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RE: Dept. of Army Permit Application Number NAE-2007-00698 EOEA #14346/ Comments on the South Coast Rail DEIS/DEIR

Dear Ms. Eglington and Mr. Anacheka-Nasemann,

Thank you for the opportunity to comment on the South Coast Rail Draft Environmental Impact Statement/Draft Environmental Impact Report (DEIS/DEIR). Public Employees for Environmental Responsibility (PEER) is a Washington D.C.-based non-profit, non-partisan public interest organization concerned with honest and open government. Specifically, PEER serves and protects public employees working on environmental issues. PEER represents thousands of local, state and federal government employees nationwide; our New England chapter is located outside of Boston, Massachusetts.

As you are aware, PEER has been involved with the review of this project since 2001 – nearly a decade. While PEER was initially relieved to hear that the Commonwealth decided to take a "fresh look" at alternatives and the project as a whole, that relief quickly turned to skepticism. Our attendance at the Southeastern Massachusetts Commuter Rail Task Force Meetings since their inception has demonstrated beyond any reasonable doubt that the Commonwealth, for whatever reason, would do whatever it could to stubbornly cling to this ill-advised and potentially illegal alternative. We have spent countless hours reviewing and commenting on

Environmental Notification Forms, Corridor Plans, ridership analyses, and various other documents, only to discover that our comments are rarely taken seriously or given due consideration.

To add insult to injury, both the U.S. Army Corps of Engineers (Corps) and the Commonwealth have unreasonably restricted the review period of this massive, 2,500+ page DEIS/DEIR to 46 business days. Many individuals, environmental groups, and legislators respectfully requested that you extend the comment period to allow time for a comprehensive review of the DEIS/DEIR; however, an extension was denied. While struggling though the volumes of information, it has become abundantly clear to us that neither the Corps nor the Commonwealth could possibly have read the document thoroughly. For example, the DEIS/DEIR states:

Since the South Coast Rail Build Alternatives would result in the discharge of fill material into greater than one acre of waters of the U.S., including wetlands, a Department of the Army Individual Standard Permit is required (DEIS/DEIR p. 3-1).

The Corps requires individual permits for the discharge of dredged or fill material into waters of the Untied States, including wetlands, for anything that has more than minimal impacts, not just fills larger than one acre. It is obvious errors such as these that lead us to believe that neither the Corps nor MassDOT had time to read this document. It is difficult to fathom how the Corps could produce a document that misstates its own regulations.

The errors and misinformation peppered throughout the volumes, not to mention the lack of necessary information, are so numerous that the document was almost impossible to navigate and digest. Moreover, navigation of the document was very difficult, with Figures and Appendices taking several minutes to load – each - even on fast, new computers. As such, our comments today are limited to what we could glean from this confusing and poorly written DEIS/DEIR. Since many of the errors create a domino effect of further errors, the document is practically useless. For example, as discussed in more detail below, the failure to consistently define the South Coast Region on which all the analyses are based – ridership, economics, impacts, air quality benefits, etc. – render the entire alternatives analysis, and hence the National Environmental Policy Act (NEPA) and the Massachusetts Environmental Policy Act (MEPA) review, worthless.

Nevertheless, we have spent considerable time reviewing the DEIS/DEIR and writing this letter in the infinitesimal hope that a Supplemental DEIS/DEIR will be issued to correct the errors and present an unbiased and comprehensive document – one that complies with the requirements of NEPA and MEPA. We sincerely hope that we have not wasted our time yet again.

Our specific comments on the document are set forth below.

**The Commonwealth did not adequately address concerns articulated in response to the ENF.** As you are aware, PEER previously submitted comments on the Environmental Notification Form (ENF) for the South Coast rail project, as well as the scope of the federal Environmental Impact Statement (EIS) and the state Environmental Impact Report (EIR). However, the responses to these comments, included in the DEIS/DEIR in an Appendix, are primarily non-responsive. Others refer the reader to incorrect sections in the DEIS/DEIR for responses to their comments. For example, comments on PEER's letters state that Table 3.3-12 in the DEIS/DEIR describes the cost per rider. However, Table 3.3-12 actually portrays the proposed construction schedule. This is not an isolated example; the errata contained throughout the documents made it extremely difficult, if not impossible, to navigate the information. At the very least, MassDOT's responses should not send readers on a wild goose chase for the correct information.

The purpose and need for the project. 33 CFR 320.4(a)2(i) states that the Corps must consider in its Section 404 decision-making, among other things, "[t]he relative extent of the public and private need for the proposed structure or work." In order to assess the practicability of alternatives, and ultimately determine the least environmentally damaging practicable alternative (LEDPA), the Corps must identify a basic project purpose for each project. In this case, the Corps and the Commonwealth have identified similar yet unique project purposes for this project. As such, as PEER has stated numerous times, there is an inherent conflict between the state and federal processes. The Massachusetts Department of Transportation (MassDOT) claims that its project purpose statement is merely "a statement of the Commonwealth's objectives in advancing the project" (see p. 362 of Appendix 8, comment N-025-003. However, it is much more than that. By narrowly defining the project purpose to "to more fully meet the existing and future demand for public transportation between Fall River/New Bedford and Boston, MA, and to enhance regional mobility while supporting smart growth planning and development strategies in the affected communities" (see p. 2.1 of the DEIS/DEIR), MassDOT is limiting the range of alternatives it deems acceptable/practicable to those that enhance regional mobility and support smart growth. On the other hand, the Corps' basic project purpose is "to more fully meet the existing and future demand for public transportation between Fall River/New Bedford and Boston, Massachusetts" (Id.). The Corps' project purpose should, if the analysis is done in an unbiased manner, result in a larger pool of alternatives from which to choose.

Nevertheless, PEER believes that the Corps should have ensured that the basic project purpose, the overall project purpose, and the purpose and need should have been the same. Different project purposes, or unclear and poorly defined project purposes, will increase the likelihood of disputes the practicability of alternatives. In this case, the Corps' basic project purpose clearly renders the Rapid Bus a practicable alternative, yet MassDOT has rejected it as impracticable.

**Definition of the South Coast study area is inconsistent, and renders many analyses worthless.** The DEIS/DEIR defines the South Coast study area in several different ways. For example, pages 4.2-4 and 4.2-5 state:

The communities that would be served or that could be impacted by the proposed South Coast Rail alternatives are listed in Table 4.2-1. The alternative railroad or highway alignments pass through or near these 27 communities, and new station sites are within or near each.

Table 4.2-1, labeled "Land Use Study Area Communities" then lists the following communities: Acushnet, Attleboro, Berkley, Canton, Dartmouth, Dighton, Easton,

Fairhaven, Fall River, Foxborough, Freetown, Lakeville, Mansfield, Mattapoisett, Middleborough, New Bedford, North Attleborough, Norton, Raynham, Rehoboth, Rochester, Sharon, Somerset, Stoughton, Swansea, Taunton, and Westport.

