

**Tri-State Transportation Campaign
Good Jobs New York
Natural Resources Defense Council
NYPIRG
Transportation Alternatives**

March 30, 2012

Michael Anderson, NYSDOT
Tappan Zee Bridge/I-287 Corridor Project Director
660 White Plains Road, Suite 340
Tarrytown, NY 10591

**RE: Comments on the Tappan Zee Bridge Hudson River Crossing Project Draft
Environmental Impact Statement**

Dear Mr. Anderson:

Thank you for the opportunity to submit comments on the Draft Environmental Impact Statement (DEIS) for the Tappan Zee Bridge Hudson River Crossing Project. The Tri-State Transportation Campaign (Tri-State) is a nonprofit organization working for a more balanced, equitable and environmentally sustainable transportation network. We have been involved in the Tappan Zee Bridge/I-287 Corridor Project for over a decade, including representation on two Stakeholder Advisory Working Groups.

Throughout the evolution of the project, Tri-State has had three major concerns: that all transit modes are evaluated comprehensively and fairly, that the project proceed with real public input and that the project incorporate land use planning with the understanding that it will have wide-ranging development impacts on the Hudson Valley, an area already irrevocably transformed by the opening of the original Tappan Zee Bridge.

Unfortunately, the DEIS does not contain any public transit alternatives despite years of state studies and stakeholder input concluding that public transit is an absolute necessity in any Tappan Zee replacement project.

The following are the major problems with the DEIS. Each is discussed in more detail below by DEIS section. We hope you will address these issues in a supplemental draft environmental impact statement, which we feel is necessary in light of these unresolved issues. The release of the Request for Proposals to private bidders on March 9, 2012, several months before finalizing the DEIS, is further evidence that a supplemental environmental review must be completed. Before this project moves forward, the public deserves a better understanding of its costs, and its impacts on our region's development patterns, air and water quality and mobility.

1. Eliminating transit and adding an eighth lane for private vehicles will result in more traffic for longer durations on the bridge and throughout the corridor. This traffic increase will negatively affect air quality, community character and socioeconomic conditions throughout the corridor. The state's claim that the project will have no effect on these issues is therefore false.
2. The DEIS must include a study of project alternatives that include transit. Many alternatives are suggested for study below, ranging from a sort of express bus system with a dedicated connection to the Tarrytown Metro North station to full corridor bus rapid transit (BRT). Despite assertions in the DEIS to the contrary, these alternatives are completely feasible and reasonable under the National Environmental Policy Act (NEPA). The community character, socioeconomic, air quality, energy and mobility benefits of these alternatives far outweigh any cost increase and must be analyzed.
3. The DEIS does not include a full financial analysis (including costs, financing and funding) for the project and any alternatives eliminated because of cost. The law is well settled that in order to eliminate a project alternative because of cost, a detailed cost analysis must be done and made available to justify that decision.
4. The DEIS does not explain traffic projections. First, traffic projections in the DEIS are significantly different than traffic projections made by the state in 2006 despite use of the same model. Second, assertions about traffic in the DEIS are directly contradictory, e.g., comparing current traffic conditions quoted in Chapter 1 with traffic counts in Appendix B or comparing traffic projections for 2017 and 2047 in Chapter 4 with Chapter 11. Third, the DEIS assumes a 25% increase in non-peak road capacity will not induce traffic, despite overwhelming past experience to the contrary and no real analysis.
5. The DEIS predicts that slightly wider lanes, changes in grading and emergency access lanes will decrease accident rates and thereby increase mobility on the new bridges. This is contrary to past state studies that concluded that transit is the only way to increase mobility. The evidence presented by the state in the DEIS and in past studies suggests that driver behavior is a significant contributor to high accident rates on the bridge. It is therefore possible that the state's conclusion that mobility will be enhanced because of this project is false. If this is true, the project fails to meet a stated need in the Purpose and Need Statement. Driver behavior and in-corridor traffic and accident effects on bridge mobility must be evaluated.
6. The DEIS provides no evidence that transit is not being precluded by the project. No analysis has been done of the needs and location of future in-corridor transit. As such, the state cannot know if the bridges' spacing, grading, alignment and structure will truly support future transit. In addition, the political, environmental or financial impacts of putting off building transit into the bridge could preclude future transit. Yet this also has not been analyzed.
7. The project does not meet a majority of the New York State Smart Growth Policy Act criteria, especially those related to TOD, or comport with the state's greenhouse gas emissions goals. Projects that are not consistent with the New York State Smart Growth Policy Act cannot be approved.

A supplemental DEIS should be drafted and disseminated that addresses these problems before the project moves forward. In addition, each of the questions raised below must be answered in the answers to comments.

DEIS Section Specific Comments:

Chapter 1: Purpose and Need

Page 1-2 states that “In 2011, while advancing financial analysis, it was determined that funding for the corridor project (bridge replacement, highway improvements, and new transit service) was not possible at this time. The financing of the crossing alone, however, was considered affordable. Therefore, it was determined that the scope of the project should be limited, and efforts to replace the Hudson River crossing independent of the transit and highway elements should be advanced.”

In order to eliminate reasonable alternatives from consideration based on cost under NEPA, a project proponent must make its financial analysis available with the DEIS. Council on Environmental Quality (CEQ) Answers to NEPA’s Forty Most Asked Questions, Answer 25b¹ (“These must be made available, either by citing the literature, furnishing copies to central locations, or sending copies directly to commentors upon request. . . Care must be taken in all cases to ensure that material incorporated by reference, and the occasional appendix that does not accompany the EIS, are in fact available for the full minimum public comment period.”) Furthermore, the analysis must clearly find the rejected alternative is economically infeasible. FHWA Office of Chief Counsel Alternatives Analysis White Paper, September 22, 2010² (“Of particular importance is the need to use sound project cost estimation methods during screening to eliminate alternatives that are not economically feasible. The lead agencies cannot make a determination about an alternative’s economic feasibility without supporting cost estimates and an analysis of likely revenue (funding) sources.”); CEQ Answer 2b³ (“Alternatives that are outside the scope of what Congress has approved or funded must still be evaluated in the EIS if they are reasonable, because the EIS may serve as the basis for modifying the Congressional approval or funding in light of NEPA’s goals and policies. Section 1500.1(a).”)

No such analysis has been released to date. The DEIS alleges that the supporting cost estimates have been done “but these costs have not been published.” DEIS Appendix A-1, pg. 4. Moreover, the state didn’t even hire a financial analyst until December,⁴ after it decided to eliminate transit alternatives in October and, as noted by Governor Cuomo, was still “working on a financial plan” last month.⁵ Clearly, the decision to eliminate transit alternatives does not meet the above NEPA requirements.

¹ <http://ceq.hss.doe.gov/nepa/regs/40/40p1.htm>.

² http://www.fhwa.dot.gov/everydaycounts/pdfs/AltsAnalysesPaperHCCWhitePaperWebVersion9_22_10.pdf.

³ <http://ceq.hss.doe.gov/nepa/regs/40/40p1.htm>.

⁴ Karlin, Rick. Meet the Tappan Zee bridge consultants. *Times Union* 16 December 2011.

<http://blog.timesunion.com/capitol/archives/96436/meet-the-tappan-zee-bridge-consultants/>.

⁵ NY seeks \$3B federal loan for Tappan. *Crain’s New York* 14 February 2012.

<http://www.craigslist.com/article/20120214/TRANSPORTATION/120219955>.

Page 1-2 also states “the EIS relies on previous relevant documents prepared for the Tappan Zee Bridge/I-287 Corridor Project.” There are two problems with this. First, as noted above, if the state relies on “previous relevant documents” it must pinpoint exactly which documents it finds relevant and make each available for inspection. Second, by relying on some but not all of the Tappan Zee Bridge/I-287 Corridor Project, it is difficult if not impossible for the public and persons responsible for issuing the Record of Decision to clearly understand why the project changed and why transit alternatives are not being considered. This is especially true when, as detailed more below, the DEIS transit costs and traffic projections are so much different than projections from 3 years ago yet no analysis has been done for future funding. This violates NEPA because 1) the public must be able to clearly understand the basis for the project proponent’s decisions; 2) if the decision maker cannot clearly navigate the basis for the state’s decisions, any decision it makes would be arbitrary; and 3) documentation supporting all decisions must be made available.

Page 1-3 states that “the bridge now carries approximately 134,000 vehicles per day with peak traffic having reached 170,000 vehicles per day.” These numbers are inconsistent with the traffic data collected by the state during 2011 and presented in Appendix B: Transportation, Section B-1 Traffic Volumes. Page 3 of Section B-1 shows that average daily traffic at mileposts 16.6 and 16.8 is much lower than 134,000. In fact, only on Fridays in summer does it appear that traffic reaches 130,000+ vehicles. Most days were near 100,000 vehicles per day. The state must explain this difference. If traffic is in fact much lower than the state suggests, perhaps other project alternatives are available to meet the real needs of the bridge that have not been studied or the Purpose and Need statement misstates the need for this project, in violation of NEPA.

