9.0 SECONDARY AND CUMULATIVE EFFECTS

9.1 Secondary Development Effects

A. Draft EIS Comments

State Agency Comments

Need for Further Explanation of Environmental Effects

State Comment: Land Use and Socioeconomic - Technical Report (June 2002)*. Page 7 - Purpose - "By providing a high-capacity transportation choice for travelers, the proposed project would be better able to meet the anticipated increases in travel demand, reduce the projected use of existing facilities, and help reduce further congestion in the corridor." This statement would be true if the construction of rail transit in the corridor did not also allow for increased densities. However, the comprehensive plans within the local government provide for higher densities with the introduction of rail transit. Therefore, any reduction in auto travel due to the availability of rail transit is exceeded by the increase in demand resulting from the increased densities, and the anticipated benefits are lost. "Moreover, the ability of the proposed improvements to increase person-moving capacity over long distances with fewer numbers of vehicles, should help minimize future increases in vehicle miles traveled in the corridor and vehicle emissions.” This statement would be true if the construction of rail transit in the corridor did not also allow for increased densities. However, the comprehensive plans within the local government provide for higher densities with the introduction of rail transit. Therefore, any reduction in auto travel due to the availability of rail transit is exceeded by the increase in demand resulting from the increased densities, and the anticipated benefits are lost. In addition, because the proposed improvements only provide for increased transit opportunities in only the east-west direction, the increased travel demand in the north-south directions due to the increased densities is not even partially reduced by the proposed construction, again reducing the anticipated benefits. (0421, 0421-A –4)


- Page 5 - Need - “The projected increase in residents and job opportunities, will result in markedly higher traffic volumes on highways and streets in the Dulles Corridor and throughout the region.”
- “Given that the corridor transportation network currently experiences traffic volumes that meet or exceed the capacity of roadways and intersections, causing severe congestion, these increases in traffic volumes are only expected to worsen conditions.”
- “Because the existing transit system in the Dulles Corridor operates on the congested roadways described above, it generally offers a poor alternative to auto travel.”
- While these are valid considerations, there is no information as to how this impact will be mitigated other than a mention of the increase in rail transit opportunities with the Metro rail Alternative. While it is recognized that rail would provide some mitigation for congested auto travel in the east-west direction, in this instance the increase in land use densities allowed with the provision of rail transit would result in an increase in traffic that is greater than any reduction that which might be provided by rail patronage. Additionally, it should be anticipated that there will be no reduction in congestion, but an increase in congestion, in the north-south direction. (0421, 0421-A –6)

Response: Fairfax and Loudoun counties govern land use and have recently conducted extensive comprehensive planning in advent of this Project. As the commenter states, the Fairfax County and Loudoun County comprehensive plans allow more density to occur at the Metrorail station areas, if the Metrorail Extension is funded and built. These policies would provide for higher levels of mixed-use, pedestrian-friendly development in these areas than would otherwise exist without Metrorail in the corridor. The primary intent of these policies is to focus future development into patterns that will increase the number of viable travel options available to corridor residents and employees, including transit, walking, and bicycling. Without the Project, the same level of development would occur in the counties; however, it would be in a dispersed...
pattern of development that is highly auto-oriented, leaving people with few travel choices and resulting in widespread congestion.

The commenter is correct in stating that the increased development in station areas would attract an increased number of vehicle trips; however, this change is consistent with local goals and comprehensive plans. These goals include promoting overall mobility by providing travelers with choices. Even though many people will still use a car in a transit-oriented development, the density allows for the cost-effective provision of other modes at reasonable service frequencies, thus providing people a choice. The clustered development at Metrorail stations in the Dulles Corridor would foster a higher mode split for transit (see Chapter 6 of the Final EIS for an analysis of the effects of the Project on transportation). Moreover, the increase in densities combined with the transit investments, results in a greater number of transit trips, pedestrian trips, and non-single-occupant vehicle trips in the corridor. Therefore, the new, transit-oriented urban form will help to provide a greater number of travel choices, increasing overall mobility in the corridor, the counties, and the region.

The Metrorail extension and related transit improvements will not only provide for increased transit opportunities in the east-west direction. Many of the feeder services that are included, as part of the alternatives would provide improved transit service for north-south travel to and from the station areas as well. Because the planned development would be within walking distance of the new stations, feeder services that connect to the station would also provide access to this development. Moreover, because in many cases the proposed feeder services would operate more frequently than existing transit service, they would provide improved transit opportunities in the north-south direction.

The density increases associated with implementation of the Dulles Corridor Rapid Transit Project also create better opportunities for future transit improvements geared toward this north-south demand. The focused development pattern (rather than a dispersed pattern) creates opportunities for “point-to-point” express services from elsewhere in the corridor. For example, say the new development along the Dulles Toll Road attracts a large number of travelers from the Centreville area. A new express service could be developed that operates from the Centreville Park-and-Ride to the concentrated destinations along the Toll Road. Because the park-and-ride lot concentrates the trip origins at one end, and the focused development concentrates destinations at the other end, the express service can efficiently and cost effectively service multiple origins and destinations. In a dispersed landscape, on the other hand, it is not possible to provide frequent and cost-effective service that serves multiple origins and destinations.

Mitigation for traffic-related impacts around proposed station areas and for long-term effects on traffic in the vicinity of the proposed stations is identified in Chapter 6 of the Final EIS. In addition, as stated in Chapter 9 of the Final EIS, any secondary effects to the built and natural environment resulting from additional station area development would be mitigated through compliance with Fairfax and Loudoun Counties’ land use policies and development permitting processes. In the future, the counties may limit development at station areas if necessary to mitigate any associated impacts to the surrounding community.