However, the January 28, 2011 memorandum from Scott Peterson of the Central Transportation Planning Staff (CTPS) regarding South Coast Rail Work Trips to Boston, which is cited in the DEIS/DEIR states, "The SCR study area consists of 28 communities, which are identified below...." The memo then lists the following towns: Acushnet, Attleboro, Berkley, Bourne, Carver, Dartmouth, Dighton, Fairhaven, Fall River, Freetown, Lakeville, Mansfield, Mattapoisett, Middleborough, New Bedford, North Attleborough, Norton, Raynham, Rehoboth, Rochester, Sharon, Somerset, Stoughton, Swansea, Taunton, and Westport. Therefore, this SCR study area deleted the five towns of Canton, Easton, Foxborough, Sharon, Stoughton, and added the six towns of Bourne, Carver, Marion, Plainville, Seekonk, and Wareham. Since this latter study area was used to determine ridership, it is critical to the analysis contained in the DEIS/DEIR.

The DEIS/DEIR then states, "*No commuter rail service is offered within the South Coast Rail study area.* The nearest commuter lines (MBTA's Providence Line and Middleborough Lines) terminate northwest and northeast of the South Coast region" (see p. 4.1-14; emphasis added). This statement is patently false and misleading. In fact, at least four towns defined as being within the SCR study area by Mr. Peterson have *existing* commuter rail stations: Attleboro, Lakeville, Mansfield, and Middleborough. Moreover, there are eight *existing* commuter rail stations in the South Coast study area as defined by Table 4.2-1 of the DEIS/DEIR: Attleboro, Canton (two stations), Lakeville, Mansfield, Middleborough, Sharon, and Stoughton.

Further, in the Socieoeconomics section of the DEIS/DEIR, Table 4.3-1:

lists the communities that would be served or that could be impacted by the proposed project, which includes 17 municipalities in Bristol County and 3 municipalities in Plymouth County. The alternative railroad or highway alignments pass through or near these 20 communities, and new station sites are within or near each. The social and economic conditions within each of these municipalities, relative to the alternative alignments and station sites, are discussed in Section 4.3.2.1.1 (see p. 4.3-2).

Table 4.3-1, labeled "Social and Economic Environment Study Area Communities," lists the following municipalities: Acushnet, Attleboro, Berkley, Dartmouth, Dighton, Easton, Fairhaven, Fall River, Freetown, Lakeville, Mattapoisett, New Bedford, Norton, Raynham, Rehoboth, Rochester, Somerset, Swansea, Taunton, and Westport. Again, this list is different than *both* the other lists presented in the DEIS/DEIR.

Yet another definition exists on p. 4.14-3 of the DEIS/DEIR: "The South Coast Rail Study Area is considered to be the region of southeastern Massachusetts consisting of southern Bristol and Plymouth Counties, bordering on Buzzards Bay or Mount Hope Bay, including the cities of Fall River and New Bedford and nearby towns."

Finally, the South Coast Rail Corridor Plan includes 31 cities and towns; again, different than the other three lists. The Corridor Plan is used to justify MassDOT's smart growth plan, on which it relies to minimize sprawl that would otherwise be a direct result of this project.

When PEER asked MassDOT to define the "South Coast Region" in its comment letter on the ENF, MassDOT responded that:

...the South Coast Rail study area ...[includes]....all of the communities that would be served by, or could be impacted by, the proposed South Coast Rail alternatives. These are the communities that the proposed railroad or highway alignments pass through or near, and that would be served by proposed stations...[t]he referenced 8,000 riders represent commuters from the region, which includes all of the communities that would be served by the South Coast Rail project (pp. 363-364, Appendix 8.2-A).

The fact that the Corps and MassDOT cannot provide a consistent definition of the South Coast Region, *on which all the analyses are based*, is of grave concern to PEER. As such, we urge the Corps and MassDOT to produce a Supplemental DEIS/DEIR (SDEIS/SDEIR) so that the public is confident that the analyses are correct. The SDEIS/SDEIR must provide a single, consistent definition of the study area, and calculate ridership, impacts, and alternatives based upon this single definition. Moreover, we suggest that the Corps and MassDOT read the DEIS/DEIR and supporting documentation more carefully, to catch these blatantly false statements and eliminate them from the documents. PEER believes that any court would agree that such basic mistakes must be remedied before issuance of a FEIS/FEIR; to do otherwise makes a mockery of the NEPA/MEPA process.

**The ridership analysis is flawed.** The DEIS/DEIR ridership analysis is flawed due to the area from which it obtains the initial Journey to Work (JTW) data, and due to assumptions that are incorrect. The DEIS/DEIR explains its ridership analysis as follows:

Traffic demand estimated for the alternatives are based on ridership forecasts developed by the CTPS. CTPS developed these forecasts based on a number of variables, such as observed commuter rail ridership in similar areas, magnitude of service to be provided, and future estimates of population and employment within the South Coast region and greater Boston area. All of these data were analyzed via a regional travel demand model, which ultimately provided a future ridership estimate for the proposed service (DEIS/DEIR p. 4.1-7).

The DEIS/DEIR also states:

In order to estimate overall transit demand for the region, an optimal transit system with no constraints such as construction costs or environmental impacts would have to be simulated. While this optimal transit demand has not been quantified, demand was measured in terms of the number of daily work-related trips between South Coast communities and Boston. For this screening analysis, transit demand was based on 2000 Journey to-Work (JTW) data. Total service to the South Coast Region was considered the total station boardings as projected for each alternative in addition to boardings at existing commuter bus services, which is anticipated to continue to operate with the South Coast Rail project in place. According to the JTW data, the number of daily work trips from the South Coast region to Boston is approximately 8,000. The ability of the alternative to meet possible future ridership potential was calculated as the percent of met ridership demand (DEIS/DEIR, p. 3-122).

As stated above, the South Coast region is defined throughout the DEIS/DEIR in several different ways. It is not clear which of the various definitions was used to determine that there are 8,000 daily work trips to the Boston area. However, as we stated in our letter on the ENF, the Journey to Work data state that 741 people from New Bedford commute to the Boston area, and 714 commute there from Fall River (see

http://www.census.gov/population/www/cen2000/commuting/mcdworkerflow.html). This is a total of 1,455 commuting to Boston and Cambridge from Fall River and New Bedford. What the DEIS/DEIR does *not* mention is that 1,667 people from Fall River commute to New Bedford for work, with another 1,248 commuting to Somerset, and another 1,078 commuting to Swansea (Id.). Similarly, 1,902 people living in New Bedford commute to Fall River, 2,145 to Fairhaven, and 3,761 to Dartmouth (Id.). Therefore, it is worth noting that 11,801 people travel among the cities and towns of Fall River, New Bedford, Somerset, Swansea, Fairhaven and Dartmouth, while only 1,455 travel to Boston. It seems clear that the transportation need is between and among these southern cities, and not to Boston.