Page 1-5 states “NYSTA estimates that an additional \$1.3 billion would be spent over the next decade to keep the existing bridge in a state of good repair.” This number is also often cited in the media but it has never substantiated by the state. More detail is needed as it conflicts with other state cost estimates. In 2010, NYSTA assembled a request for TIGER funds to support a project called the “Tappan Zee Bridge Repair Project.”⁶ That application asserted that that project would cost \$239 million dollars and extend the useful life of the bridge by 20 years. In 2011, the NYSTA General Revenue Bond Anticipation Notes, Series 2011A offering stated that between 2012 and 2015, the anticipated cost for capital projects “to keep the bridge in good condition for the immediate future” was \$66.5 million.⁷ This discrepancy must be reconciled.

Page 1-5 also states that the bridge “currently operates with seven lanes that range in width from 11 feet, 2 inches to 12 feet” and accident rates are “twice NYSTA’s statewide average” which is “higher than the statewide mean for a 7-lane, limited access highway.” The implication being that making the lanes wider on the new bridge will reduce accidents. The evidence for this implication is unclear, however.

The most obvious question is, does adding 0-10 inches per lane usually result in a significant reduction in accidents? In fact, as discussed below, the state completely overlooks its own conclusion that unsafe driving behavior not lane width caused 74% of the accidents on the bridge. It is merely presumed by the state that wider lanes will result in lower accident rates,

⁶ <https://www.dot.ny.gov/recovery/sponsors/tiger/repository/Tappan%20Zee%20Bridge%20RepairApplication.pdf>.

⁷ <http://www.thruway.ny.gov/about/financial/2011a-bans.pdf>.

there is no actual analysis. The DEIS must resolve whether driver behavior in the corridor is the reason for the high accident rates, not lane width. If so, other alternatives including implementing transit should be explored that reduce accident rates and increase mobility.

Page 1-6 discusses mobility deficiencies. This section does not incorporate solutions to automobile traffic. This is most likely because the state knows, as it repeatedly stated from the late 1990s through 2010, mobility on the bridge cannot be increased without transit. If this part of the Purpose and Need statement is not being met, the project is not meeting its stated purpose and thereby violates NEPA. FHWA Environmental Review Toolkit, NEPA and Transportation Decisionmaking, The Importance of Purpose and Need in Environmental Documents, September 18, 1990 (“If an alternative does not meet the project's purpose or satisfy the needs then the alternative is not prudent. . . .”).⁸

On Page 1-7, one of the projects objectives is to “maximize public investment” by “providing a crossing that does not preclude future trans-Hudson transit services.” The state has no evidence that it is not precluding transit, however. No analysis of the needs and location of future in-corridor transit has been done. As such, the state cannot know if the bridges’ spacing, grading, alignment and structure will truly support future transit. In addition, the political, environmental or financial impacts of putting off building transit into the bridge could preclude future transit.

If no studies are done, how can the state know it is not precluding transit by merely building overly wide bridges? The state is building single deck spans. What if transit in the corridor requires double deck spans? What if building transit later will significantly increase costs and environmental impacts? What if that increase is so great, it is politically, environmentally or financially impossible to implement transit in the future?

If any of these costs or impacts can be mitigated or eliminated by including transit now, only then would the state be maximizing the public investment. The DEIS should not say transit is not being precluded unless, at a minimum, the state can answer these questions. Please provide answers to these questions in your answers to comments and the DEIS.

Chapter 2: Project Alternatives

Section 2-1 Introduction

This section acknowledges “the development and evaluation of project alternatives is central to the National Environmental Policy Act (NEPA) and State Environmental Quality Review (SEQRA) processes.” In fact, CEQ regulations require agencies to “rigorously explore and objectively evaluate all reasonable alternatives, and . . . devote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits.” 40 CFR 1502.14. “For FHWA, this may include roadway alternatives such as alternative locations or alignments, the number of lanes, and whether or not the facility is tolled, as well as considering Transportation Management Systems and modal alternatives that are outside the purview of FHWA, such as rail.” FHWA Alternatives Analysis White Paper, pg. 1.

⁸ <http://environment.fhwa.dot.gov/projdev/tdmneed.asp>.

Despite this clear mandate, the DEIS only considers two alternatives, No Build and Replacement Bridge. Three other alternatives were allegedly considered – rehabilitation, tunnel and single structure. As discussed below, this is hardly the type of rigorous analysis NEPA and SEQRA envision and, as such, directly violates both of those statutes.

Section 2-2 Alternatives Analyzed in this Environmental Impact Statement

2-2-1 No Build Alternative

The language in this section leads the reader to believe that the No Build Alternative is not being seriously considered by the state. The following statement is indicative of this dismissive tone: “Therefore, given the age of the bridge and its vulnerabilities in extreme events, it is possible the crossing could be closed altogether at some point in the future, resulting in the loss of a critical infrastructure element to an important transportation corridor.” The Governor’s statement in January that “I’m going to build Tappan Zee just to show we can”⁹ is more reason to believe this alternative is not seriously being considered. This means the DEIS is only truly considering one alternative, the Replacement Bridge Alternative, in direct violation of NEPA and SEQRA.

2-2-2 Replacement Bridge Alternative 2-2-1 Design Parameters

Gap:

This section ostensibly explains how the project is not precluding future transit. However, there are many problems with this section, leading Tri-State to believe that the state has not fully examined how future transit systems would integrate with the proposed bridge designs and, therefore, transit may be physically precluded from a technical perspective. In addition, no consideration is given to whether the proposed bridge designs will preclude transit from a financial, legal or political perspective.

In fact, Figure 2-1 and the accompanying explanations raise more questions than they answer. Although not clear from the illustration, the DEIS text states that the left shoulder/emergency access lanes on each replacement span might be used for exclusive bus lanes in the future. This raises several questions:

- Are there any grading or design features in the current bridge plan that could inhibit or preclude a BRT system’s operations? For example:
 - Are the shoulders – narrowing to 6 feet in one instance near the bridge’s landing – wide enough to accommodate a BRT system?
 - Are the shoulders placed on the bridge in a way that would allow them to seamlessly continue into the corridor as BRT lanes?
 - BRT systems typically plan for buses to travel at a certain average speeds. Would the bridge’s grading and design allow buses to travel at such a speed?

⁹ Gelinas, Nicole. Risky Bridge-Ness. *New York Post* 29 February 2012. <http://www.manhattan-institute.org/html/miarticle.htm?id=7906>.

Answers to these questions must be provided in the answers to comments. In addition, why is the only lane configuration studied one width emergency lanes on the left side of the span? Is it possible that placement on the right side, or one span with a left aligned emergency access lane and one span with a right aligned emergency access lane would be better? This alignment could negatively affect future BRT plans and should be studied. If these configurations were studied, they must be more fully explained in the EIS.

The second option in Figure 2-1 and explained on page 2-6 proposes the construction of a third, transit-only bridge. This option is full of obstacles and potential pitfalls. The state must answer the following questions in detail.

- Would a third bridge align with current and future transportation alignments in the corridor? What type of extra infrastructure, if any, would be needed to allow for transit access and egress? Would less infrastructure be needed if transit were built into the bridge now?
- What are the environmental ramifications of building a third bridge in the river and how do they impact the feasibility of building that bridge?
- How might the local waterfront communities regard the construction of a third bridge, both now and in the future? How much land acquisition would be necessary?
- Has the state done an adequate cost/benefit analysis? Previous studies project that accommodating transit on the dual span bridge today would be less expensive than adding a \$2-3 billion third span in the future. Why forego an opportunity to accomplish the same goals for less money?

The last option, a third span between and connected to the proposed Tappan Zee's twin spans (Figure 2-1, number 3), is also problematic. According to the DEIS plan, the gap between the two proposed spans will vary between 0 and 70 feet.

- Is it feasible to build a third span in a space that varies so dramatically?
- No transit accommodations are planned for the corridor when the two spans are built – will transit access and egress be possible?
- What type of extra infrastructure would be necessary at the landings in Rockland and Westchester counties?
- Could money be saved by building transit into the bridge now?

For all options, the DEIS and answers to comments must also explain

- Will it be more expensive to build transit in the future, and if so, how much?
- Would construction of the transit aspects be faster if incorporated into the bridge now?
- What are the political, environmental and financial impediments to future transit and what is the likelihood these impediments can be overcome in the future?

Without answers to all of these questions, the DEIS cannot affirmatively say transit is not being precluded by this project.

2-3 Alternatives Considered and Eliminated

2-3-1 Rehabilitation Alternative

This section states that the “Rehabilitation Alternative would involve both upland and in-water construction activities and would be expected to result in many of the same environmental impacts of a replacement bridge.” This seems like a complete overstatement. Aside from the impacts related to unavailable in-water construction and some subsurface work, the Replacement Bridge Alternative should create many more impacts in the form of additional construction at the landings, additional subsurface dredging and additional subsurface construction, amongst others. Have these impacts been seriously compared? A detailed comparison should be done so the public can truly understand if the impacts of a replacement far exceed rehabilitation.

