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Eliza Paul, P.E.
District Engineer
Texas Dept. of Transportation
Houston District Office
7600 Washington Ave.
Houston, Texas 77007

Re: Comments on *Draft Cumulative Impacts Technical Report*, North Houston Highway Improvement Project, December 2019.

Dear Ms. Paul:

The White Oak Bayou Association (WOBA) appreciates this opportunity to provide our comments on TxDOT's December 2019 *Draft Cumulative Impacts Technical Report* for the North Houston Highway Improvement Project (NHHIP). We are concerned about a number of potentially significant cumulative environmental impacts associated with this project, which we believe are not being adequately addressed in the Environmental Impact Statement process in accordance with Federal regulations cited therein (i.e., 40 CFR §1508.7.)

In fact, as summarized on Table 1 of the report, none of the following resources / issues is to be given any further consideration in the Cumulative Impacts Assessment:

- Economic Conditions
- Transportation Facilities
- Air Quality
- Groundwater
- Surface Water Quality
- Coastal Zone and Barriers
- Floodplains
- Wetlands and Other Waters of the US
- Vegetation and Wildlife
- Threatened and Endangered Species
- Soils and Geology
- Wild and Scenic rivers
- Archeological Resources
- Historic Resources
- Visual and Aesthetic Resources
- Section 4(f) Resources (parks and publicly-owned recreational resources)

This leaves only two issues that TxDOT intends to include in its Cumulative Impacts Analysis. Both of these are within the Community Resources category: Neighborhoods and Public Facilities, and Environmental Justice. Therefore, apparently TxDOT contends that no potential impacts to environmental resources, as such, merit further consideration in the Environmental Impact Assessment process. WOBA finds this contention incredible, unjustifiable on technical grounds and completely unacceptable.

WOBA readily acknowledges the primacy of the direct human impacts of the I-45 project on affected communities, not least neighborhood and environmental justice impacts.



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Yet, the sweeping dismissal of all other environmental quality issues strikes us as inconsistent with both the definition of cumulative impacts and TxDOT's own statements regarding the scope and purpose of its report.

Tex-DOT opens its report by citing the Council on Environmental Quality definition of *cumulative impacts* as "effects on the environment which result from incremental impact of the action when added to other past, present and reasonably foreseeable future actions," etc., and also noting that "Cumulative impacts can result from *minor but collectively significant* actions taking place over a period of time." Therefore, TxDOT claims that its "*cumulative impacts analysis focuses on those resources substantially impacted by the proposed project or those that are currently in poor or declining health or at risk, even if proposed project impacts are relatively small.*"

Yet in fact, as summarized on Table 1 of the report, many of the resources noted above have been impacted by "*past [or] present actions,*" and/or are currently in "*poor or declining health or at risk.*" Therefore, at the very least, it would seem that TxDOT needs to assess the degree to which these resources will be subjected to additional (i.e., cumulative) impacts "*even if proposed project impacts are relatively small,*" in order to be consistent with its own premise and compliant with Federal regulation.

Instead, in effect, TxDOT's perfunctory denial of cumulative impacts seems to come down to the argument that the project is in a highly developed urban area, which has already been environmentally degraded, and therefore additional impacts in these areas are negligible. At the very minimum, it is incumbent upon TxDOT to perform a more rigorous, and where feasible quantitative, evaluation of these potential impacts at the local level, rather than dismissing them based on regional trends and sweeping generalizations.

Our detailed comments below focus on the following subset of resources, which are most closely associated with WOBA's core mission: Groundwater, Surface Water Quality, Vegetation and Wildlife, Section 4(f) Resources (parks and publicly-owned recreational resources) and Visual and Aesthetic Resources. However, we believe similar arguments can also be made regarding the dismissal from consideration of potential cumulative impacts to other resources, including but not necessarily limited to Economic Conditions and Air Quality.

For example, the probable closure of many local small businesses will likely have a negative impact on the economic condition of the immediately adjacent communities, which in some cases are already economically disadvantaged in part by impacts from the original highway construction projects. Similarly, air quality improvements on a regional scale notwithstanding, the public health impact on immediately adjacent communities (not least on some schools) is also unlikely to be negligible, especially on top of current and past auto emission impacts from nearby highways. Other commenters will likely elaborate on these and other issues. WOBA's position is that the



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potential for significant impacts to these and other resources *at the local, community level* deserve serious consideration and rigorous analysis.

The following paragraphs present our specific comments on potential cumulative impacts on a select subset of environmental resources.