Local Agency Comments

Consistency Between Transportation and Land Use Planning

Local Comment: The perpetual issue of how to integrate transportation planning with land use planning needs to be looked at more closely than has been done. Put simply, are Metro and Fairfax County repeating the same mistake in putting rail down the median strip of the Dulles access road that they made in putting it down the median strip of I-66? We know that separating the rail line from where people actually live and work, resulting in building a chain of lonely, isolated, ugly parking facilities connected to a metro station, is that the type of development we want for the Dulles corridor? Is the proposed median alignment likely to reduce or increase automobile traffic? The Fairfax County board of supervisors, of
course, last year attempted at least a partial solution to these issues by approving measures to encourage denser development around the metro stations. We applaud the goal. We wonder did they go far enough. (0151, 0151-T –5)

**Local Comment:** The perpetually mishandled issue of how to integrate transportation planning with land use planning needs to be looked at more closely than it has been. Put simply, are Metro and Fairfax County repeating the same mistake in putting rail down the median strip of the Dulles Access road that they made in putting it down the median strip of I-66? We know that separating the rail line from where people actually live and work resulted in building a chain of lonely, isolated, ugly parking facilities connected to a Metro station. Is that the type of development we want for the Dulles Corridor? (0151, 0297-E –6)

**Local Comment:** In sum, is there an integrated land use transportation master plan? We would like to see more evidence that the overall impact of the project has been fully considered. (0151, 0151-T –8), (0151, 0297-E –13)

**Response:** Each locality has adopted land use plans that determine the actual level of development and support transit-oriented development at the Metrorail station areas as a method to integrate land use and transportation. All current land use plans and zoning ordinances were reviewed for the Final EIS, as required. The adopted plans that were assessed as part of this study include: the Fairfax County Transportation Plan; the Fairfax County Comprehensive Plan, as amended; the Loudoun County Countywide Transportation Plan; and the Loudoun County Revised General Plan. In addition, several regional plans and initiatives were also evaluated. Section 1.3 and Section 3.1 of the Final EIS provide a discussion of each of these plans as they relate to this Project.

The median of the Dulles International Airport Access Highway (DIAAH) has been studied as a location for rapid transit since that roadway was constructed and the airport dedicated the median for that use. As shown in Figure 1.4-2 of the Final EIS, the major activity centers of Reston, Herndon, and Dulles Corner are bisected by the DIAAH. Local land use plans call for higher-intensity office, retail, and residential development on parcels in the existing and emerging activity centers these areas. Further, past experience with the Metrorail system has demonstrated that transit investment has had positive effects on residential and commercial development near the stations. Chapter 5 of the Final EIS provides a discussion of the station area planning guidelines, characteristics and development potential. Potential impacts to automobile traffic as a result of the Project are presented in Chapter 6.

**Local Comment:** While we may be critical of the EIS, we remain firmly committed to public transportation and recognize and accept that it is critical to the elimination of air pollution, minimization of vehicular transportation on city streets and in our neighborhoods. Towards this end, Section 10.3 of the Draft EIS, entitled "Issues to be Resolved," should be amended to include the Falls Church City issues raised herein. (0122, 0122-A –30), (0122, 0164-T –11)

**Response:** The EIS fully document the potential significant effects of the No-Build and Build Alternatives. The Project Team initiated meetings with the City of Falls Church during the course of the National Environmental Policy Act (NEPA) process (see Chapter 11 of the Final EIS for specific dates) to more fully understand the concerns and position of the City as they relate to the Project and the EIS’ Specific issues raised at the meetings and where they are addressed in the Final EIS are as follows:

- Parking – Chapters 3, 4, and 6;
- Pedestrian access and overpasses – Chapter 5
- Land use and development close to the proposed station locations – Chapters 3 5;
- Station location and alignment alternatives – Chapter 2;
- Impacts (e.g. noise levels, pollution, property values, congestion, and crime) – Chapters 3, 4, and 5;
• Coordination with other transit studies – Chapters 1 and 3;
• Service to Tysons Corner Center – Chapter 2;
• Support for and opposition to aerial alignments – Appendix H;
• Cost and funding – Chapter 8;
• Operational flexibility – Chapter 2;
• Enhanced bus service – Chapter 2.

Public Comments

Need to Plan the Project with a Regional, Long-Term Focus

Public Comment: Likewise, in addition to the many virtues associated with the advent of a sophisticated transit system, there will be additional automobile traffic that must be accommodated. More people clustered in transit impact areas will generate more public health, safety, educational, recreational, and environmental challenges. Public officials must begin to think in terms of an urban life style here, and not just in traditional suburban terms. The transit system can generate many social and economic advantages, but we cannot assume that we can meet the associated challenges with local government business as usual. Let’s plan ahead to fully utilize the opportunities created and meet the associated challenges of a more urban community related to a greatly improved transit system. (0088, 0211-M –19)

Response: As part of the NEPA process, impacts associated with safety, recreational, and environmental challenges were addressed in the Draft EIS, Supplemental Draft EIS and Final EIS (see Chapters 3, 4, and 5). Chapter 9 of the Final EIS also presents an analysis of the secondary and cumulative effects of the two Build Alternatives and references the need to provide additional public services if the local governments approve additional development in the Metrorail station areas. Public health was not specifically evaluated in the Final EIS; however, there are air quality standards established in the Federal Clean Air Act to protect public health. Section 4.6 presents the results of an air quality analysis that was completed as part of this Project.

Secondary Benefits of Project

Public Comment: Secondary travel effects. I should note that in the way back of a traffic study appendix on one of the technical appendices, they did an examination of what having mixed use would do in the Reston area. And when you do that, you can get up to as many as 45 percent more new transit riders. The benefits of mixed use are great. (0141, 0141-T –6)

Response: Comment noted. The Project’s ridership forecasts are based on regionally adopted population and employment forecasts for the opening and horizon years. The density bonuses associated with the Metrorail Extension are not part of these regionally adopted forecasts and therefore were not calculated as part of the demand forecasting process for the Supplemental Draft EIS and Final EIS. The impacts of congestion due to density bonuses was included in Chapter 9 of the Draft EIS and the Travel Demand Forecasting Methodology and Results Technical Report (June 2002). Chapter 5 of the Final EIS does present an analysis of the potential effects of increasing densities on the level of development as a result of the two Build Alternatives. The effects of implementing density bonuses in the corridor at Metrorail station areas is also quantified and presented in Table 5.3-1. In addition, density bonuses were included in the analysis of secondary development effects that is presented in Chapter 9 of the Final EIS in relation to traffic. This analysis was included in the Final EIS in order to address comments about the need to quantify the potential effects of increased density on traffic at Metrorail station areas.

Benefits to Non-Motorized Travel

Public Comment: You are also going to be able to increase the number of walking and bicycling trips overall. This was included into the report. In other words, not just going to the metro station, people will be able to walk to these activities because they are going to be better planned and in close proximity. Now
it's kind of difficult, although Reston is a leader in bicycles and trails, but this kind of development would encourage more of that. (0141, 0167-T –5)

Response: A discussion of pedestrian and bicycle impacts with regard to station area development is also provided in Chapters 3, 5, and 9 of the Final EIS.

