue Fendrich	Comments have been noted and will be considered as the project moves forward.
Gene Feronti (1 of 2)	The analyses for the project evaluated these issues, and identified the project impacts and mitigation to address them.

Entity/Individual Providing Comment	Response
Gene Feronti (2 of 2)	The analyses for the project evaluated these issues, and identified the project impacts and mitigation to address them.
Corliss Gibson	Depressed sections of the proposed project will be designed to provide a 500-year level of protection. This will be achieved through a pumped drainage system that will collect rainwater falling inside the depressed sections and discharge it to an adjacent detention basin or receiving channel. In addition, the entrance points to the depressed sections will be constructed above the adjacent 500-year water surface elevation, such that adjacent floodwaters cannot enter and flood the depressed sections.
	See Section 3.8.3 of the Final EIS for additional information about studies that will be conducted by TxDOT during project design
Steven Gopon	TxDOT followed all applicable regulatory procedures and best practices in conducting its analyses and feels the adequacy is sufficient to support the project decision.
Valerie Hawkins	The analyses for the project evaluated these issues, and identified the project impacts and mitigation to address them.
Deaglen Hendershot	This project is one of the highway transportation projects in H-GAC's 2045 Regional Transportation Plan (RTP). The 2045 RTP for the Houston-Galveston region sets investment priorities for the multimodal transportation system in the region. The proposed NHHIP will eliminate some existing at-grade street crossings at railroad tracks.
Clair Hopper (1 of 2)	The analyses for the project evaluated these issues, and identified the project impacts and mitigation to address health and safety.
	TxDOT is continuing to develop and design this project and will continue to coordinate with stakeholders and the public.
Clair Hopper (2 of 2)	Comments have been noted and will be considered as the project moves forward.
	The analyses for the project evaluated these issues, and identified the project impacts and mitigation to address health and safety
Glecerio Jumawan	A TxDOT representative has responded to your request for information.
Barbara Kertz	The analyses for the project evaluated these issues, and identified the project impacts and mitigation to address them.

Entity/Individual Providing Comment	Response
Nick Killian	The analyses for the project evaluated these issues, and identified the project impacts and mitigation to address them.
H.D. Lee	TxDOT followed all applicable regulatory procedures and best practices in conducting its analyses and feels the adequacy is sufficient to support the project decision.
	TxDOT followed all applicable regulatory procedures and best practices in conducting its analyses and feels the adequacy is sufficient to support the project decision.
Adrienne Lynch	TxDOT followed all applicable regulatory procedures and best practices in conducting its analyses and feels the adequacy is sufficient to support the project decision.
	The analyses for the project evaluated these issues, and identified the project impacts and mitigation to address them.
Fitz Madu	TxDOT followed all applicable regulatory procedures and best practices in conducting its analyses and feels the adequacy is sufficient to support the project decision.
Dennis Malloy	In 2018, the National Oceanic and Atmospheric Administration (NOAA) released revised precipitation-frequency data for Texas, termed "Atlas-14" data. TxDOT is using the updated precipitation-frequency estimates when designing new construction projects. During final design, final drainage and mitigation analyses will be performed, and will be reviewed by regulatory agencies to confirm that adequate measures have been incorporated into the design to ensure that the proposed project does not increase the risk of flooding to adjacent properties. TxDOT is coordinating with Harris County Flood Control District and the COH regarding regional drainage and flooding issues. See Section 3.8.3 of the Final EIS for additional information about studies that will be conducted by TxDOT during project design
Robert Marshall	The analyses for the project evaluated these issues, and identified the project impacts and mitigation to address them.
Brett Martino	Comments have been noted and will be considered as the project moves forward.
Matt	TxDOT followed all applicable regulatory procedures and best practices in conducting its analyses and feels the adequacy is sufficient to support the project decision.
Meredith McCain	The analyses for the project evaluated these issues, and identified the project impacts and mitigation to address them.
Michael Moritz	Comments have been noted and will be considered as the project moves forward.
Henry Morris	Comments have been noted and will be considered as the project moves forward.