2-3-2 Tunnel Alternative

This section state’s that the “Tunnel Alternative would consist of five separate tubes, with two lanes each. . . .” First, according to the 2007 Alternatives Analysis for Hudson River Highway Crossing,¹⁰ the five tunnels included a BRT tunnel, so the state should not be able to count this as a tunnel if it is removing BRT from the project. Second, that report shows on page 2-10 that if lanes were 11 feet wide, one tunnel could accommodate 3 11-foot lanes. This means only three tunnels would be needed to accommodate eight lanes, not four. Perhaps the environmental impacts of a tunnel option with fewer tunnels would be more viable. Perhaps a combined tunnel and bridge option is viable. There is no way to know unless the state evaluates these project alternatives in more detail.

Other Reasonable Alternatives That Should be Included in the EIS

As noted above, Chapter 1 of the DEIS details the Purpose and Need of the project, which includes five elements: structural, operational, safety, security and mobility needs. A project with or without transit can meet the first four needs. There remains, however, a very real question of how a project without transit can meet the mobility needs of the Tappan Zee Bridge and the I-287 corridor.

During the ten years of study that preceded this project, all documents clearly stated that only transit can meet the mobility needs on the bridge and in the corridor. For example, slide 8 from the Tappan Zee Bridge/I-287 Corridor Project, Fall 2010 update “new transit is the only way to relieve congestion and improve mobility in the corridor.”¹¹

The current DEIS does not dispute this. For example, Chapter 21 of the DEIS clearly states that “the proposed bridge replacement is not expected to alter regional mobility or capacity.” Rather, the DEIS basically says adding shoulders and slightly widening lanes will result in less accidents and thereby slightly increased mobility. Chapter 4, pg. 4-1, 4-15. There are two problems with this position. One, the DEIS does not actually say how or why increased lane size will decrease accident rates. Second, the likelihood that accident rates will decrease substantially is not

¹⁰ <http://www.tzbsite.com/tzb-library/pdf-library/pdf-HR-reports/20070702-Hudson%20River-Highway-Crossing.pdf>.

¹¹ http://www.tzbsite.com/public-involvement/pdf-public-involve/pdf-trans-hwy-br-options/2010_Fall_Update_Presentation_20101014.pdf.

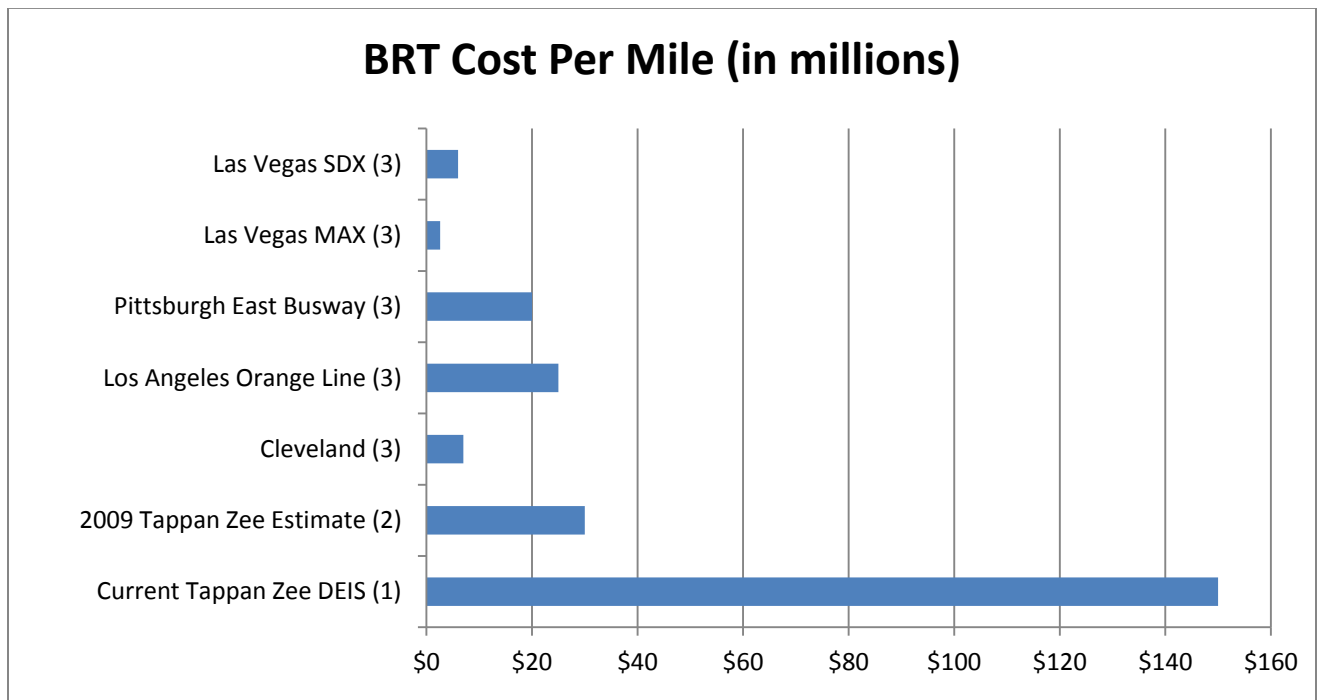
definitively settled in the DEIS. As noted below, it is possible accident rates on the bridge and in the corridor have nothing to do with lane configuration. Combined with high accident rates in the rest of the corridor, it is possible mobility will not increase. All of this must be examined and explained in the answers to comments and the DEIS in order to show that the project is fulfilling the project Purpose and Need.

Clearly transit alternatives must be studied because they remain the only way to meet the mobility element of the Purpose of Need Statement. Unfortunately, the DEIS alleges the state does not need to study transit alternatives because they are cost prohibitive. The problem is the cost estimates are totally unreasonable. Moreover, transit alternatives must be studied in a project like this even if cost is high.

1. The cost of bus rapid transit offered by the state in the DEIS is completely out of line with past state studies as well as other BRT projects and the industry average

According to DEIS Appendix A-1 White Paper on Transit and the Tappan Zee Hudson River Crossing Project, the cost of BRT in the corridor will be between \$4.5 and \$5.3 billion. However, that cost is 4-5 times more than the \$897 million price predicted by the state’s 2009 Transit Mode Selection Report.

This means the cost of BRT is suddenly \$150 million per mile in the I-287 corridor. This amount is five times as much as the 2009 estimate of \$30 million per mile and completely out of line with the industry average of \$20 million per mile. The following chart is a cost per mile comparison with other projects and the state’s 2009 cost projection.



Sources:

1. NY State Thruway Authority email <http://transportationnation.org/wp-content/uploads/2012/02/BRT-Graphic-2.pdf>
2. Tappan Zee Transit Mode Selection Report http://www.tzbsite.com/tzb-library/pdf-library/pdf-TMS-200905/TMS%20Chapter%207_200905.pdf

Clearly the difference between the new cost in Appendix A and other projects is so large it makes the estimates unbelievable, especially since no cost analysis has been released. None of the other systems incurred costs of more than \$25 million per mile. Without more explanation and considering the costs of other projects, the \$30 million per mile estimate for BRT remains a reasonable estimate. Accordingly, transit cannot be considered cost prohibitive and transit alternatives must be studied.

2. In addition, it is clear that the state's refusal to make its cost estimates public and examine transit alternatives violates NEPA.

CEQ regulations and FHWA guidance is very clear that NEPA requires a full cost analysis be done and made available to the public in order to eliminate an alternative as too costly.

- “Of particular importance is the need to use sound project cost estimation methods during screening to eliminate alternatives that are not economically feasible. The lead agencies cannot make a determination about an alternative's economic feasibility without supporting cost estimates and an analysis of likely revenue (funding) sources.” FHWA White Paper, pg. 4.
- “Care must be taken in all cases to ensure that material incorporated by reference, and the occasional appendix that does not accompany the EIS, are in fact available for the full minimum public comment period.” CEQ Answer 25b.
- “In addition, all documentation related to the development of the project alternatives during the planning and scoping stages should be retained and made available for public review upon request.” FHWA White Paper, pg. 5.
- “It must be made clear what criteria were used to eliminate alternatives, at what point in the process the alternatives were removed, who was involved in established the criteria for assessing alternatives, and the measures for assessing the alternatives' effectiveness.” FHWA Environmental Review Toolkit, NEPA and Transportation Decisionmaking, Development and Evaluation of Alternatives.¹²

The DEIS must include such an analysis so as to not violate NEPA. Without that analysis, the elimination of alternatives based on cost is unjustified and those alternatives remain reasonable and should be evaluated when they provide mobility, socioeconomic, environmental and other benefits.

Furthermore, for a transportation project in a large urban area (200,000+ people) like the I-287 corridor, cost alone is not an acceptable justification to eliminate an alternative.