Station Area Environmental Effects

Public Comment: And eight, transit-oriented land use plans have been adopted by the local governments for all the proposed rail stations, and the traffic impacts were studied for the Tysons and Reston and Herndon plans, and they do not overburden the surrounding roadways. (0144, 0144-T –9)

Response: The land use plans of each community affected by the Project were assessed and summarized in Chapters 1 and 3 of the Final EIS. In addition, traffic impacts associated with the station areas were addressed in Chapters 6 and 9. Localized traffic congestion is projected at the Metrorail stations areas. The actual level of congestion, though, can be mitigated through the site development process controlled by local government. Mitigation measures for traffic impacts are provided in Chapter 6.

Public Comment: We have concerns about proposals for as much as 16 million square feet of commercial development at the end statement, what is called Moorefield station. While we support transit-oriented development, this is overkill, given the vast amount of land already available for commercial development, and this amount of office and commercial will prompt sprawl far out to the west. (0251, 0251-T –7)

Response: The actual level of development and implementation of any site-specific private development opportunities within the corridor is under the control of the local government. The Final EIS provides a general assessment of the potential for development surrounding stations as part of the effort to identify potential effects of the two Build Alternatives.

Clarification of Tysons Corner

Public Comment: There is a reference in the technical report for economic and secondary development that states that there can be a change in the character at Tysons West, and with all the Tysons alignments. The character of the area is auto-oriented and could convert into the future as many - as more density is allowed, once the transit station's construction. My question to WMATA is, what will be the changed character of Tysons Corner? (0147, 0147-T –6)

Response: The potential changes in character are described in Chapter 5 of the Final EIS. Land use compatibility and impacts to neighborhoods, community services, and community cohesion in the Tysons Corner area are also discussed in Chapter 3. In addition, the Fairfax County Comprehensive Plan includes language that supports pedestrian and transit-oriented design, including mixed-use developments connected to transit and accessible by foot on a network of sidewalks, trails, plazas, and courtyards and includes provisions for creating improved landscapes and gateways for Tysons. The actual implementation of these plans for the Tysons West area is under the jurisdiction of Fairfax County; it is difficult to project specific changes in relation to specific stations as their ultimate form is dependent on the local government and the development plans that they approve in the future.

Clarification of Transit-Oriented Development

Public Comment: On page 55 of the same report, it talks about some specific changes and it relates to the dense development, pedestrian amenities and mixed uses. It states that the transit corner could become more transit oriented. I guess my question is or my concern is I would like for it to say "would." On the other hand, does that also mean that it might not become more transit-oriented? We are concerned about the increase in traffic. (0147, 0147-T –7)
Response: The word “could” was used because the selection of the preferred alternative was pending at the time of the Draft EIS. It is an objective of this Project to provide stations that are compatible with the character of the surrounding neighborhoods and encourage transit use. In addition, density bonuses and transit-oriented development plans are tied to implementation of Metrorail through the core of Tysons. Summaries of area transit-oriented plans assessed as part of the Final EIS are presented in Chapters 1 and 3.

More Use of Illustrations

Public Comment: We have some concerns about the DEIS. We would like greater attention directed to illustrating, perhaps through alternative development scenarios, the impact of generating greater density near the stations, especially Reston Parkway and Wiehle Avenue. (0188, 0188-T –2) (0188, 0217-M –2)

Response: The actual implementation of greater densities for the Reston Parkway and Wiehle Avenue station areas is under the jurisdiction of Fairfax County. It is difficult to project specific changes in relation to specific stations, as their ultimate form is dependent on approval by the local jurisdiction. The potential change in development character in the corridor is assessed and quantified in Chapter 5 of the Final EIS.

Clarification of Non-Motorized Traffic Impacts

Public Comment: Another goal of higher density TOD is to increase the number of walk and bicycle trips. These trips occur independently of transit and are not access to station trips. The analysis shows substantial increases in walk and bicycle trips resulting from concentrated, transit-related development patterns. Walk/bike trips in Reston for work would go from 371 to 819, a 68 percent increase. Total walk/bike trips would increase from 708 to 1,643, a 132 percent increase! (0141, 0443-E –15)

Response: Comment noted. The data referred to by the commenter are included in Table 22-5, on page 385 of the Traffic Analysis and Station Access Study Technical Report (June 2002). An analysis of transportation effects is also included in Chapter 6 of the Final EIS.

Need for Further Clarification of Development Assumptions

Public Comment: Following are my comments on the Draft Environmental Impact Statement for Dulles Rail. Since ridership is predicated on increased densities as provided in Amendment No. 2000-01 to the Comprehensive Plan for Fairfax County, these comments are centered around assumptions built into this amendment. More details, including my background, are attached in the Appendix. There is considerable flexibility in the amendment as it relates to redevelopment in Reston, assuming a BRT or rail option. Your DEIS used rail development related forecasts. There needs to be detail supplied as to the specifics used in your assumptions. Maximum density requires a hotel component with neither square footage or room count specified. It also requires a residential component, within limits (for example, 40-75% in the 17 acres closest to the Wiehle Avenue station). Many sub-units permit density increases with the BRT, but not the rail option. Accordingly, questions are:

1. What specific densities for the rail option did you assume for each sub-unit-- office, residential, support/retail, hotel?
2. What specific densities for the BRT option did you assume for each sub-unit-- office, residential, support/retail, hotel?
3. For those sub-units in the Master Plan Amendment that permit higher density for BRT but not for rail, did you assume the Master Plan BRT density for rail?
4. What assumptions did you make about the site coverage -- building and parking structure footprints-- in each case? (0449, 0449-E –1)

Response: In reviewing the comments submitted, the focus of the analysis presented by the commenter is on the Reston-Herndon area, so these responses will focus on that segment of the corridor and not Tysons Corner or Loudoun County. Density analyses were also conducted for
these areas, but the methodology varied slightly since the land use regulations vary for each sub-

The Project Team used the specific densities allowed in the comprehensive plan amendment for the Reston-Herndon area and worked from a build-out projection to estimate what percentage of build-out might be achieved. The analysis was general in nature to determine potential effects of growth in the Metrorail station area and did not include a detailed evaluation of the intricacies of the land use regulations, since they are flexible in application. For the Metrorail Alternative the Project Team had used the rail option floor to area ratio (FAR) maximum and then calculated a standard mix of development in terms of office, residential, retail, and hotel development and did not vary by land use. For example, at Wiehle Avenue Station, the Team had applied the rail option 2.5 FAR that is allowed for 17 acres in Sub-Unit G-4. For the BRT Alternative evaluation, the Team had used the lower FAR’s, as defined in the comprehensive plan and used the same mix of development. The Project Team had used the BRT level of development for sub-units and then added the rail development totals to the BRT projections to determine the maximum under the Metrorail Alternative. No assumptions were made about site coverage, as this level of detail was not included in the analysis. However, BRT was eliminated from further consideration after the public and interagency review and comment on the Draft EIS