Entity/Individual Providing Comment	Response
Shannon Morrison	A TxDOT representative has responded to your request for information.
Bette Moser	Comments have been noted and will be considered as the project moves forward.
Hussain Nathoo	Comments have been noted and will be considered as the project moves forward.
Lam Nguyen	The analyses for the project evaluated these issues, and identified the project impacts and mitigation to address them.
Joshua Orsak	Comments have been noted and will be considered as the project moves forward.
Petermac3321@gmail.com	Comments have been noted and will be considered as the project moves forward.
Angelica Ponce	The analyses for the project evaluated these issues, and identified the project impacts and mitigation to address them.
Ruthy Portnoy	Segment 3 construction is expected to begin in late 2021 and is anticipated to take approximately 7 years to complete (late 2028). Regarding your question on the presentation, that second bullet point on slide 31 referring to five cross streets was a carryover from an older presentation and was accidentally taken out of context. There are actually far more than five cross streets between downtown and the east side in the proposed condition as can be seen in slide 32 of that presentation. What slide 31 was trying to convey is that TxDOT closely coordinated with the City of Houston to optimize the local street network connectivity in Segment 3, including the cross streets between Downtown and the east side of downtown. One of the key benefits of the project is that TxDOT can restore a continuous southbound street parallel to the highway between Commerce St. and Leeland St This restored street (noted as Hamilton in the schematic) would reestablish connectivity of four east/west streets that were severed when the GRB Convention Center was constructed (Dallas, Lamar, McKinney, and Walker) and improve access between Downtown and areas to the east (East End and Third Ward). It would also support local street capacity during sporting or convention center events.
Jill Rafferty (1 of 5)	Comments have been noted and will be considered as the project moves forward.
Jill Rafferty (2 of 5)	Comments have been noted and will be considered as the project moves forward.
Jill Rafferty (3 of 5)	The 2/3/20 meeting was conducted by COH. Comments have been noted and will be considered as the project moves forward.

Entity/Individual Providing Comment	Response
Jill Rafferty (4 of 5)	Comments have been noted and will be considered as the project moves forward.
Jill Rafferty (5 of 5)	Comments have been noted and will be considered as the project moves forward.
Kathleen Ruhleder	Comments have been noted and will be considered as the project moves forward.
Campbell Sadeghy	Comments have been noted and will be considered as the project moves forward.
Marianna Sattler	Comments have been noted and will be considered as the project moves forward.
Deanna Schmidt	Comments have been noted and will be considered as the project moves forward.
Heidi Skiff	Comments have been noted and will be considered as the project moves forward.
Carl Sloan	Comments have been noted and will be considered as the project moves forward.
Christine Smith	The analyses for the project evaluated these issues, and identified the project impacts and mitigation to address them.
Carter Stern	The analyses for the project evaluated these issues, and identified the project impacts and mitigation to address them.
Mark Steuer	The analyses for the project evaluated these issues, and identified the project impacts and mitigation to address them.
John Stultz	Comments have been noted and will be considered as the project moves forward.
Terald Doucett	The analyses for the project evaluated these issues, and identified the project impacts and mitigation to address them.
Kelly Taylor	The analyses for the project evaluated these issues, and identified the project impacts and mitigation to address them.
texfyre@gmail.com	The analyses for the project evaluated this issue, and identified the project impacts and mitigation to flooding.
Melinda Toribio	Comments have been noted and will be considered as the project moves forward.
Maria Turlan	TxDOT has limited input on activities outside the TxDOT right-of-way.
Amanda Villaneuva	Comments have been noted and will be considered as the project moves forward.
Jody Wilding	Comments have been noted and will be considered as the project moves forward.
Sarah Williams	Comments have been noted and will be considered as the project moves forward.

Entity/Individual Providing Comment	Response
Cheryl Worn	Comments have been noted and will be considered as the project moves forward.
Felix Zacarias	Refer to the Traffic Noise Technical Report for locations of proposed noise barriers.
Lone Star Legal Aid – Amy Dinn Attorneys for Independence Heights Redevelopment Council (IHRC)	TxDOT followed all applicable regulatory procedures and best practices in conducting its analyses and feels the adequacy is sufficient to support the project decision.
	TxDOT is continuing to work the IHRC to address the issues discussed in this letter.
	Comments have been noted and will be considered as the project moves forward.
Texas Housers: Zoe Middleton, Houston & Southeast Co- Director	TxDOT followed all applicable regulatory procedures and best practices in conducting its analyses and feels the adequacy is sufficient to support the project decision.
	TxDOT is continuing to develop and design this project and will continue to coordinate with stakeholders and the public.
	TxDOT considered the comments and questions and sees no need to revise the Community Impacts Assessment and Cumulative Impacts technical reports.
Citizen's Transportation Coalition: Carol Caul	TxDOT followed all applicable regulatory procedures and best practices in conducting its analyses and feels the adequacy is sufficient to support the project decision.
	TxDOT is continuing to develop and design this project and will continue to coordinate with stakeholders and the public.
Greater Northside Management District: Anibeth Turcios	TxDOT is continuing to develop and design this project and will continue to coordinate with stakeholders and the public.
	TxDOT will continue to coordinate with Greater Northside Management District on the issues noted and other relevant issues.
	Comments have been noted and will be considered as the project moves forward.