PEER also disagrees that the proposed train line will draw people off existing lines to the new trains. MassDOT is assuming that people will, for example, leave train stations in their own towns, and drive miles to a different train station. This is non-sensical, and skews the ridership figures drastically. The map below shows existing train stations (blue markers), the SCR study area as defined in the January 28, 2011 CTPS memorandum, the basis for the ridership figures (red markers), and the preferred alternative (yellow markers).



MassDOT is assuming that people living in the red marker towns will travel to the proposed yellow marker train stations rather than taking an existing train at one of the blue markers. This is disingenuous and, frankly, laughable. Why would someone living in Mansfield, for example, drive miles to Easton to take the train, when a commuter rail station exists in Mansfield? In fact, of the 28 communities listed in the CTPS memo, 13 or more of them have existing, operating train stations closer to them than the ones that would exist if the proposed line were built. The SDEIS/SDEIR should remove the ridership numbers from these towns that already have closer train stations in order to present more accurate ridership projections.

It appears that the ridership analysis also assumes that, and takes credit for, riders that shift from one train line to another. Page 3-44 of the DEIS/DEIR states:

New system-wide boardings represent the overall draw to the commuter rail transit system due to the South Coast Rail project, which represents an increase in capacity along other commuter rail lines as a particular alternative attracts system-wide new ridership. This total is also used to calculate overall cost-effectiveness of the project.

If we are interpreting this correctly, MassDOT is stating that as riders shift from an existing line to the proposed new line, other riders will take their place on the existing lines. The SDEIS/SDEIR should provide some evidence to support this contention.

There are four ways that potential riders can get to the train station: they can drive, if there is ample parking; they can get dropped off and picked up again in the evening, they can walk or ride their bikes, or they can take some other form of transportation, like feeder buses. It appears that, in some cases, ridership from a particular station is unreasonable given parking availability, or ability to walk to the station. The SDEIS/SDEIR should calculate ridership in two ways: 1) with feeder buses, and projected land use (e.g., TODs), *only if* the costs of those changes are included in the costs of the project; or 2) ridership that would occur using existing land use and available parking. In other words, the DEIS/DEIR should not assume dozens of people or more will be walking to a rural train station with little housing around it.

It is also unclear as to why MassDOT assumes that mass transportation into Boston from Fall River and New Bedford will suddenly translate into jobs for residents of these two economically depressed cities. Page 4.3-15 of the DEIS/DEIR states:

The majority of workers in the South Coast region are employed in blue collar and service jobs such as construction, manufacturing, retail trade, health care/social assistance, and accommodation and food service. A large portion of the population is also employed in educational service jobs, particularly towns with higher median incomes, such as Rochester, Lakeville, and Rehoboth. Workers in the larger South Coast cities, such as Fall River and New Bedford are concentrated in the manufacturing and health care/social assistance sector.

The SDEIS/SDEIR should provide information on the number of manufacturing and health care/social assistance jobs available in Boston for these Fall River and New Bedford workers. This analysis should also explore the pay for these jobs, and whether the cost of the commute would be affordable.

In a recent article entitled *Job accessibility and journey to work: the case of Boston Metropolitan area*, the author states: "...job matching is one of the important factors determining job accessibility since physical proximity to opportunities means nothing if workers nearby are not qualified for the available job opportunities" (See *Job accessibility and journey to work: the case of Boston Metropolitan area*, <u>http://hdl.handle.net/1721.1/33691</u>,Chung, Jee-seong, MIT, Dept. of Civil and Environmental Engineering., 2005, p. 57). This author also states, "cities and towns around Route 128 contain 20 to 25% of all office space in the Boston metropolitan area. About 35 to 40% of office space is located in downtown Boston with the remainder scattered throughout the metropolitan area" (Id., at 82). The SDEIS/SDEIR must make an attempt to show where the jobs exist, what type of jobs they are, and whether they are appropriate and available for the people in the South Coast study area (whatever than may be). As Chung cautions:

...using conventional methods, job accessibility by transit is determined using the total number of jobs in a zone, assuming that all jobs in a zone can be reached by transit users if the zone can be reached by transit. This assumption leads often to the overestimation of transit job accessibility by over-counting the number of jobs accessible by transit, resulting in the overestimation of transit ridership ....While residents of a neighborhood might be closer to many job opportunities, if they do not have the skills or education to qualify for those jobs, then they are hardly candidates for employment opportunities.

Therefore, job accessibility indicators need to incorporate occupational matching (Id. at 87-88).

The MEPA Certificate that issued in 2009 stated:

Many commenters have questioned the need for the project as well as the ridership demand estimate of 8,000 daily work trips for the South Coast region presented in the ENF (which is based on the U.S. Census 2000 Journey to Work data). Some commenters believe the number of trips is underestimated, others believe it to be excessive. EOT should consider the comments from the municipalities, regional planning agencies and others regarding the inputs to the ridership model. I expect the analysis in the DEIR to resolve many of the outstanding questions and provide well documented, valid projections of ridership to support the analysis of impacts and mitigation, and the selection of alternatives (See

http://www.southcoastrail.com/downloads/ENF\_Secretary\_Cetrificate.pdf).

The Secretary explicitly asked that the outstanding questions regarding ridership be answered in the DEIR; if anything, more questions have arisen. Moreover, the ridership projections are neither valid nor well-documented.

In conclusion, the ridership figures are severely overestimated. The Corps and MEPA must require a more accurate estimate of ridership in order to fairly assess the various alternatives. Moreover, they must provide occupational matching to demonstrate that the alleged riders will actually have jobs to ride to.

## Travel time, which is used to rate alternatives, is unrealistic. The DEIS/DEIR states:

Since New Bedford/Fall River commuters currently rely on cars and private bus services, an improved quality of service would provide a comparable or competitive travel time and improved reliability with respect to existing commuter options during peak commuting periods. The average commuting time by car during rush hour is currently 90 minutes. The CTPS travel demand model projects slower commutes as congestion along already slow corridors continues to increase. A future (2030) commute from New Bedford and Fall River to Boston is expected to be approximately 10 to 30 minutes longer than in 2009 (in the peak period) (DEIS/DEIR, p. 3-123).