Need for Clarification of Development Assumptions

Public Comment: Most sites are currently fully, or close to fully developed according to previously approved densities. Remaining economic life of the projects thereon may be as much as 40-50 years. It is not likely that these projects can be redeveloped with double or triple present densities without substantial increases in land values sufficient to justify removal of the current improvements. Achieving the highest permitted densities will likely require at least some use of the maximum permitted height of 140 feet (14 stories). Existing buildings are not likely to be sited such that extensive redevelopment could take place and achieve maximum permitted densities without the substantial removal of existing improvements. Several examples of this are:

1. 10 Acres of Sub-Unit D-4 in the Reston Town Center Urban Core closest to transit station, which will permit mixed-use development at an FAR up to 2.0, upon funding for rail. This is essentially developed, including two very new office buildings just opened.
2. Sub-Unit D-6, the Oracle development. This has a currently approved FAR of 0.7 and is currently improved with two of a four building planned project. It may be redeveloped to an FAR of 1.5 for a mixed-use development, with funding for rail.
3. Sub-Unit H-2 permits the 10 acres closest to the rail station to go to an FAR of 1.25 with funding for rail. Eight acres of this are currently improved with Class "A" office buildings dating from the mid- to late 1980s. (0449, 0449-E –2)

Response: The development analysis, presented in Chapter 5 of the Final EIS, and the secondary development analysis, presented in Chapter 9, used aggressive growth projections to assess what can be viewed as the worst-case scenario. Actual growth may vary, depending on a number of external factors.

Need for Further Explanation of Development Effects

Public Comment: In addition to physical constraints relating to redevelopment, there are also market constraints. Typically far higher land values will be required to make it economic to remove currently performing office projects. Yet higher land values will, of course, result in the requirement for higher office and residential rents. Question:

1. What full-service office rents did you assume for office redevelopment?
2. What residential rents did you assume for high-rise apartments?
3. What absorption rates for office, hotel, retail/service, and residential redevelopment did you assume going forward from 2002 to 2025? (0449, 0449-E –3)
Response: The development analyses conducted in Chapters 5 and 9 of the Final EIS did not contain this level of detail. The development projections were based on the continuation of the positive market conditions within the corridor and predicted that much of the development potential allowed in local comprehensive plans would be achieved. Chapter 5 of the Final EIS describes in detail the methodology used to determine the potential development effects of the two Build Alternatives.

Public Comment: A major component of redevelopment, and perhaps source of your new riders, would come from residential redevelopment. This would appear to require average residential rents of about $2500/month. This is about twice the current highest Reston apartment rents, size for size. There is also an on-site, dispersed affordable housing requirement. Reduction of market rate rents to accommodate affordable housing will require an increase or subsidy by the remaining market rate rent payers. Required rents are also about 30% higher than current asking rents, per square foot, from individual owners at Stratford House, a luxury condominium at Reston's Town Center. This project currently partake of all Town Center amenities and does not overlook the Dulles Access/Toll Road or future rail.
1. What assumptions did you make concerning affordable housing?
2. What assumptions did you make concerning the requirement for noise abatement for high-rise apartments? (0449, 0449-E –4)

Response: The traffic analysis conducted as part of the Final EIS did not contain this level of detail. Assumptions about affordable housing were not needed in order to prepare inputs into the traffic analysis, which refined regional projections by adding new growth in the Metrorail station areas to the regional transportation network. Chapter 6 in the Final EIS presents a discussion of the methodology used in the traffic analysis.

Noise was assessed in the Final EIS, but not for future development projections. The noise analysis used Federal Transit Administration (FTA) guidelines for three land use categories: Category 1, serene parks or other outdoor uses where quiet is an integral part of its use; Category 2, residential, which includes all single- and multi-family buildings; and Category 3, institutional, such as schools and churches. Project noise levels were determined using the FTA guidelines and WMATA criteria. Chapter 4 of the Final EIS includes a discussion of the methodology and assumptions employed in the noise analysis.

Public Comment: Maximum redevelopment to permitted amended master plan densities also require hotels as a part of the component. Reston currently supports only two hotels, with a third currently planned for Reston's Town Center.
1. How many hotel rooms did you assume in total?
2. Did you assume a hotel in each sub-unit as required for mixed-use redevelopment?
3. If so, how many rooms were assumed in each sub-unit? (0449, 0449-E –5)

Response: The development analyses conducted in Chapters 5 and 9 of the Final EIS did not contain this level of detail. Chapter 5 of the Final EIS presents an in-depth discussion of the methodologies used to determine the development effects of the Project. Chapter 9 presents the potential secondary development that may occur because of the Project.

Public Comment: The amended master plan contains a "Non-degradation Policy" for rail high-density options. This requires transportation or other guarantees to maintain levels of service. With specific regard to the 17 acres, part of Sub-Unit G-4 (Wiehle Avenue TSA), it appears necessary to accommodate parking for at least 5,000 cars (including 2,300 as identified as transit parking as identified in your Draft EIS). Presently there are accommodations for about 1,100 cars (including 825 on the commuter lot). Questions:
1. How can an increase of about 4,000 cars on-site be accommodated without degradation of the level of service on adjacent roadways?
2. If additional traffic lanes are deemed required, how many are there and where are they located? (0449, 0449-E –6)
**Response:** The analysis did not contain this level of detail. This level of detail was not needed in order to prepare inputs into the traffic analysis conducted, which refined regional projections by adding new growth in the Metrorail station areas to the regional transportation network. Transportation effects of the Project and the methodologies used to estimate the effects are presented in Chapter 6 of the Final EIS.