Entity/Individual Providing Comment	Response
Houston Parks Board: Rachel Ranta	TxDOT followed all applicable regulatory procedures and best practices in conducting its analyses and feels the adequacy is sufficient to support the project decision.
	The Final EIS discusses in detail the impacts to parks and includes a Section 4(f) evaluation. Please refer to that discussion.
Greater Fifth Ward Super Neighborhood #55: Joetta Stevenson	TxDOT is continuing to develop and design this project and will continue to coordinate with stakeholders and the public.
	Mitigation for community impacts, including the Greater Fifth Ward, is addressed in the CIA Technical Report. TxDOT will continue to work with the Greater Fifth Ward on these and other mitigation opportunities.
Houston City Council Member: Leticia Plummer	The analyses for the project evaluated these issues, and identified the project impacts and mitigation to address impacts to communities.
	TxDOT is continuing to develop and design this project and will continue to coordinate with stakeholders and the public.
	TxDOT plans to follow up regarding the issues raised with COH and city council members.
Jeff Adams	The analyses for the project evaluated these issues, and identified the project impacts and mitigation to address them.
Joshua Atkinson	The analyses for the project evaluated these issues, and identified the project impacts and mitigation to address them.
Andres Bryan	The analyses for the project evaluated these issues, and identified the project impacts and mitigation to address them.
Jon Cooper	The proposed I-45 MaX lanes would provide 2-way, 24x7 operation. The MaX lanes would have a flexible footprint for HOV, bus and rubber-tired high-capacity transit (e.g., Bus Rapid Transit [BRT] or automated vehicles).
Margo Fendrich	TxDOT followed all applicable regulatory procedures and best practices in conducting its analyses and feels the adequacy is sufficient to support the project decision.
	Comments have been noted and will be considered as the project moves forward.

Entity/Individual Providing Comment	Response
Joshua Fowler	Comments have been noted and will be considered as the project moves forward.
Emily Fulk	TxDOT followed all applicable regulatory procedures and best practices in conducting its analyses and feels the adequacy is sufficient to support the project decision.
	Comments have been noted and will be considered as the project moves forward.
Fred Lindner	TxDOT followed all applicable regulatory procedures and best practices in conducting its analyses and feels the adequacy is sufficient to support the project decision.
Mary Natoli	TxDOT followed all applicable regulatory procedures and best practices in conducting its analyses and feels the adequacy is sufficient to support the project decision.
	Comments have been noted and will be considered as the project moves forward.
Sai Paul	Comments have been noted and will be considered as the project moves forward.
Trenton Piepergerdes	TxDOT followed all applicable regulatory procedures and best practices in conducting its analyses and feels the adequacy is sufficient to support the project decision.
Chalandra Robinson	TxDOT followed all applicable regulatory procedures and best practices in conducting its analyses and feels the adequacy is sufficient to support the project decision.
	The analyses for the project evaluated these issues, and identified the project impacts and mitigation to address them.
Alicia Selvera	TxDOT followed all applicable regulatory procedures and best practices in conducting its analyses and feels the adequacy is sufficient to support the project decision.
Kay Warhol	The analyses for the project evaluated flooding issues, and identified the project impacts and mitigation to address them. See Section 3.8 of the Final EIS for additional information.
	The analyses for the project evaluated other issues noted in your comment, and identified the project impacts and mitigation to address them.
	TxDOT followed all applicable regulatory procedures and best practices in conducting its analyses and feels the adequacy is sufficient to support the project decision.

Entity/Individual Providing Comment	Response
Kelly Granado	TxDOT followed all applicable regulatory procedures and best practices in conducting its analyses and feels the adequacy is sufficient to support the project decision.
Zoabe Hafeez	The analyses for the project evaluated these issues, and identified the project impacts and mitigation to address them.
Edsel Kiboma	TxDOT followed all applicable regulatory procedures and best practices in conducting its analyses and feels the adequacy is sufficient to support the project decision.
	The analyses for the project evaluated these issues, and identified the project impacts and mitigation to address them.
Janette Lindner	TxDOT followed all applicable regulatory procedures and best practices in conducting its analyses and feels the adequacy is sufficient to support the project decision.
Victor Giron	Comments have been noted and will be considered as the project moves forward.
Harris County – Loyd Smith (cover letter)	TxDOT is continuing to develop and design this project and will continue to coordinate with stakeholders and the public.
	TxDOT will continue to coordinate with Harris County on these and other relevant issues.
Harris County – Loyd Smith (attachment to letter)	TxDOT will continue to coordinate with Harris County on these and other relevant issues.
	Comments have been noted and will be considered as the project moves forward.
- West Gillespie Road	The pavement width will be adjusted on the final schematic.
- West Road	The pavement width will be adjusted on the final schematic.
- Blue Bell Road	The addition of a dedicated left-turn lane would require acquisition of additional ROW along Blue Bell approaching I-45. Knowing Harris County will be expanding Blue Bell in the future, we have updated the schematics to four lanes under I-45.