The DEIS/DEIR then goes on to assign grades to the performance times of the various lines, claiming that the Stoughton electric train would receive a score of 99%, and the diesel option would receive a score of 88%. In order to determine the travel times, the DEIS/DEIR examined arrival time statistics from 2008 (see p. 3-132), and estimated future travel times. However, MBTA's website has statistics for the percentage of trains on time each month (See <a href="http://www.mbta.com/about\_the\_mbta/scorecard/">http://www.mbta.com/about\_the\_mbta/scorecard/</a>). MBTA states that Stoughton trains' on-time performance was 82% in Feb. 2011, and 10+ minutes late 13% of the time. The MBTA provides similar performance times throughout previous months and years, all more recent than the 2008 data used in the DEIS/DEIR. These data are readily available, and PEER is puzzled as to why the DEIS/DEIR cites data from 3 years ago rather than using current data. Moreover, if the

Stoughton trains are currently more than 10 minutes late 13% of the time now, PEER does not understand how MassDOT can be so certain that the estimated travel times of 76 and 85 minutes for the electric and diesel options, respectively, can be accurate. Travel times for all alternatives should reflect a range of times, using recent data for on-time performance. If 10+ minutes are added to the Stoughton diesel travel time, it would take longer to use the commuter rail than to drive.

Further, p. 3-42 of the DEIS/DEIR states:

Rail travel times for the Attleboro and Stoughton/Whittenton Alternatives, which include dwell times at the stations, were calculated for the 2030 operation and reflect future improvements and service modifications to the rail corridors.

The SDEIS/SDEIR should disclose what these "future improvements" and "service modifications" are, and the associated costs of these improvements. The SDEIS/SDEIR should also disclose the travel times without these future improvements and service modifications.

Finally, PEER would like to see additional information as to why the Rapid Bus suddenly got so much slower in its travel time. MassDOT alluded to future traffic at one of the Task Force meetings as to why the bus is suddenly slower than all the train options, but we believe that the SDEIS/SDEIR should reveal these data. Chung states that, "Travel time is considered to be one of the decisive factors determining people's mode choice" (p. 64). If the travel times in the DEIS/DEIR are not accurate, then neither are the ridership figures.

**Cost**. PEER believes that the costs of the project are highly underestimated. First, we believe there are items missing from the capital cost estimate. By providing a lump sum figure for infrastructure costs, it is impossible to judge whether these costs are accurate. The SDEIS/DEIR should break out the separate costs for track, signals, stations, parking lots, road and intersection improvements, and maintenance facilities. Only with this information can anyone evaluate the accuracy of the cost estimates. An accurate capital cost figure is critical because this figure is used to calculate cost per rider, and to compare alternatives. If the capital cost of the project given in the DEIS/DEIR is inaccurate, then all of the alternatives analyses and comparisons are also inaccurate.

Second, PEER believes that the upgrades to South Station must be taken into account as part of the costs of this project. Although the entire commuter rail system will benefit from the South Station upgrades, they should not be treated as an independent project. Since the proposed South Coast Rail project relies on the South Station upgrade, and since the Commonwealth must somehow find the money to conduct the upgrade, leaving this cost out of the project underestimates the true cost of the South Coast Rail project.

Third, we do not see where the costs associated with the commuter rail maintenance facility are in the cost estimate for the project. Our understanding is that both the maintenance facility and the track leading to this facility must be upgraded in order to support the proposed project, if the project is going to be electrified. Therefore, this cost should be included. Fourth, pp. 3-60 to 3-62 of the DEIS/DEIR discuss how a feeder bus service to the train stations is "envisioned by MassDOT to connect the urbanized communities in the study area to the South Coast stations." The DEIS/DEIR goes on to state:

Since the commuter rail system would primarily serve work commuters traveling to downtown Boston, priority would be given to improving access for residents to suburban stations...Feeder bus service would provide a direct connection to significant nearby destinations or origins including downtowns, universities, government centers, hospitals and higher density residential developments...All public transportation systems would reflect and incorporate the South Coast Rail service.

Although the DEIS/DEIR states that "[p]reference would be given to rerouting existing services over providing new services where possible," there are undoubtedly costs associated with these feeder buses, and for new stations, feeder buses could not simply be rerouted. The SDEIS/SDEIR must include the costs of these feeder buses, bus drivers, fuel, storage and maintenance facilities, and stops into the cost of the project.

Fifth, PEER is concerned that the inflation rate used in the cost figures is inaccurate. Table 3.2-26 on page 3-94 of the DEIS/DEIR states that the cost is in 2009 dollars, and that "[e]scalation was calculated at 3.25% per year per FTA criteria." PEER believes that construction costs have exceeded standard inflation rate. For example, the costs of concrete, steel, fuel and electricity have increased faster than the inflation rate. Therefore, the escalation rate used by MassDOT is inadequate, and the costs of the project should be altered accordingly.

Sixth, the cost estimates assume that construction on this project will begin approximately one year from now. This is inconceivable. MassDOT should explain how it can possibly believe that engineering will be complete, and all permits will be obtained and the project will be ready for construction in one year. There will likely be legal challenges to the project as well, which would delay any construction. Even if we assume that the cost of the proposed project is \$1.8 billion (which, as we have already explained, is a serious underestimate), the yearly inflation will be astronomical.

Seventh, the costs of wetland mitigation are not included in this project at all. Given the proposed impacts to wetlands, these mitigation costs will likely be high, and must be added to the project. Moreover, if MassDOT continues to claim benefits from the Corridor Plan, it must explain where the money will come from to pay for preservation of Priority protection Areas. Unless MassDOT has a way to pay for this mitigation, it should not assume that it is going to happen.

Finally, and most importantly, there is absolutely no mention of where the money will come from to build this project. Although the Commonwealth and the nation seem to be recovering slowly from the recession, it is completely unclear as to where the Commonwealth will get the billions of dollars necessary to construct this project. Because the source of funding may itself have impacts relevant to the Corps' public interest review (e.g., taxes taken from areas around new municipal stations, gas taxes, etc.), the source of funding must be revealed.

The Secretary, in his issuance of the MEPA certificate in April of 2009, stated:

The Project summary should include a discussion of the project's purpose and need and associated goals and objectives. The project description and assessment of impacts should include construction and operational phases, and address all components of the project alternatives including the rail alignment, stations and layover facilities, substations and other improvements necessary for the construction, maintenance and operation of each alternative and Transit-Oriented Development (TOD) areas. ....As discussed in the ENF, cost is one of the key factors being used by EOT in selection of alternatives. The DEIR should include a detailed analysis of costs, including construction, operation and mitigation costs, for each of the alternatives. EOT is also basing its elimination and selection of alternatives on the basis of smart growth opportunities along the corridor. The DEIR should include an estimated cost per rider based on the results of the ridership analysis for each alternative (see

http://www.southcoastrail.com/downloads/ENF\_Secretary\_Cetrificate.pdf)

The Corps and MEPA must require that the SDEIS/SDEIR contain a detailed and honest cost estimate of the project that includes the costs of the entire capital expenditure. Moreover, this new estimate must justify the escalation rate, and include realistic inflation rates for construction materials, electricity and fuel. In addition, the construction start date must be more realistic. Finally, the SDEIS/SDEIR must contain mitigation costs. A realistic cost estimate is necessary in order to accurately calculate cost per rider, cost per Vehicle Mile Traveled (VMT) reduction, and for a true comparison of alternatives.