**Public Comment:** Conclusion: According to your Draft EIS, highest density options for rail were used as assumptions for Reston redevelopment, and in turn for your ridership forecasts. The Master Plan Amendment permitting this raises as many questions as it answers. Those enumerated above need to be answered to give credibility to the ridership forecasts in your Draft EIS. (0449, 0449-E –7)

**Response:** The travel demand forecasts in the Draft EIS were based on the Metropolitan Washington Council of Governments’ (MWCOG) Round 6.2 Cooperative Land Use Forecasts. The Round 6.2 forecasts represented the regionally adopted population and employment forecasts through 2025, for the metropolitan Washington area, including Fairfax and Loudoun County. Travel demand forecasts in the Final EIS were based on the MWCOG Round 6.3 Cooperative Land Use Forecasts, which represent the regionally adopted population and employment forecasts through 2030. By federal regulation, such regionally approved land use forecasts must be used in the travel demand analysis of each alternative studied in an EIS. The density bonuses associated with the Metrorail Extension are not part of these regionally adopted forecasts and therefore were not calculated as part of the demand forecasting process for the Supplemental Draft EIS and Final EIS. The impacts of congestion due to density bonuses was included in Chapter 9 of the Draft EIS and the Travel Demand Forecasting Methodology and Results Technical Report (June 2002). Chapter 5 of the Final EIS does present an analysis of the potential effects of increasing densities on the level of development as a result of the two Build Alternatives. The effects of implementing density bonuses in the corridor at Metrorail station areas is also quantified and presented in Table 5.3-1. In addition, density bonuses were included in the analysis of secondary development effects that is presented in Chapter 9 of the Final EIS in relation to traffic. This analysis was included in the Final EIS in order to address comments about the need to quantify the potential effects of increased density on traffic at Metrorail station areas.

**Public Comment:** What pressures will be put on public services due to the increase density around the stations? (0147, 0459-L –16)

**Response:** If a local jurisdiction allows an increase in density, there will be additional demand for public services from the local government involved. Chapter 3 in the Final EIS identifies one specific impact to emergency services as a result of the Project. An increase in traffic congestion in the vicinity of the Fairfax County Fire Company #25 could affect egress and access to the station. The Fire Company currently has a pre-emptive traffic signal to control the flow of traffic.

**Need for Further Explanation of Environment Effects**

**Public Comment:** What will be the specific secondary and cumulative effects of development at the proposed densities around the rail stations? What resources, either from WMATA or by the county, will be required to mitigate these potential for adverse secondary cumulative effects? What financial resources will be required? Who will be - where will we get the resources for this revenue? (0147, 0147-T –8)

**Response:** The secondary development effects of the Project alternatives as they relate to population, employment, and residential and commercial development around station areas are summarized in Table 9.3-1 of the Final EIS. The table also summarizes the predicted development characteristics if the LPA was not implemented, i.e., the effects of the No Build Alternative. Chapter 9 also presents a discussion of the potential secondary effects of development on growth patterns, traffic, and visual characteristics. However, it should be noted that since the predicted character of development is highly speculative and based on how
development would occur under circumstances similar to today, it is difficult to specify the exact secondary effects of development at the proposed densities surrounding the stations.

Four potential resource areas where cumulative effects may be of concern were identified and evaluated in the cumulative effects analysis. These include: water resources, air quality, historic resources, and resources protected under Section 4(f). If the Project was not expected to impact a certain resource, then it was not considered as contributing to cumulative impacts to that resource.

Any secondary or cumulative effects to the built and natural environment resulting from additional station area development would be mitigated through compliance with Fairfax and Loudoun Counties’ land use policies and development permitting processes.

**Public Comment:** The Council on Environmental Quality's regulation defines cumulative effects as the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-federal) or person undertakes such other action (40 CFR 1508.7). The DEIS failed to include sufficient information about impacts to neighborhoods but not define these impacts is a major defect in the DEIS. A lack of a more complete community impact analysis indicates that the project team determined that the cumulative impacts were insignificant. However, there is a lack of evidence in the DEIS which supports this analysis. (0147, 0459-L –19)

**Response:** An analysis of cumulative effects, as defined by the commenter, is included in Chapter 9 of the Final EIS and presented in detail in the Economics and Secondary Development Effects Technical Report (June 2002). In addition, a full community impact assessment was conducted for every neighborhood not only within proximity to the Metrorail stations and along the corridor, but also for any neighborhoods projected to experience an increase in traffic volumes or noise effects. The detailed impacts to neighborhoods and community resources as a result of the Project are included in Chapter 3 of the Final EIS. They are also summarized in Table 3.2-3 of the same chapter. The use of the 300-foot buffer and half-mile radii at the Metrorail station areas resulted in the inclusion of numerous neighborhoods in the corridor that were evaluated for impacts. Few actual impacts have been identified, other than noise and traffic impacts for the vast majority of neighborhoods assessed. Since the alternatives are located primarily within existing transportation rights-of-way, there are few neighborhood and community impacts, in comparison to other alignments on new locations that could include numerous residential displacements. Few cumulative impacts are projected as well.

**Public Comment:** It is proposed that the rail line along Reston will be wall to wall office buildings. The DEIS does not address the impact of wall to wall office buildings along the rail line. What impact will they have on the character and aesthetics of Reston? What impact would it have on the social and political make up of the community? What financial impact would they have on the community? What impact would it have on our property values? What are alternatives to heavy density? What positive impact would increased density have on the community? What is the tax impact on the community to include the poor, retired and the elderly? What impact would the daily commuters have on Reston on utilizing restaurants and businesses? What impact would the increase in residents have on the community? On the Reston Association? On schools? On police and fire responses? (0189, 0448-E –5)

**Response:** Chapter 5 of the Final EIS presents an analysis of the potential effects of increasing densities on the level of development as a result of the two Build Alternatives. The effects of implementing density bonuses in the corridor at Metrorail station areas is also quantified and presented in Table 5.3-1. In addition, density bonuses were included in the analysis of secondary development effects that is presented in Chapter 9 of the Final EIS in relation to traffic. This analysis was included in the Final EIS in order to address comments about the need to quantify the potential effects of increased density on traffic at Metrorail station areas.
An analysis was also conducted to determine the effects of the Project on output, earnings, employment, and tax revenues. The analysis, however, was not specific to the poor, retired, or the elderly, but rather to the counties directly impacted by the Project. This analysis is presented in Chapter 5 of the Final EIS.