- “The following range of alternatives should be considered when determining reasonable alternatives . . . Mass Transit: This alternative includes those reasonable and feasible transit options, (bus systems, rail, etc.) even though they

¹² <http://www.environment.fhwa.dot.gov/projdev/tdmalts.asp#alternative>.

may not be within the existing FHWA funding authority. It should be considered on all proposed major highway projects in urbanized areas over 200,000 population.” – FHWA Technical Advisory T 6640.8A, Guidance for Preparing and Processing Environmental and Section 4(f) Documents, October 30, 1987.¹³

- “Alternatives that are outside the scope of what Congress has approved or funded must still be evaluated in the EIS if they are reasonable, because the EIS may serve as the basis for modifying the Congressional approval or funding in light of NEPA's goals and policies.” CEQ Answer 25b.
- “Alternatives that are outside the scope of what Congress has approved or funded must still be evaluated in the EIS if they are reasonable, because the EIS may serve as the basis for modifying the Congressional approval or funding in light of NEPA's goals and policies. Section 1500.1(a).” CEQ Answer 2b.

In sum, based on the foregoing, because the state has not substantiated the newer, higher costs of BRT and mass transit alternatives should be studied in a large urban area project like this, the state must study BRT transit alternatives.

3. Alternatives the state should consider

- A. Four Lanes of Mixed Use Traffic and One Dedicated Lane for Full Corridor BRT
- B. Four Lanes of Mixed Use Traffic and One HOV/Bus Lane for Full Corridor BRT

These alternatives are essentially the BRT systems that were being studied in the Tappan Zee Bridge/I-287 Corridor Project.¹⁴ The bridge concept would be similar to the current DEIS but there would be a specific lane dedicated to either BRT service or an HOV/BRT lane.

- C. Three Lanes of Mixed Use Traffic and One Dedicated Lane for Full Corridor BRT
- D. Three Lanes of Mixed Use Traffic and One HOV/Bus Lane for Full Corridor BRT

This alternative clearly appears to merit study based on projected traffic numbers in the current DEIS and BRT ridership numbers in the Tappan Zee Bridge/I-287 Corridor Project. The Tappan Zee Bridge/I-287 Corridor Project estimated that over 50,000 commuters¹⁵ would ride BRT every day. If that meant, for example, 2000 or more people would ride BRT every hour during peak hours, the three mixed use lanes would have less traffic per lane per hour than the four mixed use lanes in the DEIS Preferred Alternative. The following is a rough estimate.

The DEIS projects the number of eastbound commuters on the bridge during the morning peak hour will be 7,402 vehicles per hour (vph) in 2017 and 7,668 vph in 2047. This means that each of the four mixed use lanes would average 1,850 vph in 2017 and 1,917 vph in 2047.

If instead, there were only three mixed use lanes and a bus lane, and we assume 2000 commuters switch to bus as noted above, that would leave 5,402 vph in the mixed use lanes in 2017 and

¹³ <http://environment.fhwa.dot.gov/projdev/impTA6640.asp>.

¹⁴ Tappan Zee Bridge/I-287 Corridor Project, Alternatives Under Study.
<http://www.tzbsite.com/alternatives/alternatives-index.html>.

¹⁵ http://www.tzbsite.com/tzb-library/pdf-library/pdf-TMS-200905/TMS%20Chapter%205_200905.pdf.

5,668 vph in the mixed use lanes in 2047. This means that each non-bus mixed use lane would average 1,800 vph in 2017 and 1,890 vph in 2047. These volumes are lower than projected mixed use lane hourly volume in the current DEIS.

Although this is a rough estimate, it shows that this alternative must be studied. In addition, it is also significantly more environmentally friendly than the Preferred Alternative as it not only reduces the size of the bridge but also provides for a significant reduction in emissions: according to the state's 2009 Transit Mode Selection Report, a \$900 million BRT system could reduce oil usage in the corridor by 5 million gallons per year and eliminate the emission of 12,000 tons of CO₂.¹⁶

Also, it is important to remember that the 50,000 rider projection was a conservative estimate in the old study because of coding issues and the planned ARC Tunnel. For all of these reasons, these alternatives must be studied in the DEIS as they are clearly reasonable.

E. Four Lanes of Mixed Use Traffic and One Dedicated Lane for Partial Corridor BRT or similar express bus service

F. Four Lanes of Mixed Use Traffic and One HOV/Bus Lane for Partial Corridor BRT or similar express bus service

These bridge alternatives are essentially the same as the four regular traffic lanes alternatives above, except there would not be as much transit system build out into the corridor, at least not in the near term. One idea could be to build some sort of express bus service in the middle part of the corridor, perhaps between the Palisades Center and White Plains, with connections to train service in Tarrytown and White Plains. Another solution could be significantly enhancing Tappan ZEEexpress bus service as suggested by Rockland County Executive C. Scott Vanderhoef in his public comments on February 28, 2012.¹⁷ When cost is an issue, less than full build out is supported by the FHWA. FHWA Environmental Review Toolkit, NEPA and Transportation Decisionmaking, The Importance of Purpose and Need in Environmental Documents, September 18, 1990.¹⁸

G. Three Lanes of Mixed Use Traffic and One Dedicated Lane for Partial Corridor BRT or similar express bus service

H. Three Lanes of Mixed Use Traffic and One HOV/Bus Lane for Partial Corridor BRT or similar express bus service

These bridge alternatives are essentially the same as the alternatives C and D above, except there would not be as much build out in the corridor, in the same way and for the same reasons as alternatives E and F above.

¹⁶ http://www.tzbsite.com/tzb-library/pdf-library/pdf-TMS-200905/TMS%20Chapter%206_200905.pdf.

¹⁷ Rockland County. County Executive Vanderhoef Speaks at Public Hearing on Proposed Plans for New Tappan Zee Bridge. February 28, 2012. http://www.co.rockland.ny.us/ENews/12/CE022912_TZB.pdf.

¹⁸ <http://environment.fhwa.dot.gov/projdev/tdmneed.asp>.

4. Project aspects that must be studied as a part of all alternatives

Each of the following concepts must be incorporated into all alternatives studied in the DEIS as they are reasonable and not expensive when compared to the benefits resulting from their implementation.

A. Traffic Demand Management/Transportation System Management (TDM/TSM)

TDM/TSM measures include I-287 park & ride facilities, three-lane high-speed toll plaza, expanded weekend E-ZPass program, ramp metering, congestion pricing, and were strongly supported by the state's 2010 EIS Methodology Report, pg. 2-2.¹⁹

B. Tarrytown Bus/Train Station Metro North Connector

This idea was put forth by Drew Fixell, Mayor of Tarrytown in an op-ed dated March 10, 2012.²⁰ Mayor Fixell suggested the state build “a new bus-rail transfer station into the new bridge's toll plaza. Such a facility would allow bus passengers headed to Grand Central to quickly transfer to a new platform below.” This could provide a direct link for commuters into Manhattan, thereby encouraging ridership and reducing automobile dependency.

C. Tarrytown ramp providing direct connection for buses to existing

In his February 28, 2012 Tappan Zee Hudson River Crossing project public hearing testimony,²¹ RPA Senior Fellow Jeff Zupan suggested the inclusion of “a three-quarter mile bus-only ramp at the Westchester County side at the time the new bridge is built for buses to directly reach the Tarrytown train station, providing a congestion-free link between bus and rail.” This could provide a direct link for commuters into Manhattan, thereby encouraging ridership and reducing automobile dependency.

In sum, transit alternatives clearly are a better option for the Tappan Zee Hudson River Crossing Project. The state must, at a minimum, consider these transit alternatives now (and should consider double-deck bridge configurations as part of this analysis). By any metric – cost, federal law and guidance, mobility or environmental benefits – these alternatives must be studied and incorporated into the project.

¹⁹ http://www.tzbsite.com/tzb-library/pdf-library/pdf-EIS_methodology_20100915/EIS_Methodology_20100915.pdf.

²⁰ Fixell, Drew. 'TZB Station' would mitigate harm to Tarrytown from building new bridge. *LoHud.com* 10 March 2012. <http://www.lohud.com/article/20120311/OPINION/303110034/-TZB-Station-would-mitigate-harm-Tarrytown-from-building-new-bridge>.

²¹ Regional Plan Association, Testimony of Jeff Zupan on Tappan Zee Bridge, February 28, 2012. <http://www.rpa.org/pdf/RPA-Testimony-Tappan-Zee-2-28-12.pdf>.

3-4 Public Outreach Program

This section begins, “Continuing the commitment to an open, participatory process, the Tappan Zee Hudson River Crossing Project has solicited early and continued feedback from the public and from agencies; encouraged open discussion of project details and issues; and has provided opportunities for comments and questions.”