Groundwater. TxDOT's comments regarding groundwater on Table 1 are confined to potential impacts to drinking water aquifers. While we agree that the risk of impacts there are low, TxDOT also needs to consider cumulative impacts to shallow groundwater. Our bayous are in part sourced by seepage of shallow groundwater from springs. Past actions, including channelization of the bayous and disconnection from the floodplains has disrupted this groundwater-surface water interaction. Part of the NHHIP involves building subgrade roadways in trenches. These are likely to intersect the shallow groundwater and cause further disruption of groundwater-surface water discharge, potentially further affecting stream flow. This potential cumulative impact should be addressed. The discharge of storm water accumulation in these entrenched roadways is also likely to have surface water quality impacts as described below.

Surface Water Quality. TxDOT acknowledges that the "several" streams crossed by the project are already impaired (i.e., "*in poor or declining health*"), but TxDOT contends that "*the project area includes existing roadway located in an urban area; therefore encroachment alteration effects to water quality would be minor*" (i.e., "*relatively small.*") How is this not a direct contradiction of TxDOT's statement quoted above, that the cumulative impacts analysis will focus on resources that "*are currently in poor or declining health or at risk, even if proposed project impacts are relatively small*"?

TxDOT says additional surface water impacts need not be considered further because "*various levels of regulatory protections in place*" and "*BMPs and design elements*" will obviate a cumulative impact. But this assertion is not supported by any specific information or analysis regarding either the "minor" nature of "*encroachment alteration effects to water quality,*" nor any detail regarding the efficacy of "*regulatory protections in place*" (in spite of which, the water ways are acknowledged to be impaired), or what specific "*BMPs and design elements before during and after construction*" are to be implemented and specifically how they will prevent or mitigate these potential effects which have not even been described in the most cursory manner. This is totally inadequate.

Many of our waterways are "*currently in poor or declining health or at risk,*" to use TxDOT's words, but none more so than White Oak Bayou. Ten miles of its channel was enlarged and paved in the 1960s and 70s and its banks cleared of shade trees. These past actions have resulted in the virtual destruction of the aquatic ecosystem, disconnection of the stream from its flood plain and ongoing impairment. As an example of ongoing impairment, paving and removal of shade result in artificially high summer water temperatures, causing depressed dissolved oxygen content, which in turn can



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harm aquatic life, potentially including fish kills. Additional acres of I-45 lanes will equate to more storm water runoff and potentially significant heat impacts. In a summer storm, the first flush of runoff from sub-baked pavement can be quite hot. The incremental impact of this heat input could make the difference between a merely unhealthy condition and a fish kill. At a minimum, calculations using actual data or at least realistic assumptions should be made to assess the potential cumulative impact of increased runoff and associated heat flux.

Also, as noted above, the discharge into the bayous of storm water accumulation in the submerged roadways should also be addressed as a potential surface water quality cumulative impact. The effluent could potentially be a significant source of pollutants, not least in the form of oil, grease and fuel from flood-stranded vehicles. This potential impact should be addressed in the cumulative impacts analysis.

In addition, more freeway lanes will equate to more litter and more floatable trash in the bayous making its way downstream to Galveston Bay and the Gulf of Mexico. However many thousands of dollars TxDOT currently spends on trash removal, there is always more trash flying out of car windows and the beds of pickup trucks to replace it. If not for the ongoing efforts of many entities such as Houston Parks and Recreation Department, Houston Parks Board, Buffalo Bayou Coalition, neighborhood civic associations and many other volunteer groups and individuals, whether working in organized events such as Trash Bash or in every day *ad hoc* efforts, things would be even worse. And with the I-45 expansion there is no reason to expect that they won't get worse. There is no rational basis for assuming that more traffic volume will not equate to proportionally more trash in the bayous. TxDOT should not be allowed to disregard this important potential cumulative surface water quality impact (and the additional taxpayer dollars that will be spent on efforts to clean it up.

Vegetation and Wildlife. The lower portion of the White Oak Bayou Greenway, particularly from Stude and White Oak Parks down the University of Houston Downtown (UHD) and the confluence with Buffalo Bayou at Allen's Landing, is one of the most productive and diverse bird habitats in the city, due in large measure to the relatively healthy stands of tall grass prairie vegetation. This area represents an important, but unfortunately rare fragment of what was once a continuous riparian corridor, having some of the highest avian diversity inside Beltway 8. White Oak Park, about one mile upstream from the project, has recorded 178 species of birds just within the past several years. Unfortunately, recent expansion of the UHD campus destroyed a not insignificant portion of this rich feeding and nesting habitat. Encroachment by the I-45 expansion will almost certainly lead to a further cumulative impact and TxDOT should be required to assess it.