The commenter identifies several issues related to the increase in density. While they are important considerations for Fairfax County to consider, they are not specifically related to this Project. However, the direct effects of the Project on neighborhoods and community resources were evaluated in Chapter 3 of the Final EIS (see Table 3.2-3). As part of the neighborhood and community analysis the following issues were evaluated: changes in population and employment; community cohesion and interaction; isolation effects; social values – social groups valued or harmed; barrier effects; noise and vibration; physical intrusions; access changes; community facility impacts, which includes hospitals, parks, places of worship, day care centers, schools, government offices, police and fire stations, cultural centers, and special service providers; displacements; safety; and property values adjacent to Metrorail stations. From a cumulative effects perspective, there is not a causal relationship between the two Build Alternatives and many of these issues.

Public Comment: What are the traffic increases projected if various alternatives are selected? For instance, metro stations attract more businesses and more housing, thus increasing traffic around the stations and areas - a neverending circle. (0235, 0235-E –8)

Response: The effects of the Project alternatives on regional and local roadway facilities are presented in Chapter 6 of the Final EIS. The 2025 peak-hour traffic volumes and levels of service (LOS) on selected highway links throughout the Dulles Corridor are shown in Table 6.2-2. LOS reflects the impacts of congestion experienced by vehicles traveling along a road or through an intersection. Projected delays in seconds at key intersections in the corridor and the corresponding LOS were also assessed for the Project alternatives.

Public Comment: The second thing we have to do, I requested a few times the county transportation staff taking a look at this issue, rather than just the land use people looking at it. In fact, I got so frustrated I got myself a transportation consultant who did an analysis. There are 13 plan amendments pending in Tysons Corner, and I asked him to take a look at the amount of trips per day that this 13 plan amendments would produce. They would produce 111,000 new trips per day in Tysons Corner. Also I suggested that you find out how many metro trips would come from that other station, because we're in Tysons Corner. Sixteen thousand new transit trips a day on metro out of this 111,000. Another 16,000 would be internal. That's about 32,000 trips out of 111,000 that would be carried by a system that would - to get into Tysons Corner it would cost almost $2 billion. The other 78,000 trips would be on the road. That's not a happy thought. (0136, 0168-T –3)

Public Comment: The proposed redevelopment of the commons is based on rail through Tysons. The density that is being proposed will be approximately seven to 10,000 apartments. Even with 30 to 35 percent ridership, which is the number being used by Washington Metro - and even that's being optimistic - that still means another 5 to 7,000 cars in Tysons Corner. (0159, 0159-T –2)

Public Comment: Additionally, I have grave concerns with the information that I have been able to read in this brief amount of time. Bonus densities that would be granted around the metro stations do not appear to have been considered in the traffic calculations. The most optimistic projected non-single occupancy vehicular ridership for growth around the new metro stations is estimated to be 20 to 30 percent. That translates into 70 to 75 percent of the residents using the area roads. Tysons is currently a congested and a miserable drive during peak hours. If the current level of service in this area is failing, retaining an F grade does not mean that there is not change of road conditions with no relief from increased densities. (0179, 0179-T –6)

Public Comment: The last one, you know, back in December I thought it might be interesting to go to the planning commission of Fairfax County and suggest that they take those 13 plan amendments that
are pending in Tysons Corner and say, hey, you know, maybe building those rail stations is not necessarily going to take care of all those trips created by those 13 plan amendments that are pending at Fairfax County pending the outcome of this EIS and rail station in place. And I was turned away. And the Fairfax County transportation staff has never done an analysis of the impact of transit rail stations and this development that's being proposed in Tysons Corner. Now I took it upon myself to get a transportation consultant who is well known in this region to do an analysis, and he concluded that those 13 plan amendments would create 111,000 new trips in Tysons Corner per day, and 16,000 of those, according to this consultant, would go use Metro. Another 16,000 would go internally. And 78,000 would be new trips on the road. And I'm still waiting for the county to do their own transportation - you know, we pay millions and millions of dollars to the transportation staff that we have in the county, and I think they're very competent, but it's time to let them loose, let them do their job. This is not a land use program. This is supposed to be a transportation program, the largest public works project in the history of Fairfax County. And the least we should do is have the transportation people in Fairfax County, the staff, our staff, the ones we pay for, take a look at it. Because I have information which I am sure the folks at the table up there have, that just putting rail stations at Tysons Corner is not necessarily going to hack it.

Response: The travel demand forecast results used in the Final EIS analyses of roadways and transit service (see Chapter 6) are based on the MWCOG Round 6.3 Cooperative Land Use Forecasts. These forecasts represent the regionally approved and adopted population and employment forecasts through 2030 for the region, including Fairfax and Loudoun counties. By federal regulation, such regionally approved forecasts must be used in the analysis of the two Build Alternatives. Model assumptions must be consistent among the alternatives so as to not bias the results of the travel demand forecasting process.

In fact, land use development patterns often do react differently depending on the type and mode of transportation in a given corridor, due largely to local policies that may encourage transit-oriented development around major transit nodes. Subsequent to the adoption of the Round 6.3 Forecasts, Fairfax and Loudoun counties amended their respective land use plans (Fairfax County Comprehensive Plan and Loudoun County Revised General Plan) to permit additional residential, retail, and office development around Metrorail stations. These amendments and their impact on corridor land use and population and employment are discussed in detail in the Final EIS in Chapters 3, 5, and 9. Density bonuses were included as part of the analyses included in Chapter 5. The travel-related effects of this additional, or secondary development are summarized in Chapters 6 and 9 of the Final EIS. However, the Project's ridership forecasts are based on regionally adopted population and employment forecasts for the opening and horizon years. The density bonuses associated with the Metrorail Extension are not part of these regionally adopted forecasts and therefore were not calculated as part of the demand forecasting process for the Supplemental Draft EIS and Final EIS. The impacts of congestion due to density bonuses was included in Chapter 9 of the Draft EIS and the Travel Demand Forecasting Methodology and Results Technical Report (June 2002). All current land use plans and zoning ordinances were reviewed for the evaluation of land use impacts (see Chapter 3). Pending plan amendments and development proposals, as referenced in the comments, that have not been adopted by the local government are not included in the analysis.

Public Comment: And what assurances do the surrounding neighborhoods have that they won't be overwhelmed by a greatly increased human and traffic density, without adequate infrastructure in place?

Response: The local governments have control over the actual level of development that will be approved and there are triggers included in the land use regulations that have been adopted to mitigate the infrastructure effects of the additional growth. County regulations allow the clustering of future development in locations that are best able to support that development in terms of providing transit, pedestrian, and bicycle access to residents and employees. In the future, the counties may limit development at station areas if necessary to mitigate any associated impacts.
to the surrounding community. Chapter 9 presents the potential secondary and cumulative effects of the Project alternatives.