**Vehicle Miles Traveled (VMT) analysis is inaccurate**. There appear to be many flaws associated with the VMT analysis, which goes to the heart of the alleged greenhouse gas benefits.

First, on p. 4.1-7, the DEIS/DEIR states:

CTPS conducted 2030 Build model runs for each alternative by including the new bus or rail service as a travel option. The model was used to quantify the number of vehicle trips diverted from regional roadways to local roadways because of drivers and riders who change mode from passenger car to transit service. Trip generation for each station was based on projected park-and-ride (i.e., driving & parking at the station) and drop-off (i.e., being dropped off or picked up by another driver) ridership. The analyses of impacts on traffic operations are based on the peak hour park-and-ride and drop-off ridership projections for each station. The park-and-ride ridership was divided by a vehicle occupancy rate (VOR) of 1.05 to calculate the number of park-and-ride vehicles entering and exiting the stations. Two vehicle trips were assumed for each drop-off rider: one entering and one exiting the proposed station.

When someone is dropped off at a station, there are two vehicle trips each *morning*: one dropping the person off, then the vehicle returning home or continuing on somewhere else. This analysis fails to include how the person gets home from the train station at night. It seems to

PEER that when someone is dropped off at a train station to go to work, that person also needs to get picked up every evening, resulting in *four* vehicle trips, not two.

**Impacts associated with using the line for freight must be revealed.** The DEIS/DEIR gives conflicting information as to whether freight will be carried on this line, and if so, the impacts of such freight. Page 3-63 of the DEIS/DEIR states:

Freight service on alignments of rail alternatives that would include new track infrastructure or abandoned right-of-way, including Stoughton (beyond existing Stoughton station), Attleboro Bypass and Whittenton alternatives, would be restricted to standard freight size and weight.

## The Corridor Plan states:

The South Coast region has a modest freight rail market, and some businesses do rely on freight service. EOT is developing a statewide freight rail plan that identifies opportunities for future freight service in the corridor. In general, this region is not expected to experience significant growth in freight for a variety of reasons. The South Coast Rail planning process has been coordinated with the state freight process and the commuter rail project will be designed in a way so as not to preclude future freight opportunities should they arise. Any future freight service would, of course, be required to undergo separate environmental review and permitting.

Finally, p. 373 of Appendix 8, comment N-025-035 states:

Expansion of freight service is not currently planned for the Stoughton line segment between Stoughton and Taunton. Any future freight service on the MBTA's right-of-way would be required to undergo MEPA review and to address potential effects on public water supplies.

The SDEIS/SDEIR must reveal whether freight is going to use the line, and if so, the frequency, types of freight, and impacts. Merely stating that future freight service would have to undergo MEPA review is totally inadequate for purposes of this analysis. But for the proposed new line, freight could not run through this location. If freight is anticipated as reasonably foreseeable activity, the impacts must be revealed in order to assess cumulative impacts to the resources, including public drinking water.

## The impacts associated with MassDOT's preferred alternative are severely understated.

The DEIS/DEIR is disingenuous at best about the impacts associated with its preferred alternative. Page 3-145 of the DEIS/DEIR states that the alternatives are compared "based on five adverse environmental impacts:" 1) The amount of permanent wetland loss (in acres) and wetland loss in ACECs; 2) The number of acres of protected open space that would be directly impacted, acres of land acquisition and municipal tax loss; 3) The number of acres of protected public water supply lands (active and inactive Mapped Wellhead Zone 1) that would be directly impacted; 4) The amount of noise impacts; and 5) The number of acres of mapped Priority Habitat (state-listed rare species) that would be lost (edge and interior habitat). As PEER and

other groups have been saying for years, MassDOT must look beyond the direct impacts. PEER cannot count the number of times that we cautioned that even if direct impacts are low, indirect impacts may be astronomical.

In fact, MassDOT's own Conservation Assessment and Prioritization System (CAPS) analysis, buried in the Appendices, illustrates this nicely. On page 7 of the CAPS analysis, it states:

Overall the two routes through the Hockomock Swamp showed the greatest estimated loss in ecological integrity...

As we have been saying since the beginning, the fragmentation impacts of the Hockomock Swamp are extremely high. So, although the alleged direct impacts associated with the Stoughton Alternative appear lower than some of the other alternatives, this does not mean that the Stoughton Alternative is the LEDPA.

PEER also believes that the DEIS/DEIR downplays the effects of clearing a 40 to 100 foot swath through the Hockomock canopy. Page 4.14-60 of the DEIS/DEIR cites a 1993 study, stating that:

Where the proposed rail will require the clearing of a corridor through a forested area, the potential increase in ambient light levels in the understory canopy will be reduced by the shape and orientation of the clearing. The relatively narrow canopy gap and its northsouth orientation will limit the potential increase in ambient light within the understory area. Accordingly, the impacts associated with the clearing are considerably less than would be expected in most clear cut/forest edge conditions and would be more similar to a north-facing exposed cut. The study found no significant edge microclimate effects in northern facing cuts. The impact analysis conservatively assumes that increased light, wind and temperature are likely to occur within 30 feet of the cleared edge of the rightof-way, based on the research cited above. The most likely potential effect of this physical change would be to increase the growth rates of the shrubs currently growing in this zone, resulting in a more dense shrub layer along the edge. Increased drying of the leaf litter, if this effect occurred, may affect recruitment of shrub and herbaceous species by affecting seed germination and seedling establishment. The anticipated effect would be that the existing sweet pepperbush (Clethra alnifolia) and greenbrier (Smilax rotundifolia) currently found along the edges of the railbed in wetland areas would respond with enhanced growth and fill the edge gap. These species have responded in this way to increased light along the edges of the

Hockomock Swamp created by Route 138, and in the Assonet Cedar Swamp along the edges of the New Bedford Main Line...The temporary nature of the alteration reduces the potential impacts associated with the proposed corridor clearing. An increase in sunlight adjacent to the rail corridor will result in an increase in adventitious limb growth and increased development of the shrub layer. "Closed edges" as defined by Matlack are edges of older clear-cuts where adventitious limbs and shrub growth have closed or partially closed the gaps created by clear-cuts. Once this gap in the canopy is closed, measurable differences in light, temperature, humidity, vapor pressure density and soil moisture are no longer observed.

First, PEER strongly disagrees with the characterization that a 40 to 100 foot cut through the center of the Hockomock Swamp, and then construction of an active rail line, is "temporary in nature." Second, PEER was under the impression that the canopy would not be allowed to close; rather, that the vegetation had to be kept clear of the rail line, particularly if it were electric. The SDEIS/SDEIR should clarify what the Commonwealth plans to do with regard to the vegetative growth next to the line. If indeed the canopy is allowed to grow back, the SDEIS/SDEIR should disclose how long this will take to reach pre-construction conditions, if ever.