Entity/Individual Providing Comment	Response
- American Statesmanship Park	No right-of-way is proposed to be acquired from the American Statesmanship Park tract.
	The December 2019 Draft Community Impacts Assessment Technical Report and 2019 design schematics mistakenly showed an aesthetic wall in a location that would block the view of the park. Although an aesthetic wall was preliminarily shown to meet criteria for inclusion in the project, TxDOT recognized that it would impact the view of the park and is not proposed. This will be revised in the final technical report and the schematics.
	TxDOT is continuing to develop and design this project and will continue to coordinate with Harris County during design and construction.
- Nance Street Parking Lot	In the updated drainage study completed in 2019, the detention ponds under the connectors have been removed. There is now, however, a pump station planned under the connectors. TxDOT will coordinate with Harris County during the design phase as the drainage is finalized to minimize the impact to the planned offsite parking site.
County Courthouse / Criminal Justice Complex on the North Side of Downtown	TxDOT is coordinating and will continue to coordinate with the City of Houston to accommodate the City's future expansion of San Jacinto St Support columns for the elevated I-10 main and express lanes and I-45 main lanes will be positioned to accommodate the northward extension of San Jacinto St.
	The proposed design would maintain connectivity between Northside and the Central Business District. All of the existing streets connecting the Northside to Downtown would remain and accommodations would be made for a future San Jacinto St. connection. Improvements also include railroad underpasses at McKee St. and Jensen Dr. The proposed design would minimize impacts in the historic warehouse district.
	Proposed access improvements include grade-separating Rothwell St. and Providence St. under the UPRR and HB&T railroads, so that eastbound and westbound traffic between Jensen Dr. and Main St. would no longer cross the tracks at-grade.
	Surface St. Configuration at the northeast corner of downtown near I-69: 1. Ruiz St. cannot be extended across I-69 due to the vertical transition of the exit ramp from I-69 that becomes the new Hamilton St.

Entity/Individual Providing Comment	Response
	2. TxDOT is coordinating and will continue to coordinate with the City of Houston regarding local street connections.
	3. Runnels St. cannot be extended across I-69 due to the vertical transition of the highway from below-grade to elevated, and cannot be extended below I-69 within the proposed ROW of the project. An alternative east-west route is using Navigation Blvd. to Commerce St., then west on Commerce St. to Downtown.
	4. Based on public input, the proposed SH 288 managed lane ramps were relocated and would not connect to Chenevert St.
	The NHHIP will accommodate the existing trail alignment under I-69 between Commerce St. and Runnels St. There may be temporary detours during construction, but the current trail will be accessible as it is today after construction.
	TxDOT is coordinating and will continue to coordinate with the City of Houston regarding local street connections.
- Draft Community Impacts Assessment Technical Report	TxDOT followed all applicable regulatory procedures and best practices in conducting its analyses and feels the adequacy is sufficient to support the project decision.
	TxDOT is continuing to develop and design this project and will continue to coordinate with stakeholders and the public.
	Comments have been noted and will be considered as the project moves forward.
	No right-of-way is proposed to be acquired from the American Statesmanship Park tract or in the area of Bingham St. The thick red line shown on the schematic is a retaining wall that will be within the existing TxDOT right-of-way.
	The December 2019 Draft Community Impacts Assessment Technical Report and 2019 design schematics mistakenly showed an aesthetic wall in a location that would block the view of the park. Although an aesthetic wall was preliminarily shown to meet criteria for inclusion in the project, TxDOT recognized that it would impact the view of the park and is not proposed. This will be revised in the final technical report and the schematics. TxDOT intends to retain the visibility of the statues by passing drivers.

Entity/Individual Providing Comment	Response
	Per your comments, other changes were made in the Community Impacts Assessment Technical Report:
	 Figure 5-23 has been revised to indicate American Statesmanship Park as park land use.
	 Figure 5-25 has been revised to indicate American Statesmanship Park as park land use and is named. The land use shown on Figure 5-25 is from H-GAC's 2018 regional land use data, and it was noted on the figure that it may not reflect on-the-ground conditions.