**Public Comment:** Another thing I wanted to touch on tonight was something very deep in a technical report. The report is called “Traffic Analysis and Station Access Study Technical Report.” It reported on the secondary impacts of land use, and in the corridor the Fairfax supervisors had a task force that recommended mixed use development around the four stations here, and in May of 2001 the county board actually adopted these recommendations, and these were fed into the analysis. And the results were really astounding. They show that if you do plan land use to be related to the new transportation investment, you do get some significant changes in behavior. For instance, just without considering Loudoun County, their data was not - and they have changed their comp plan, too, but their data was not fed into this analysis. The projected ridership grows from 86,700 to 101,000, and the new riders grow to 54,000. Even more to the point, the number of new transit riders increase by 43 to 45 percent, depending on what alternative is used for Tysons Corner. (0141, 0167-T –3)

**Response:** If density bonuses were included in the Draft EIS model forecasts, total ridership would have increased from 86,900 to 101,100 for the Alignments T6 and T9. New riders also would have increased from 38,300 to 54,400 for Alignments T6 and T9. Secondary development impacts of the alternatives brought forward into the Final EIS are presented in Chapter 9 of the Final EIS. Density bonuses were included as part of this analysis. Chapter 6 includes an analysis of the transportation effects, including ridership and new riders, of the Project alternatives. However, the Project’s ridership forecasts are based on regionally adopted population and employment forecasts for the opening and horizon years. The density bonuses associated with the Metrorail Extension are not part of these regionally adopted forecasts and therefore were not calculated as part of the demand forecasting process for the Supplemental Draft EIS and Final EIS. The impacts of congestion due to density bonuses was included in Chapter 9 of the Draft EIS and the Travel Demand Forecasting Methodology and Results Technical Report (June 2002).

**Public Comment:** The EIS does not appear to adequately address the traffic that will result from the density bonuses, i.e., growth, planned for land adjacent to future transit stations. If you consider that at the very most 30 percent of those in new residential developments might use transit for work commuting, that means that the other 70 percent will not. Where will all those cars go? What will be the corresponding impacts on highway noise and congestion? (0145, 0145-T –12)

**Public Comment:** That we don't know enough about bonus density impacts on congestion in neighborhoods around transit stations. (0446, 0146-T –8) (0446, 0218-M –8)

**Public Comment:** Specifically, the process should be stopped until steps are taken for the draft EIS to include a detailed quantitative analysis of the impact increased traffic and increased development will have on these residential areas. (0454, 0454-E –2)

**Public Comment:** To achieve the proposed density opportunities around stations, there will be an increase in traffic congestion. For example, under the metrorail option at Wiehle Avenue, there is an option to have 4,244,065 square feet of residential use. This results in 3536 dwelling units. If 25% of the people in these units use some transit mode other than a single occupancy vehicle, one can predict that 75% or 2652 people will not. The DEIS provided only a superficial analysis of the community impact of the additional traffic generated around stations. In addition, the analysis zone was too restricted. (0147, 0459-L –21)

**Response:** The Project’s ridership forecasts are based on regionally adopted population and employment forecasts for the opening and horizon years. The density bonuses associated with the Metrorail Extension are not part of these regionally adopted forecasts and therefore were not calculated as part of the demand forecasting process for the Supplemental Draft EIS and Final EIS. The impacts of congestion due to density bonuses was included in Chapter 9 of the Draft EIS and the Travel Demand Forecasting Methodology and Results Technical Report (June 2002).
The impacts of congestion due to density bonuses are generally discussed in Chapter 9 of the Final EIS. The overall level of development expected to occur as a result of the density bonuses in the Metrorail station areas is quantified in Chapter 5 of the Final EIS. The projected level of growth and related traffic and other effects were assessed. All neighborhoods within a half-mile of the Metrorail stations were analyzed to see if they would experience an increase in cut-through traffic or other traffic impacts due not only to the construction of the transit alternatives, but also due, in part, to the increase in traffic associated with the development. The specific neighborhoods included as part of the analysis are listed in Table 3.2-1 of the Final EIS. Direct impacts due to Project alternatives on neighborhoods in the study area are described in Chapter 3. Impacts to traffic at key intersections in the vicinity of the station areas are presented in Chapter 6.

Public Comment: There will be increased density at these station areas. More retail, more office development, more residential, and in some areas, hotel use. For example, under the metrorail option at Wiehle Avenue, today there exists 521,000 square feet of residential use. Based on the new comprehensive plan that was recently adopted, this bonus density credit plan, the projections would make metrorail options, there could be up to 4,244,000 square feet of residential. That’s at the Wiehle Avenue station. Now if we wanted to calculate this and turn it into dwelling units, we could have 3500 dwelling units. Now if 25 percent of the people from these units use some transit mode, which means that they did not get in a single-occupancy vehicle, what will the 75 percent or 2652 other people do? To conserve time for the other two stations, with the projected residential use, it will total almost 7 million square feet. Then we can readily expect an addition of about 7000 cars added to our present mix. By VDOT standards, 2700 cars equals three lanes of traffic. (0147, 0177-T –4)

Response: Localized traffic congestion is projected to occur at the Metrorail station areas, due not only to the provision of transit services, but also due to the increase in densities. The effects of this congestion are discussed in Chapter 9 of the Final EIS. As stated in that chapter, the local jurisdictions will ultimately determine the actual level of development allowed in the future. Further, there are triggers in place designed to mitigate the infrastructure effects of the additional growth.

Public Comment: Density projections need to be realistically assessed and the impact of the increased growth needs to be included in the projections. (0150, 0150-T –10)

Response: The potential changes in the level of development in the corridor is assessed and quantified in Chapter 5 of the Final EIS. The analysis in the Final EIS projects potential development at the Metrorail station areas. The projections were based on the continuation of the positive market conditions within the corridor and predict that much of the development potential allowed in local comprehensive plans would be achieved. For many of the parcels evaluated, it was also projected that full density bonuses due to proximity to Metrorail stations and the inclusion of housing would be allowed. An analysis of the potential effects of implementing density bonuses in the corridor at Metrorail station areas in the study area and is also included in Chapter 9 of the Final EIS.

However, the Project’s ridership forecasts are based on regionally adopted population and employment forecasts for the opening and horizon years. The density bonuses associated with the Metrorail Extension are not part of these regionally adopted forecasts and therefore were not calculated as part of the demand forecasting process for the Supplemental Draft EIS and Final EIS. The impacts of congestion due to density bonuses was included in Chapter 9 of the Draft EIS and the Travel Demand Forecasting Methodology and Results Technical Report (June 2002).