PEER would also like to direct MassDOT and the Corps to read the article *Overview of Transportation Impacts on Wildlife Movement and Populations* (see Jackson, S.D. 2000. Overview of Transportation Impacts on Wildlife Movement and Populations. Pp. 7-20 In Messmer, T.A. and B. West, (eds) Wildlife and Highways: Seeking Solutions to an Ecological and Socio-economic Dilemma. The Wildlife Society). In particular, we would like to draw your attention to page 3, which states, "As long linear features on the landscape, railways, roads and highways have impacts on wildlife and wildlife habitat that are disproportionate to the area of land that they occupy" (see also *Effect of rail on wildlife*,

<u>http://www.wildlandscpr.org/node/221</u>). PEER is disturbed that the DEIS/DEIR cites to one study that is almost 20 years old to support the Commonwealth's contention that the impacts through the Hockomock will be minimal. This is certainly contrary to using the best science available, and misleading to the reader.

The DEIS/DEIR is also misleading in other places. For example, Page 4.14-100 states:

The Stoughton and Whittenton Alternatives would reduce connectivity in the Hockomock Swamp with a gradient ranging from major impacts close to the rail line to negligible impacts at greater distances, compared to the existing connectedness (Figure 4.14-27). Without a trestle (Figure 4.14-28), these alternatives would result in substantial losses in connectivity in the Hockomock Swamp east of the rail line, between the Raynham dog track and Foundry Street and between the rail line and Route 138, and in some areas west of the rail line. *Moderate impacts would extend through much of the Hockomock, including areas east of Route 138. These impacts would be substantially reduced by the trestle (Figure 4.14-29), with major losses restricted to a smaller area east of the rail line and north of the dog track. Impacts would also extend over a smaller area than the "no-trestle" option* (emphasis added).

However, when you examine Figure 4.14-29 (see below), you can see that contrary to the description in the DEIS/DEIR, the loss of connectedness is major east of the rail line, not moderate. The SDEIS/SDEIR should include the figures next to the text, and describe them accurately.

Page 1-35 of DEIS/DEIR states that:

Losses of wetland habitat are similar for the Rapid Bus and Attleboro Alternatives (20.3 to 21.5 acres), and they would result in the largest impacts to vernal pool wetland habitat (2.3 to 5.4 acres). The Stoughton and Whittenton Alternatives would have less wetland

loss (10.3 to 11.9 acres), and the least impacts to vernal pool wetland habitat (1.0 to 1.8 acres).

However, again, MassDOT misrepresents the true impacts by not taking into account the 55+ acres of supporting vernal pool upland habitat that would be lost (see Table 4.14-28). The SDEIS/SDEIR should present direct and indirect impacts together, in order to allow the reader to properly assess the true impacts associated with each alternative.



Another example of where the DEIS/DEIR is disingenuous is on page 4.15-47, which states:

Reconstruction of the track of the former Stoughton line would result in habitat loss which *could* lead to habitat fragmentation and loss of genetic diversity. However, the loss of a small percentage of habitat is not considered significant given the large area of suitable habitat for these species in, and in the vicinity of, the project area (emphasis added).

The qualifiers used in statements such as these appear to be an attempt to minimize the known impacts of the preferred alternative. As stated above, the CAPS analysis found that the Stoughton routes would result in the "greatest estimated loss in ecological integrity" of all the alternatives. Stating things like habitat fragmentation "could" result, but is not considered significant makes a mockery of ecology and wildlife biology.

The DEIS/DEIR also downplays water quality impacts. Page 4.14-61 states, "[t]he rail or highway alternatives are not anticipated to generate non-point source discharges of pollutants to surface waters, and therefore are not considered to have an adverse impact on aquatic communities." However, page 4.17-34 states, "Most potential rail contaminants are due to the train traffic on the rails, which may result in hazardous contamination from spills, drips, or exhaust." PEER has provided its water quality analysis of vernal pools along an active rail line compared to the vernal pools in the Hockomock several times. This analysis demonstrates that non-point source discharges from rail lines do, in fact, significantly affect water quality of vernal pools. A bald statement that the impacts do not occur is not sufficient to make scientific studies disappear. The SDEIS/SDEIR must investigate fully the impacts of rail on the water quality of vernal pools and other waters.

Page 4.14-84 of the DEIS states that the canopy gap for the length of the trestle will be 40', but later on that same page it says the canopy gap will be 40 - 80' for a single track, including through some Atlantic White Cedar swamp, and 60 - 100' for a double track. Specifically, it states:

Removing the forest canopy on the railbed within the Hockomock Swamp ACEC study area could potentially alter the physical conditions (light, wind, temperature) in adjacent forested areas. No adverse effects are anticipated to herbaceous or shrub-dominated communities, since there would be no change in the light, wind or temperature regimes. The canopy gap is anticipated to be approximately 40 feet in width for the length of the trestle, and the resulting forest edges will face east and west.....Reconstructing the railroad track system through the Hockomock Swamp ACEC will increase the width of the canopy gap over the railbed to between 40 and 80 feet wide in areas with single track (through the Hockomock and Pine Swamps) and between 60 and 100 feet wide in areas with double track (north of North Easton station and a segment south of the trestle near Raynham Place station), and will require the removal of existing vegetation on the elevated railbed. This linear gap, extending through natural communities, which include Atlantic white cedar swamp and red maple swamp, may allow invasive exotic plant species to colonize the railbed or areas adjacent to the railbed. Again, the impacts to the Hockomock should be clear and unambiguous, and this includes a specific width of clearing. Moreover, statements such as "No adverse effects are anticipated..." are unscientific, counterintuitive, and indicate a clear bias. These statements should be removed form this supposedly factual document.

The trestle through the Hockomock is a bridge, and cannot be built without substantially more impacts than what is revealed in the DEIS/DEIR. The MBTA defines a bridge as "any structure with total bridge length (sum of all spans) greater than 20 feet" (http://www.mbta.com/uploadedfiles/Documents/Schedules\_and\_Maps/Commuter\_Rail/FINAL %20031009\_Vol1Sec3\_Bridges\_March-2009.pdf). The trestle, is therefore a bridge. In fact, Page 3-74 of the DEIS/DEIR states:

By far the largest new bridge would be the trestle through the Hockomock Swamp with about 284 spans. It would be about 8500 feet long and 24 feet wide at the level of the bridge deck, with a minimum 3 feet clearance above grade and incidental excavations to allow large mammal passage. Figure 3.2-19 shows the typical cross section of the trestle through the Hockomock Swamp.