From the very start, this process has been less than open. Moreover, there is a real difference between providing an open forum for interested parties to give feedback and actually listening to that feedback. If anything, it seems as more and more people provide feedback, the process has become less open. Generally speaking, rescinding the NOI for the previous study and issuing the new NOI came out of nowhere. The public had no idea this was happening and was not consulted as required. Moreover, everyone was blindsided by the removal of transit from the project. Transit was the key to the previous plan and the Tappan Zee replacement in general. Below are problems with some of the specific “tools” listed in the DEIS as having been used in the “public involvement process.”

- Public meetings and Open houses

At all of the public meetings, many if not most of the attendees called on the state to include public transit in the project. Despite this, the state continues to say public transit will not be included in the project and refuses to provide the public with a detailed explanation of why. Merely providing information about the project with no intention to actually make any changes based on what people say is not meeting public participation requirements.

- Project website

Immediately after the NOI for the Tappan Zee Hudson River Crossing Project was issued, all of the links to the documents on the website for the Tappan Zee Replacement/I-287 Corridor Project²² were disabled, effectively cutting off the public’s ability to review all of those studies in order to better understand and comment on this new project. Had certain groups not called on the state to restore those links, it is possible they would never have been fixed, making public participation much more difficult. Cutting off the links to all of the previous studies, especially when the DEIS purports to rely on some of them is hardly meeting public participation requirements.

- Informational materials will be produced at key points during the project development process.

The DEIS is very confusing, especially in light of findings in the previous study. There are many areas like economic feasibility and future bridge/corridor traffic volumes where the DEIS conflicts with documents from the Tappan Zee Bridge/I-287 Corridor Project. There is no way

²² <http://www.tzbsite.com>.

for the public to resolve these conflicts because the DEIS merely states “Although the Tappan Zee Hudson River Crossing Project is undertaking an independent environmental review, this EIS relies on previous relevant documents prepared for the Tappan Zee Bridge/I-287 Corridor Project.” The DEIS must clearly state exactly what parts of which documents it believes are relevant and why, because not detailing this information is akin to providing no documentation at all.

This problem is compounded by the state’s refusal to timely produce documents as required by NEPA and when requested by the public. On top of not simply making the documents supporting DEIS assertions available throughout the comment period, the state is dragging its feet on requests by the public for this information. Tri-State requested several of these documents through the New York State Freedom of Information Law (FOIL) requests, yet the state said it needs 66 days to provide them. The fact that a FOIL request even had to be made for many of these documents is simply incredible. These documents must be readily available and easily transmittable, especially in an age where virtually all documents are created using computers.

Some examples of documents that must be made available are below.

- Pages 3 and 4 of Appendix A contains a very short explanation of the costs for BRT in the corridor. However, as noted above, the cost has increased from \$900 million to almost \$5 billion for the four alternatives studied in the old process. The DEIS states “the designs and cost estimates are significantly higher than the 2007 estimate. These costs have not been published, as the previous study was terminated before that information was available to the public.” These estimates must be made available to the public and should be part of the appendices to the DEIS.
- Pages 5 and 6 of Appendix A to the DEIS explains that the NYMTC 2035 Regional Transportation Plan – “A Shared Vision for a Shared Future” (Plan) projects a \$16 billion shortfall for State of Good Repair and Normal Replacement (SOGR/NR) work. It goes on to state that because of this shortfall, transit cannot be included in the Tappan Zee Bridge Hudson River Crossing Project. In other words, because of this \$16 billion shortfall, only enough money is available for the bridge not transit. Yet the SOGR/NR work does not include the bridge or transit, so by the state’s logic, no money is available for any part of this project, bridge or transit. This clearly makes no sense. Without supporting documentation, it is impossible for the public to understand the state’s reasoning. Unfortunately, this analysis still has not been made available. This analysis must be made available immediately.
- The DEIS repeatedly states that transit is not being precluded by this project but no evidence has been made available that the state has done any analysis of if or how the project will accommodate transit or if certain bridge alignments would make transit much less costly or more feasible in the future. This is despite overwhelming public support for transit. Without such information, how can the public be certain that transit really is not being precluded? This analysis must be made available immediately.

- As discussed further in the next section, the traffic projections in the DEIS vary markedly from earlier projections. No detailed explanation has ever been provided showing how, despite using the same model as the Tappan Zee Bridge/I-287 Corridor Project, traffic is now barely expected to increase as opposed to the earlier study's findings of dramatic traffic increases. This analysis must be made available immediately.

The state is clearly not providing informational materials as contemplated by NEPA, 23 U.S.C. § 139 (SAFETEA-LU), 23 CFR 777.111 and federal guidance.²³

Please explain in the answers to comments and the EIS if the state believes how despite the preceding "public involvement process" problems, the state is meeting these requirements. In addition, please make the above documents available immediately.

Chapter 4: Transportation

4-3 Methodology

4-3-1 Travel Demand Modeling

This section states "a traditional Level of Service analysis was not conducted as part of the traffic analysis." The explanation given for not doing that analysis is that the Highway Capacity Manual identifies limitations for a freeway facility like the Tappan Zee Bridge. However, the 2006 Alternatives Analysis includes Level of Service analysis on pages 4-17 and 4-19. Please explain why the Level of Service analysis was planned in the old DEIS but is not being done here in the answers to comments and the DEIS.

The Paramics model is described as being "enhanced based on field conditions for the 2010 (Existing Conditions), 2017 (Estimated Time of Completion, or ETC) and 2047 (ETC+30) analysis years." Yet the state does not have traffic projections or field conditions for 2047. As explained on page 4-4 "NYMTC forecasts continued growth to 2035 for both population and employment, which were assumed to hold constant until 2047..."

The question is, of course, is it reasonable to assume that population and employment will remain constant between 2035 and 2047? Table 11-3 pg. 11-10 shows the effect of this assumption on future traffic projections. One can clearly see that no traffic increase is projected between 2037 and 2047, despite a 350 vph increase between 2017 and 2027 and a 730 vph increase between 2027 and 2037 (although 2035 not 2037 was the cutoff). Does the state truly believe that traffic volume will not increase at all between 2035 and 2047? If, unlike the state's assumption, there are increases in population and employment, that means more traffic, which would render the traffic analysis in the DEIS meaningless.

Also, more traffic could mean other alternatives warrant consideration. Assuming no population, employment and traffic increases for 12 years on the bridge and in the corridor appears arbitrary. Please explain the justification for this assumption in the answers to comments. The EIS traffic

²³ FHWA, SAFETEA-LU Environmental Review Process (Public Law 109-59) FINAL GUIDANCE, November 15, 2006. <http://www.fhwa.dot.gov/hep/section6002/index.htm>.

projections should represent actual increases that would result from increases in population and employment between 2035 and 2047.

In addition, the DEIS does not adequately explain why traffic projections are so different from the Tappan Zee Bridge/I-287 Corridor Project projections in the 2006 Alternatives Analysis. That document stated on page 4-28 “the Tappan Zee Bridge, would experience a demand that is over capacity in each and every hour of the peak periods (both AM and PM).” More specifically, on page 4-17 the east bound AM peak hour vehicle volume entering the bridge in 2025 is projected to be 8,800 vph – above the bridge’s capacity of 8000 vph.

Table 4-4 pg. 4-13 of the DEIS states, however, that even in 2047, the bridge will not be operating at capacity. Again giving a specific example, the east bound AM peak hour vehicle volume on the bridge in 2047 is projected to be 7,668 vph.

Essentially, the DEIS’s analysis seems to say that, despite using the same traffic models as the previous study, over 1,000 less cars will be on the bridge in the eastbound morning peak period than predicted only a few years earlier. This is especially surprising since the analysis year was 2025 for the Tappan Zee Bridge/I-287 Corridor Project not 2047 in the DEIS. One would expect that more not less traffic would be on the bridge in 2047 than 2025, not the other way around. The answers to comments and EIS must explain this change. Without it, the public and decision makers cannot understand what traffic data is correct.

4-4-1-2 Safety and Accident History

As noted above, the accident rate analysis in the DEIS does not clearly show that accident rates will decrease with the planned 12-foot lanes on the new spans. In fact, unsafe driving seems to be the main cause for accidents on the bridge. For example, page 4-6 states “The steep grade on the bridge, sun glare and weaving maneuvers appear to be the cause of the higher rate for eastbound vehicles,” and page 4-7 notes that 74% of all accidents on the bridge result from unsafe driving practices. Moreover, also as noted above, many locations in the corridor also experience higher than normal accident rates. Accordingly, the answers to comments and EIS should more fully explain and analyze whether driver behavior and the capacity restraints of the highway in the corridor will inhibit any mobility gains. As of now, these issues call into question whether the DEIS clearly shows mobility will increase as a result of increased lane width and changed grading and, as such, can meet the Purpose and Need of the project.