Visual and Aesthetic Resources. The footprint of the proposed project represents a significant encroachment upon the White Oak Bayou Greenway, 18 acres by one estimate. Many comments have previously been made at public meetings and



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elsewhere regarding the visual impacts of the multiple additional elevated freeway lanes, which will essentially eliminate the nearly unobstructed “iconic” vista down the White Oak Bayou Greenway to the downtown skyline. TxDOT is effect says: Yes we will be creating visual blight on this part of the landscape but by removing elevated freeway lanes elsewhere we will be removing the blight we created historically (but did not in any way mitigate.) TxDOT does not bother to note that the amount of blight that would be removed is not proportional to the amount of blight they are creating. The removal of a small piece of I-10 is not in scale even on the same order of magnitude as the addition of seven new overpasses with the loss of 18 acres of greenspace. This approach fundamentally says: Yes, we will have a greater cumulative impact on a resource in one place, but it’s ok because we’re going to improve it somewhat somewhere else where we have already made a significant negative impact. A zero-sum game approach would not be unacceptable, but this is not even zero sum, it represents a significant net gain in blight.

Section 4(f) Resources (parks and publicly-owned recreational resources.) It is also not at all clear how or why the construction of a multi-overpass freeway project over the White Oak Bayou Greenway, with the loss of 18 acres of greenspace, does not constitute an impact to a park or publicly-owned recreational resource. This is another cumulative impact which TxDOT has chosen, but should not be allowed, to completely ignore.

In summary, TxDOT needs to significantly expand its cumulative impacts analysis to realistically address these and other concerns, instead of merely brushing them aside on the basis that the damage has been done and what we do next doesn’t really matter. Again, this is inconsistent with the concept of evaluating potential cumulative impacts as stated in federal regulation and as such, is not acceptable.

More generally, and going beyond our specific concerns regarding the logical inconsistencies in TxDOT’s consideration of cumulative impacts, we question whether it is in the best long-term interest of the greater Houston region to go forward with this project as designed, even if some or all of these impacts were ultimately to be somehow mitigated rather than blithely ignored. We know empirically that freeway expansion leads to more traffic, more congestion and more pollution. Any reductions in traffic congestion are temporary as the additional capacity is soon taken up by more traffic. The I-10 expansion in west Houston, among many other projects clearly demonstrates this. Expanded freeways also contribute to congestion and pollution by reducing the incentive to use existing mass transit resources and to develop additional alternatives.

It also has been demonstrated that downtown Houston is not the destination for most of the I-45 traffic approaching from either north or south. Rather, most of this traffic is just passing through. So, why route it through the center of town? Why not instead consider routing it around downtown via I-610, Beltway 8, Hardy Toll Road and or US 59 / I-69? Such an alternative approach has the potential to eliminate many of the socio-



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economic, neighborhood and environmental justice impacts to the local communities associated with the NHHIP as proposed, as well as the specific concerns described above.

We urge TxDOT to take a more forward thinking approach that better takes into account community and environmental costs. At a minimum, TxDOT should honestly and rigorously account for the undeniable *cumulative* impacts the NHHIP will have on our environment and our community.

Again, thank you for this opportunity to provide our comments. For your convenience we are also resubmitting our prior comments on this project, originally submitted June 9, 2017. Should you have any questions regarding our concerns, please call me at 713-775-7330 or email me at rsigurdlee@gmail.com.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert S. Lee".

Robert S. Lee, P.G.
President, White Oak Bayou Association

w/ enclosure

Cc:

Mayor Sylvester Turner, City of Houston
James Koski, Office of the Mayor, City of Houston
Margaret Wallace Brown, Planning Department, City of Houston
Karla Cisneros, Houston City Council District H
Abby Kaiman, Houston City Council District C
Rodney Ellis, Commissioner, Harris County Precinct 1
Anna Eastman, Member Elect, Texas House of Representatives, District 148
Matt Zeve, Chief Operations Office, Harris County Flood Control District
Michael Skelly, Make I-45 Better Coalition
Dr. Sarah Bernhardt, President & CEP, Bayou Preservation Association
Ann Lents, Chair, Memorial Heights Redevelopment Authority
Charles Place, Managing Director of Capital Projects,, Houston Parks Board
Dr. George Guillen, Director, Environmental Institute of Houston, UH Clear Lake