Page 3.2 of the MBTA document shows a diagram of a "one track of two rails" of 56.2' for *each* rail track, yet the figures in the DEIS/DEIR show the single track trestle through the Hockomock as either 20' (Figure 3.2-19) or 28' (figure 4.15-9) wide. MassDOT should explain how MBTA design standards for bridges require 56.2', yet the bridge structure through the Hockomock will only be 20' to 28'. The SDEIS/SDEIR must include a design of the trestle, based on an actual survey, to adequately depict impacts to the Hockomock Swamp. The not to scale drawings included in the DEIS/DEIR are completely inadequate.

PEER also does not understand how the proposed trestle through the Hockomock could be built and/or maintained without a much wider right-of-way, or without access roads leading into the wetland. The DEIS/DEIR describes the construction sequence but does not discuss how the heavy equipment will get into the swamp, how it will operate within the right-of-way, and how this trestle will be maintained once it is built. It is inconceivable that the trestle would not require some kind of access to it, and the impacts associated with this access must be disclosed.

The DEIS/DEIR also does not appear to disclose the width of the right-of-way through the Hockomock or in other locations. PEER contacted Kristina Egan of MassDOT, and was told that the right-of-way through the Hockomcok was 60°. That information should be included in the SDEIS/SDEIR, and a survey should be done to ensure that the right-of-way is consistent in width throughout the area. According to the DEIS/DEIR, the width of the right-of-way varies: page 3-102 states, "The construction method would be kept consistent throughout the corridor, even in sections where the right-of-way and embankment widens." However, the specific width, varying or not, is nowhere to be found in the DEIS/DEIR.

Article 97 issues are not adequately discussed in the DEIS/DEIR. It is clear that the preferred route for the rail line would invoke Article 97. Pages 4.10-26 to 4.10-27 state:

The estimated area of protected open space and publicly owned parcels in the ACEC

required for constructing the Stoughton Electric Alternative north of the Southern Triangle is listed in Table 4.10-9and shown in Figures 4.10-7a-e. This area would be used for the widened right-of-way necessary for the railroad improvements or construction, and for a traction power facility...The two entries for Easton in Table 4.10-9 represent one 0.94-acre parcel, for a traction power facility. The site is entirely within the Hockomock Swamp ACEC. One of these parcels is designated for conservation purposes, and would therefore be considered Article 97 land subject to the provisions of the EEA's Article 97 Land Disposition Policy.

According to the EEA Policy, Article 97 land disposition cannot occur unless "exceptional circumstances" exist. In order for a determination of "exceptional circumstances" to be made, the following conditions, among others, must be met: 1) no feasible and substantially equivalent alternatives exist and 2) The disposition of the subject parcel and its proposed use do not destroy or threaten a unique or significant resource. MassDOT claims that because the area proposed to be converted "represents a very small proportion of the overall protected area," no unique or significant resources would be threatened (see page 4.10-60). PEER disagrees. Article 97 should be taken very seriously, and public land should not be given away lightly. Table 4.2-9 of the DEIS/DEIR shows 2.57 acres of public land being taken, in a total of 8 parcels. PEER believes that construction of the rail through the Hockomock would involve even more public land being taken from the Division of Fisheries and Wildlife (DFW). We do not believe that the trestle can be constructed within the confines of the right-of-way; nor do we believe that the trestle can be maintained without additional impacts to DFW land. AS such, we believe that the SDEIS/SDEIR should more accurately reflect both the amount and the impact of such takings, and the likelihood that the legislature would approve such a taking, given the enormous cost of this project.

**Implementation of the Corridor Plan is highly speculative and will cost additional monies that are not disclosed.** Page 4.3-24 of the DEIS/DEIR states that the Corridor Plan provides "an opportunity to organize new growth around stations and direct it away from sensitive areas of ecological value." Unfortunately, the DEIS/DEIR does not disclose either the source of funding or the legal mechanisms to accomplish this. In fact, pages 4.3-56 and 57 concede that, "Implementation of Smart Growth measures, as proposed by MassDOT, is subject to local decision making and may thus vary among communities targeted for Smart Growth…" Despite this uncertainty, the DEIS/DEIR proceeds to assume that "conservatively established smart growth goals would be achieved by the Build Year and development would be distributed accordingly. Actual development with the implementation of Smart Growth Plan, so that its impacts could be assessed relative to those without Smart Growth measures."

Page 3-144 of the DEIS/DEIR states:

As stated in the South Coast Rail Economic Development and Land Use Corridor Plan, commuter rail service to the South Coast will generate nearly \$500 million in new economic activity every year. This is new growth by the year 2030 that would not occur without the new infrastructure. The rail connection is projected to create between 3,500

and 3,800 net new jobs within the Commonwealth by 2030-about two-thirds of which would locate in the South Coast region with the remaining third in Boston Cambridge and other communities outside the region. The Corridor Plan would be implemented by MassDOT throughout the 31-community region regardless of which alternative was selected, so there would be no substantive difference among alternatives with regard to the majority of smart growth benefits. These benefits include protecting the Priority Preservation Areas, and concentrating development in the Priority Development Areas. The principal differences among the alternatives would be with regard to their ability to promote concentrated development (transit-oriented development) at station areas. Transit-oriented development (or redevelopment), as illustrated by the concepts included in the Corridor Plan report, would include mixed high-density residential, retail, and commercial/office development at certain station locations. The benefits of this transitoriented development would be to increase local tax revenues; decrease vehicle miles traveled, and decrease Greenhouse Gas emissions. As outlined in the Corridor Plan, transit oriented development would be likely as new development or re-development at the Downtown Taunton, Taunton, Freetown, Fall River Depot, King's Highway, Whale's Tooth, Easton Village, and Raynham Place stations.

Even the Secretary's 2009 MEPA certificate requested additional information:

The DEIR should include an assessment of costs associated with implementation of the smart growth aspects of the project for each alternative, to fully understand the overall costs and rationale for selection of alternatives. The DEIR should address how the proposed rail and/or bus routes, and associated Land Use and Economic Development Corridor Plan will be financed.

It is unrealistic – not to mention deceitful - to assume that these Smart Growth measures will be implemented. The SDEIS/SDEIR must remove these assumptions in all of its analyses unless and until both a funding mechanism and legal mechanisms are developed and assured.