4-5 Environmental Effects

4-5-1 No Build Alternative

Page 4-12 states “Demand on the Tappan Zee Bridge would not reach capacity under the 2047 No Build Alternative because of the capacity constraints on the adjacent highway segments, including the reduction from four to three lanes and steep grades in Rockland County and merges and weaving associated with entering and exiting vehicles in Westchester County. These adjacent highway segments in Rockland and Westchester Counties have a maximum capacity that is less than that of the Tappan Zee Bridge, and the capacities of these adjacent roadways

would be reached before 2047. As a result, traffic on the Tappan Zee Bridge would be controlled by the more limited processing capacity of the adjacent highway segments.” This position is in direct contradiction to the Tappan Zee Bridge/I-287 Corridor Project findings as noted above. The answers to comments and EIS must explain in more detail how the old study found the bridge could reach and exceed capacity while this DEIS says that is impossible.

Another problem with the traffic data in the DEIS is that it is inconsistent. Table 4-4 on page 4-13 projects different total bridge traffic volumes than Table 11-3 on page 11-10. The following table shows the discrepancies:

Total Bridge Traffic Volume		
	Table 4-4	Table 11-3
AM Peak Hour 2017	11,657	11,783
AM Peak Hour 2047	12,909	12,863
PM Peak Hour 2017	11,753	11,678
PM Peak Hour 2047	12,672	12,408

This discrepancy makes it that much harder for the public and decision makers to understand what traffic conditions will be like and, accordingly, what alternatives are reasonable for study. The answers to comments and EIS must explain and correct all of these traffic projection discrepancies.

4-5-2 Replacement Bridge Alternative

Because the DEIS states “The traffic growth projections for the Replacement Bridge Alternative are the same as for the No Build Alternative,” all of the preceding problems with respect to the No Build Alternative highlighted above apply to the Replacement Bridge Alternative as well.

One issue merits more specific discussion here. The Replacement Bridge Alternative adds an additional lane but page 4-15 states “The Replacement Bridge Alternative would not alter the highway features that constrain the bridge’s capacity for growth. Thus, the addition of a travel lane on the bridge would not induce vehicle trips along this corridor, and the capacity of the adjacent highway segments in Rockland and Westchester Counties would continue to control volumes on the bridge.” But this contradicts exactly what happens on the bridge every day – when four lanes are open for crossing on the bridge, volume frequently exceeds 7,000 vph. So for the state to say that adding a lane will not induce vehicle trips along the corridor seems unjustified. Induced growth is something that almost always accompanies increased capacity. Without actually analyzing the character of the corridor and its amenability to induced growth, the DEIS is not truly analyzing the impacts of this project. This capacity increase must be examined in greater detail and all effects of such added capacity must be analyzed in the DEIS.

Chapter 5: Community Character

The most important issue that is not addressed in this chapter is how traffic growth in the corridor will affect community character. As noted in DEIS Chapter 4 on page 4-13, as roadways adjacent to the bridge will reach capacity by 2047, there will be “increased congestion on the alternative roadways and higher traffic volumes on the Tappan Zee Bridge during more hours of

the day.” This is consistent with the 2006 Alternatives Analysis’ finding that “With th[e] deterioration of traffic conditions on the Thruway [due to growing congestion], commuters would divert to alternate routes or delay entry to the Thruway, remaining on local arterials longer than they do today. This level of prolonged congestion could impede the future economic and job growth that is projected to occur in the corridor.” 2006 Alternatives Analysis at pg. 4-28.

Increased travel times, increased air pollution, as well as impeded future economic and job growth should have been explored in this chapter. If there are large negative impacts on community character, it would be reasonable to study transit alternatives that can actually increase capacity and mobility on the bridge and in the corridor while reducing environmental impacts. This is precisely why NEPA requires more alternatives be studied than just a No Build and Replacement Bridge Alternative. Without a rigorous exploration and objective evaluation of other alternatives that can meet the project’s goals, especially where the decision not to explore them is not substantiated, this analysis cannot satisfy NEPA requirements.

Moreover, there must be a more robust discussion of the effects on community character with the addition of an eighth lane. As noted above, this lane could potentially induce traffic volumes on the bridge and in the corridor because the adjacent roadways obviously do not restrict non-peak direction capacity to current traffic volumes. A mere conclusory statement that non-peak direction traffic volumes will not increase is insufficient. This is exactly why NEPA mandates project proponents “rigorously explore and objectively evaluate all reasonable alternatives, and . . . devote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits.” Without more analysis, the project cannot meet the environmental review requirements, including 40 CFR 1502.14, 40 CFR 1502.16 or 6 NYCRR § 617.9.

Chapter 8: Socioeconomic Conditions

This chapter is limited in the same way that Chapter 5 is insufficient. By not seriously evaluating more than at most two alternatives and limiting the study area, the DEIS authors sidestepped a serious discussion of the impacts of this project on the entire I-287 corridor. As noted above, both the 2006 Alternatives Analysis and the DEIS note that congestion will continue to increase in the corridor in the future. But the DEIS not only limits the study area so that the socioeconomic impacts of this congestion appear minimal but also limits alternatives studied so that the benefits of alternatives like those with transit would have on socioeconomic conditions in the I-287 corridor.

This is exactly why NEPA mandates project proponents “rigorously explore and objectively evaluate all reasonable alternatives, and . . . devote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits.” Without more analysis, the project cannot meet the environmental review requirements, including 40 CFR 1502.14, 40 CFR 1502.16 or 6 NYCRR § 617.9.

Chapter 11: Air Quality

This chapter is limited in the same way that Chapters 5 and 8 are insufficient. First, by ignoring the possibility that increasing capacity on the bridge could induce demand, the state is ignoring the potential air quality impacts of that demand. This increased traffic volume would create increased emissions, representing a different scenario than the No Build Alternative.

Accordingly, a new conformity analysis would be required. The state must perform a serious analysis of the likelihood of induced demand created by increased capacity. And, if it finds traffic volume will increase, a new conformity analysis must be done.

Second, this section underplays the importance of analyzing and comparing overall air quality impacts from different alternatives. As noted earlier, only transit alternatives, as well as traffic demand management, are alternatives that separately and together could significantly reduce air quality impacts of the replacement bridge project. This must be studied as part of the overall alternatives analysis. This is exactly why NEPA mandates project proponents “rigorously explore and objectively evaluate all reasonable alternatives, and . . . devote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits.” Without more analysis, the project cannot meet the environmental review requirements, as well as 40 CFR 1502.14, 40 CFR 1502.16 or 6 NYCRR § 617.9.

Chapter 13: Energy and Climate Change

Section 13-2-2 Replacement Bridge Alternative

This section notes that “Overall, the improvement in lane widths and the addition of shoulders would substantially improve incident management and reduce the propensity for substantial vehicle delays.” However, as noted above, the DEIS does not provide clear evidence that this is the case. Rather, as discussed above, most of the accidents on the bridge result from poor driving, not narrow lanes, so a decrease in accident rates resulting from slightly wider lanes must be explained more thoroughly in the answers to comments and the DEIS.

13-3 Measures to Reduce Greenhouse Gas Emissions

This section starts “The operation of the Replacement Bridge Alternative would result in some local reduction in traffic congestion on the bridge.” As noted above, whether this reduction will occur and the size of this reduction are not clearly substantiated in the DEIS. Also if there is a reduction, based on the state’s evidence it seems likely that the reduction will be very minimal.

Moreover, the DEIS’s assertion that heat exchange pumps and efficient lighting will comport with New York State policy of working to reduce greenhouse gas emissions 80 percent by 2050 is not convincing.

Executive Order 24, issued by Governor David Paterson in 2009 and reauthorized by Governor Cuomo in 2011, states that “it shall be a goal of the State of New York to reduce greenhouse gas

emissions from all sources within the State eighty percent (80%) below levels emitted in the year nineteen hundred ninety (1990) by the year two-thousand fifty (2050).”

According to the New York State Energy Research and Development Authority, “the transportation sector consistently made the largest contribution to greenhouse gases over time.”²⁴ Also, according to the New York State Climate Action Council, one of the four key strategies for meeting this emissions reduction goal is “reducing combustion from fossil fuels [because] . . . combustion accounts for about 87% of all GHG emissions in New York State, with the largest fraction coming from the transportation sector (38%). . . .”²⁵ That report goes on to explain how a reduction in vehicle miles traveled and increased smart growth planning are necessary elements of meeting the state’s greenhouse gas goals.

However, public transit, vehicle mile reduction and smart growth plans were thrown out of the Tappan Zee process when the Governor completely changed course last October. As noted above, the BRT system was projected to prevent the emission of 12,000 tons of CO₂ per year – and that is before accounting for the additional savings that can be obtained with smart growth development around transit. Heat exchange pumps and efficient lighting are not sufficient substitutes for these measures.

Chapter 15: Water Resources

As noted above, the state’s Replacement Bridge Alternative analysis presumes no increase in traffic volumes despite a 25% increase in capacity. The state must reevaluate its traffic projections as noted above and, if traffic is projected to increase, they the water quality analysis that includes all impacts must be redone as well, including potential salinity impacts caused by de-icing.

Chapter 16: Ecology

16-4 Affected Environment

Atlantic Sturgeon

After the release of the DEIS, the NMFS to designate the Hudson River Atlantic Sturgeon population as endangered under the Endangered Species Act. As such, the DEIS must be updated to ensure compliance with the Endangered Species Act (ESA).

Threatened and Endangered Species

²⁴ New York State Energy Research and Development Authority, New York State Greenhouse Gas Emissions Inventory and Forecasts for the 2009 State Energy Plan, page 9, August 6, 2009.
<http://www.nyclimatechange.us/ewebeditpro/items/O109F22458.pdf>.

²⁵ New York State Climate Action Council, Interim Report, Appendix F 2050 Visioning: Brookhaven National Laboratory Report, page 10, November 9, 2010.
<http://www.nyclimatechange.us/ewebeditpro/items/O109F24033.pdf>.

The DEIS should provide more information about the effects of the project on endangered species. The lead agencies must ensure that the Section 7 consultation has concluded, the critical habitat of these endangered species has been determined and the results of the dredging and pile installation work are more fully explored.

Section 7 of the ESA requires federal agencies to coordinate with the U.S. Fish & Wildlife Service, in consultation with National Marine Fisheries Service (NMFS), for actions that may affect listed species or their designated habitat. 50 C.F.R § 402.12 provides that formal consultation is required if it is determined that a project may affect listed species or a critical habitat. FHWA has begun the consultation process, but the lead agency may not finalize the EIS without first concluding the ESA Section 7 consultation process. In order to conclude the Section 7 consultation process, the lead agencies ensure NMFS make a determination that the construction of this bridge is “not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species.”²⁶ This finding must be made before the project may proceed.

Section 4 of the Endangered Species Act provides that a species’ critical habitat must be determined at the time of its listing.²⁷ Yet critical habitat has not been designated for shortnose sturgeon or the Atlantic Sturgeon. If either species’ critical habitat is determined to be in the area of the Tappan Zee, it could affect construction activities. Accordingly, this determination should be made before the project moves forward.

This project’s dredging and pile driving work may also negatively affect the endangered species and should be examined more thoroughly. For example, the biological assessment states “while dredging and armoring of the bottom will result in a temporary reduction in foraging opportunities [for the Shortnose and Atlantic Sturgeon], the project will not jeopardize the continued existence of the shortnose or Atlantic sturgeon populations of the Hudson River.” This insufficiently conclusory and more information is needed.

Candidate Species

This section states “Candidate status does not carry any procedural or substantive protections under the ESA. Although true, the state should consider doing more as recommended under FHWA guidance: “NEPA documents should identify candidate species as such, and describe any planned conservation measures. The Services encourage Federal agencies to consider implementing conservation measures for candidate species, as these measures may avoid the future necessity of listing. Proactive partnering with the Services to conserve candidate species might reduce future delays on Section 7 processes and/or result in future cost savings if listing can be avoided.” Shrouds, James M., INFORMATION: Management of the Endangered Species Act (ESA) Environmental Analysis and Consultation Process, February 20, 2002.²⁸

²⁶ 16 U.S.C. § 1536(a)(2).

²⁷ 16 U.S.C. § 1533(a)(3)(A)(i).

²⁸ http://environment.fhwa.dot.gov/ecosystems/laws_esaguide.asp.

Chapter 21: Indirect and Cumulative Effects

The analysis in this chapter can be summed up in two sentences. “Since the proposed bridge replacement is not expected to alter regional mobility or capacity, and is in an area with well-established land use patterns, it is not expected to result in new induced or indirect effects.” “Since the proposed replacement bridge has been determined to have no direct or indirect effect on regional traffic capacity or vehicle miles traveled (VMT), it would have no cumulative effect in combination with other projects.”

These statements are clearly wrong. The project is in fact increasing capacity. The current bridge provides four lanes of traffic in the peak direction and three lanes of traffic in the non-peak direction, adjusted by a moveable barrier. The DEIS Replacement Bridge Alternative will add one lane in the non-peak direction, increasing the non-peak capacity by 25%. For the DEIS to say that this is not an increase in capacity is not correct. Failure to consider this additional lane as increasing capacity makes the entire analysis of direct, indirect and cumulative effects inaccurate.

The DEIS merely assumes without analyzing that increasing capacity by 25% on hugely influential regional transportation infrastructure will not have any effects of the area because the area already has well-established land use patterns.

It is not clear in the DEIS how the conclusion was made that no capacity is being added despite an increase in capacity of 25%. As noted above, the DEIS’s explains that bridge capacity is constrained by I-287 in the corridor but peak bridge traffic volumes regularly exceed 7,000 vph. Yet the No Build non-peak bridge capacity is 6,000 vph. Accordingly, even if I-287 in the corridor does constrain capacity on the bridge, the Replacement Bridge Alternative is adding capacity of at least 1,000 vph. This increase in capacity could have direct, indirect and cumulative effects and must be analyzed in the DEIS. Without this analysis, the project cannot meet the environmental review requirements, including 40 CFR 1502.14, 40 CFR 1502.16 or 6 NYCRR § 617.9.

Chapter 22: Other NEPA and SEQRA Considerations

Page 22-3 states “The proposed facility would foster future economic development, which in turn would serve to create jobs and generate increases in property tax revenues.”

This is a conclusory statement without any evidence or analysis. If the bridge will remain as congested as it is now, save for the possibility of a few less accidents, how specifically will it foster economic growth? In the old study, it was explicitly found that increasing mobility by including transit in the project was the only way to meet population demand and foster economic growth. 2006 Alternatives Analysis, pg. 4-28 (“This level of prolonged congestion could impede the future economic and job growth that is projected to occur in the corridor.”). The answers to comments and EIS must explain in further detail.

Page 22-4 states “In addition, with narrow land [*sic*] widths and without shoulders, emergency response on the bridge would continue to be hindered.” Are the current lane widths on the bridge

so narrow as to, by themselves, hinder emergency response? That is, if the current bridge had a shoulder, how would the current lane widths hinder emergency response? Also, if each new planned span is built with only one shoulder (two shoulders total for the whole project), how would that affect emergency response? Are two shoulders absolutely necessary? If so, how and why?

Page 22-5 states “Oyster habitat in the project vicinity would likely be lost as an unavoidable impact during construction activities. Where the existing Tappan Zee Bridge would be removed, there would be an opportunity for habitats to redevelop.” This seems to mean the oyster habitat will be destroyed and the state does not know if it will ever come back. Is that correct? Is the state implementing any mitigation measures to try to encourage new habitat development? If so, what type? If not, why?

Section 22-5 New York State Smart Growth Infrastructure Policy Act

The New York State Smart Growth Public Infrastructure Policy Act sets out ten criteria state agencies must meet in order to fulfill the Act’s purpose of “augment[ing] the state’s environmental policy by declaring a fiscally prudent state policy of maximizing the social, economic and environmental benefits from public infrastructure development through minimizing unnecessary costs of sprawl development.” Environmental Conservation Law § 6-0107.

Despite the state’s analysis to the contrary, the project as currently planned cannot meet six of the ten criteria, as detailed below.

Criterion D: to protect, preserve and enhance the state's resources, including agricultural land, forests, surface and groundwater, air quality, recreation and open space, scenic areas, and significant historic and archeological resources

A project without transit cannot satisfy this criterion. As the DEIS admits, no effort is being made to reduce traffic volume in the corridor. Yet the DEIS asserts this criterion is met “by reducing the frequency of accident and incident delays on the bridge, traffic flow would be improved and air quality emissions reduced.” (pg. 22-6)

The minor air quality improvements, if any, that would result from less accidents can hardly be said to “protect, preserve and enhance” the state’s air quality. However, reducing traffic in the corridor could truly protect, preserve and enhance air quality by preventing over 12,000 tons of CO2 from entering the atmosphere every year while also protecting, preserving and enhancing other state resources with compact development and land use planning around transit facilities that is more efficient and requires less space.

Criterion E: to foster mixed land uses and compact development, downtown revitalization, brownfield redevelopment, the enhancement of beauty in public spaces, the diversity and affordability of housing in proximity to places of employment, recreation and commercial development and the integration of all income and age groups

Maintaining the status quo cannot meet this requirement. There is no plan for incorporating any of these aspects into the corridor. The DEIS asserts that this criterion is “Not Applicable” but the Tappan Zee Bridge/I-287 Corridor Project met this criterion by incorporating transit oriented development into its planning.

In fact, this transit oriented development was an integral part of the Tappan Zee Bridge/I-287 Corridor Project and was projected to be a way for meeting sustainability goals embodied in the Smart Growth Act. That transit oriented development would foster mixed land uses and compact development, downtown revitalization, the diversity and affordability of housing in proximity to places of employment, recreation and commercial development and the integration of all income and age groups as this criterion requires. A project without transit cannot and will not meet any of these requirements.

Criterion F: to provide mobility through transportation choices including improved public transportation and reduced automobile dependency

This criterion also obviously cannot be met by the project, yet the DEIS asserts that the project is “Consistent” with this criterion.