**The mitigation discussion is wholly inadequate**. As we stated above, mitigation costs are not taken into account in the costs of this project. However, the mitigation discussion, such as it is, is flawed in other ways as well. Specifically, the mitigation does not comply with the requests in the 2009 MEPA certificate. The Secretary stated:

The DEIR should also include a comprehensive mitigation plan for any unavoidable impacts, explain why these impacts are unavoidable, and demonstrate how impacts will be avoided and minimized to the maximum extent feasible. The mitigation plan should address permanent and temporary impacts and construction-related impacts...EOT should consult with MassDEP to discuss any concerns regarding proposed wetlands mitigation sites and to discuss appropriate protective measures and mitigation for vernal pools....The DEIR should describe proposed wetlands mitigation areas and identify locations on maps and site plans. As noted in the MassDEP comment letter, there is flexibility within the variance process to consolidate some mitigation into more centralized areas rather than individual mitigation sites at each impact location. The DEIR should describe how mitigation sites will be designed to preserve critical functions

such as flood storage volume at each locality. The DEIR should discuss ownership of the sites and identify any proposed to be taken by eminent domain. The DEIR should provide details on any replication proposed including the timeframe anticipated and the methods proposed to achieve successful replication. The DEIR should include a monitoring and contingency plan to ensure success of mitigation. The ENF indicates that EOT will rely on compensatory wetland mitigation areas referenced in the 2002 New Bedford Fall River Commuter Rail FEIR, which identified more than 50 acres of compensatory wetlands. The DEIR should use the FEIR Certificate as a starting point for developing wetlands mitigation commitments, as recommended by MassDEP, and should specifically identify the proposed mitigation measures and ratios associated with each of the resource areas.

The DEIS/DEIR did not contain maps, locations of mitigation sites, or costs associated with mitigation. Did MassDOT confer with MassDEP as requested? If so, that information should be provided in the SDEIS/SDEIR. The discussion of mitigation in the DEIS/DEIR was so minimal, PEER is unclear how MassDOT even proposes to mitigate for the massive impacts proposed, and how it will pay for such mitigation. All of this information is necessary for the resource agencies to make an informed decision on permitting.

Alleged economic benefits of the proposed train are unsubstantiated. The DEIS/DEIR claims that the proposed project will bring all sorts of wonderful economic benefits to the South Coast region (whatever that may be), and help the cities of Fall River and New Bedford. These claims are stated baldly, with no substantiation. Moreover, a quick review of other depressed cities, and their unemployment rates before and after the commuter rail arrived in their towsn, does not show miraculous economic recoveries. For example, the City of Brockton got the commuter rail in 1997. As you can see from the graph below, Brockton's unemployment rat tracks that of the state fo Massachusetts, and does not appear to change with the advent of the rail.



(from Jan 1990 to Sep 2010) (in percent)



Similarly, Worcester got the commuter rail in 1994. The same trends exist: the unemployment rate tracks that of the state.

Rather than assuming that the commuter rail will bring economic growth and employment to these cities, MassDOT must give us hard evidence that this will happen. The SDEIS/SDEIR should provide analyses of unemployment, education, job skills, language skills, etc., to determine the precise reasons for their economic woes. Simply claiming that the train is the silver bullet is not sufficient to warrant an expenditure of billions of dollars, and allow the destruction of such valuable natural resources.

**The Rapid Bus is the LEDPA**. It is abundantly clear to PEER that the Rapid Bus is the LEDPA. Although the ridership analysis and cost analysis are seriously flawed, it is apparent that the Rapid Bus has the least amount of impacts (zero loss of ecological integrity units, according to the CAPS analysis), is much cheaper, and will accomplish the basic project purpose. The DEIS/DEIR states on page 4.3-67, "The South Coast Rail Rapid Bus alternative will improve accessibility and mobility in the South Coast region, which in turn will stimulate additional economic activity in the region." Even if the Stoughton alternative were to be declared the LEDPA, it would cause or contribute to significant degradation of waters of the United States, and thus be unpermittable.

**Other errata and items that must be addressed in a SDEIS/SDEIR:** There are numerous other errata and unaddressed issues in the DEIS/DEIR which should be addressed in a Supplemental document. These include, but are not limited to:

• The analysis of climate change on page 3-142 does not take into account induced traffic.

<sup>(</sup>from Jan 1990 to Sep 2010) (in percent)

- In the land use chapter (pages 4.2-1 to 4.2-2), all discussion of noise receptors are humanrelated. There should be additional mention of the effects of noise on wildlife, interference with breeding calls, etc.
- The blue-spotted salamander population in the Hockomock is likely the pure, diploid population, which is very rare throughout New England. The Commonwealth should investigate this matter, and increase protection of the population if indeed it is the diploid one.
- Figure 3.2-6 shows that there is a section of privately owned track in Raynham. The SDEIS/SDEIR should disclose how this track will be obtained, and costs of obtaining this track must be disclosed and added to costs of the project.
- Page 4.3-6 uses property tax rates from 2005, showing, for example, that the property tax rate in Easton was \$7.45/\$1,000 Assessed Value. However, in Table 4.3-9 on p. 4.3-19, the DEIS/DEIR says the Easton 2005 tax rate is 10.69. The SDEIS/SDEIR should use consistent, and preferably correct, figures. Moreover, it should use up-to-date figures; the 2012 tax rates are already available for most towns and cities.
- Figure 4.2-5c, Tile 2 has a category for "undeveloped" land and "forest," yet the undeveloped land is mostly forested. This must be clarified;
- Page 4.3-22 discuss the "permanent impacts" of the proposed project, stating, "The potential long-term social and economic effects of the South Coast Rail alternatives include loss of property tax revenue for municipalities from the acquired privately owned parcels, displacement of existing businesses, residential displacement, fragmentation of neighborhoods or loss of continuity between neighborhoods and job creation related to the operation of the new service." This section should include noise impacts, quality of life, water quality, drinking water, and safety issues.
- Table 4.2-2 on page 4.2-6, states that 40.8% of Easton is "developable." It also states that, "For purposes of this analysis, developable land is defined as large parcels of land that could be developed into new subdivisions or new commercial/industrial properties or could be placed into permanent or limited open space protection." It is unlikely that this amount of land in Easton is indeed developable. The SDEIS/SDEIR should check this and other numbers, and disclose how these percentages were obtained.
- Figure 4.15-9 shows a trestle through "Hancock Swamp." Please clarify where this swamp is.
- Page 4.3-25 states, "Projections were also made for the four Rhode Island communities that are expected to have commuters utilizing the potential new transit service. Please clarify whether these riders are included in the ridership analysis, and/or the parking availability analysis.
- The DEIS/DEIR states that the trestle will be 1.6 miles in length (page 4.10-26), while Appendix 8 says 1.8 miles (page 377, comment N-025-048). Pick one and stick with it.

**Conclusion.** Given the short amount of time to review this massive document, together with its many errors and shortcomings, PEER is positive that we did not cover all the ground we should have. However, it is abundantly clear that a Supplemental DEIS/DEIR needs to be done, with an adequate amount of time given for its review. We are also absolutely sure that the Stoughton Alternative is not the LEDPA, and even if it were, it is not permittable. We urge the Corps and MEPA to do their duties and require adequate and truthful information before they make a determination on this project.

Sincerely,

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