Although the state asserts that “the bridge would be designed not to preclude transit” and would “improve mobility and efficiency,” this is not enough to meet this criterion. Public transit is not being improved and automobile dependency is not being reduced as required by this criterion, so the project cannot be consistent with this criterion.

Criterion G: to coordinate between state and local government and intermunicipal and regional planning

The DEIS asserts that the project is “Consistent” with this criterion because the authors anticipate coordination with local and regional agencies. However, the state’s actual actions do not comport with this criterion.

Indeed, there are many constituents and local elected officials publicly calling for public transit to be included on the bridge and in the corridor as part of this project, yet the state continues to refuse to do so. Tri-State believes

- the state should be coordinating more with local governments and intermunicipal and regional planning,
- this criterion is not being met because all calls for transit transparency are being rejected with little, if any, explanation and
- the state, by only going forward with its plan without opening the process to local governments or incorporating intermunicipal and regional planning into the process in a meaningful way, cannot meet this criterion.

Criterion H: to participate in community based planning and collaboration

The DEIS asserts that this criterion is “Not Applicable” presumably because “this is a large-scale regional transportation initiative.”

Apparently the state does not consider residents in Rockland or Westchester county to be part of the community. Many constituents and local elected officials have publicly called for public transit to be included on the bridge and in the corridor as part of this project, yet the state continues to refuse to do so. Tri-State believes

- the state should be participating in community based planning and collaboration,
- this criterion is, in fact, applicable and
- the state, by telling the local communities what it plans to do without opening the process to them in a meaningful way, cannot meet this criterion.

Criterion J: to promote sustainability by strengthening existing and creating new communities which reduce greenhouse gas emissions and do not compromise the needs of future generations, by among other means encouraging broad based public involvement in developing and implementing a community plan and ensuring the governance structure is adequate to sustain its implementation

The state asserts that this criterion is “Not Applicable.” But if it were, the state goes on, “a reduction in accidents and congestion” and eliminating the need for the machine that moves the barrier on the bridge would reduce greenhouse gas emissions, so the criterion would be met.

This project clearly cannot fulfill this criterion through less accidents and eliminating the barrier-moving machine. As noted above, this project is not promoting sustainability but merely providing minor, if any, emissions reductions and definitely not making a plan for meeting the needs of future generations.

This criterion can only be met by incorporating transit and land use planning into the project. A good example of this type of planning was the Tappan Zee Bridge/I-287 Corridor Project which took a broad-based look at the real problem – traffic throughout the corridor – and sought to solve it in a sustainable way that protects the environment and quality of life in the corridor by incorporating public transit in order to meet the mobility and economic needs of future generations. That project included a long process but the process was long precisely because it involved broad-based public involvement in an effort to create a plan that provided a sustainable solution to the mobility problems in the corridor now and far into the future.

By limiting the project definition to just a bridge, the DEIS is trying to make a straight-faced albeit disingenuous case that many of the Smart Growth Act criterion are not applicable to the project or are otherwise met by the project.

This project, by eliminating the transit and smart growth planning that were included in the earlier project, clearly does not maximize the social, economic and environmental benefits that transit and smart growth provide. As noted above, there is no evidence transit is not being precluded or rendered cumbersome and overly expensive by the current project, ultimately falling short of the Smart Growth Act’s requirements.

Chapter 23: Draft Section 4(f) Analysis

The DEIS should consider whether alternatives to the Replacement Bridge Alternative that incorporate different deck alignments and spacing could minimize harm. For example, making the decks less narrow might minimize harm.

Appendix A: Project Planning and Development

A-1 White paper on Transit and the Tappan Zee Hudson River Crossing Project

Recent Cost Estimates

This section mischaracterizes the development of transit alternatives and introduces new cost estimates without any substantiation. In 2009 and 2010, the state was working on developing a BRT system for entire I-287 corridor. One option, the BRT/HOV lane option was quoted as being \$897 million in Chapter 7 of the 2009 Transit Mode Selection Report. Although that section noted that highway costs were not included in this cost estimate, the Tappan Zee Bridge/I-287 Corridor Project was a comprehensive rebuild of the entire corridor so much of the highway cost projections in the study had nothing to do with public transit and everything to do with simple corridor maintenance. In addition, as can be seen in the 2010 Transit Alignment Options Report,²⁹ previous plans included an unnecessary amount of overdesign. For example, in certain sections of the corridor the state proposed to add three new lanes – a bus lane, HOV lane and climbing lane.

Presumably the prices quoted in this section of the DEIS include all of that unrelated work and overdesign but it is impossible to know because the state refuses to make cost estimate documents public. As noted above, without providing a cost breakdown, the state cannot eliminate the transit alternatives.

A final point about this section is the cost estimates chart on page 4. This chart is totally unintelligible. This chart needs to be redone in the EIS and the cost estimates must be made available immediately. In addition, the answers to comments should provide a detailed explanation of how and why the estimated costs have gone up so much in such a short period of time.

NYMTC 2035 Regional Transportation Plan – “A Shared Vision for a Shared Future”

One justification in the DEIS for excluding mass transit appears to be an anticipated shortfall in funding for state of good repair and normal replacement (SOGR/NR) work over the next 25 years. The exact calculation is as follows:

NYMTC SOGR/NR funds needed	\$986.3 billion
NYMTC SOGR/NR funds available	\$969.5 billion
Projected shortfall	“roughly \$16 billion”

²⁹ The 2010 Transit Alignment Options Report is not readily accessible by the public and was only made available to Tri-State through a Freedom of Information Act request to USDOT.

Somehow, this funding shortfall (which is actually closer to \$17 billion) leads the state to believe that the bridge is affordable, while transit is not: “Based upon the information in the recent cost estimates and the current funding levels both from federal and state sources and systematic review of the financial analysis in the various transportation plans, it was determined that funding for the Tappan Zee Bridge/I-287 Corridor Project (components including bridge replacement, highway improvements, and new transit service) was not financially feasible at this time” Appendix A-1, p. 5-7.

But the above calculation suggests that no Tappan Zee Bridge work is financially feasible at this time. The state does not say why it can locate money for a bridge but cannot locate money for transit. If funds can be found to rebuild the bridge, one can reasonably assume that transit funds can be found as well. The decision to pick one but not the other is arbitrary. The state must explain in detail in the answers to comments and DEIS how this calculation makes sense and why additional funds cannot be found for transit.

New Project Purpose-Need and Goals-Objectives

As described in more detail above, the DEIS does not clear explain how this project is not precluding transit or maximizing the public investment, especially since the state has made no effort to explore a scaled down public transit system that could be further expanded later. Tri-State’s comments above on these issues apply equally to this section.

Page 7 states “Future transit alternatives are presently not considered reasonably foreseeable transportation improvements. (FHWA defines reasonably foreseeable as being part of the fiscally constrained portion of the Metropolitan Planning Organization’s long range plan).” Based on this logic, a replacement bridge is also not “reasonably foreseeable” as it is also not part of the fiscally constrained portion of the MPO’s long range plan. The answers to comments and DEIS must explain this in more detail.

Appendix B: Transportation

B-5 AECOM Future Capacity Memorandum

This memorandum states that the question addressed by the memorandum was “whether the increase in capacity due to th[e] fourth off-peak lane over the bridge could increase off-peak direction traffic in the corridor . . . resulting in potential traffic and related impacts along the corridor.” This memorandum essentially compares current traffic volumes and speeds with future traffic volumes and speeds. The premise seems to be that if speeds are maintained under future No Build conditions, then adding an extra lane will not impact growth.

The problem with this analysis, of course, is the complete disregard for overwhelming evidence that adding capacity induces traffic increases.³⁰ Moreover, this analysis seems to disregard the fact that additional capacity can induce development and people are willing to accept lower

³⁰ Litman, Todd. “Generated Traffic and Induced Travel, Implications for Transport Planning.” *Victoria Transport Policy Institute*. 6 November 2011. <http://www.vtpi.org/gentraf.pdf>.

traffic speeds as a result. The current situation on the Tappan Zee is the perfect example of this. Capacity was added to the bridge, yet it is still congested every day. A more thorough analysis of the potential growth inducing effects of increasing non-peak capacity by 25% must be done. This limited, three page analysis is insufficient.

In sum, there are many unresolved issues in the DEIS. The state must address each of the preceding issues before the project can be finalized. All of the information requested by these comments to be released or explained in more detail in the answers to comments and DEIS should be released to the public as soon as possible. Moreover, the state must immediately release all documents providing support for conclusions made in the DEIS.

Sincerely,

Kate Slevin, Executive Director
Tri-State Transportation Campaign

Vincent Pellecchia, General Counsel
Tri-State Transportation Campaign

Paul Steely White, Executive Director
Transportation Alternatives

Bettina Damiani, Project Director
Good Jobs New York

Rich Kassel, Senior Attorney
Natural Resources Defense Council

Gene Russianoff, Staff Attorney
NYPIRG/ Straphangers Campaign