Public Comment: Let the new jobs, shopping and housing move farther out. That will ease congestion, the sensible, natural way. It appears that the real motivation for rail is to aid the businesses and property owners in Fairfax County. (0155, 0155-T –3)
Response: The primary goals of the Project are not only to support future development, but also to improve transportation service; increase transit ridership; support environmental quality; provide cost-effective, achievable transportation solutions; and serve diverse populations. The two Build Alternatives of this Project were designed to meet those needs. The purpose and need for the Project is stated in Chapter 1 of the Final EIS and the specific goals and objectives of the Project are listed in Table 1.6-1.

Public Comment: The EIS does not appear to adequately address the traffic that will result from the density bonuses-growth-planned for land adjacent to future transit stations. If you consider that at the very most 30 percent of those in new residential developments might use transit for work commuting, that means that the other 70% will not. Where will all those cars go? What will be the corresponding impacts on highway noise and congestion? Only a systematic approach that considers how the impacts of a change in one part of the system will affect the whole system can have credibility. We feel that this EIS lacks credibility where it addresses environmental impacts. (0145, 0452-E –9)

Response: Localized traffic congestion is projected to occur at the Metrorail station areas due to the increase in density and as drivers access the stations, as specified in Chapter 9 of the Final EIS. A systematic approach was used to define these impacts. The potential increase in density in Fairfax was modeled to define traffic impacts and transit ridership effects and acknowledges that this growth will generate additional vehicular traffic (traffic impacts directly related to the Project alternatives are presented in Chapter 6). However, mitigation for this increase in traffic due to the increase in densities at the Metrorail station is incorporated into local land use regulations, as defined in Chapter 9 of the Final EIS. The local governments have incorporated language in their comprehensive plans that would limit the level of development if congestion were projected.

Public Comment: On the quality of life, the rail as projected will have a devastating impact and change our community forever. As you so stated it will result in increased localized traffic congestion and in poor air quality. In addition, it will result in pedestrian and traffic safety problems, increased crime, and serious delays in ambulance, fire and police responses. Furthermore, we have a significant increase in density such as Wiehle Avenue which would be increased over 986 percent and Reston Parkway area almost 268 percent. Moreover, we will have a cannon of office buildings along the rail line effectively dividing our community like the Great Walls of China. Also, along with these buildings will come an army of commuters projected to be over thirty thousand, who will overtax our roads, restaurants, and other facilities. Not to mention that these buildings in the evening will be nothing but an empty ghost town. (0189, 0201-L –3) (0189, 0189-T –3)

Response: The effects of the Project alternatives on neighborhoods and community resources are summarized in Table 3.2-3 of Chapter 3 in the Final EIS (see Table 3.2-3). No adverse impacts on pedestrians are predicted. On the contrary, pedestrian bridges across existing roadways are planned for several of the Metrorail stations, thus improving pedestrian access and providing better safety. The congestion is only projected to affect one emergency service community facility, Fairfax County Fire Station #25 on Wiehle Avenue. The development effects of the Project are discussed in Chapter 5 of the Final EIS. The secondary and cumulative effects on neighborhoods due to the increase in development are analyzed in Chapter 9 of the Final EIS.

It should be noted that the 986 percent increase in population at Wiehle Avenue Station in Table 9.3-4 of the Draft EIS is largely a statistical anomaly, since the overall increase is due more to the lack of any residential development than a large volume of total residential development. In addition, the increase in residential development at the Metrorail station is allowed under the comprehensive plan in Fairfax, because it provides a greater opportunity for non-auto dependent development to occur. Residential development in close proximity to transit generates much fewer trips on the road system than other forms of development.
Public Comment: Relate the projected land use density near the stations to specific impacts on schools and arterial roadways. This information is necessary for public to determine the projected community impacts. (0147, 0459-L –13)

Response: As a result of implementation of the LPA, the intensity of development in station areas could increase. The potential increase in population and employment near stations would create an additional strain on community facilities and services, such as schools and arterial roadways. However, under the No Build Alternative, the population and employment within the Project area is projected to increase and would also cause a strain on these facilities and services. More information on potential development effects is included Chapter 5 of the Final EIS. The influence of the Project on development outside of station areas is discussed in Chapter 9.

Public Comment: The DEIS reports an increase in traffic volume at stations and parking spillovers at certain stations. The recommended mitigation measures include truck access and circulation planning, lighting, control plans and landscape buffering. Treatment of community impacts was handled in a very superficial manner. Therefore, there should be further analysis with more specificity and with identification measures that will address the traffic shifts and overflow parking concerns. Again the geographic study area must be expanded to include feeder streets and neighborhood streets surrounding the transit stations. Without analysis and reporting of findings, the DEIS fails to meet the recommendation to report cumulative effects. (0147, 0459-L –20)

Response: Impacts to neighborhoods, communities and community services were assessed using techniques described in the Federal Highway Administration’s Community Impact Assessment: A Quick Reference for Transportation. Chapter 3 of the Final EIS provides the methodology used to assess neighborhood, community services and community cohesion impacts. Transportation related impacts are discussed in Chapter 6 of the Final EIS. The process used to evaluate secondary and cumulative effects is based on the guidance provided in the Federal Highway Administration Technical Advisory, Guidance for Preparing and Processing Environmental and Section 4(f) Documents (1987).

Public Comment: The key to reducing traffic congestion with higher density development is for total vehicle hours to be reduced by an amount to more than compensate for the higher automobile demand created by the increase density. Based on the proposed density levels for each station area, what is the automobile demand created? What is the anticipated vehicle hours per capita for each of the station areas based on density opportunities? To reduce traffic congestion in the Tysons Corner and Reston areas by 25 percent what percent reduction per capita vehicle hours would be required? (0147, 0459-L – 33)

Response: The analysis to estimate the traffic impacts of increased density allowed with the implementation of rail was completed for the Draft EIS but new analysis was not completed for the Final EIS. The data are shown in Chapter 22 of the Traffic Analysis and Station Access Study Technical Report (June 2002) completed for the Draft EIS. The data produced for the Draft EIS do, however, provide a reasonable understanding of the impacts of increasing densities per the density bonuses allowed for rail. The data is presented for the three areas in Fairfax County where density bonuses are allowed: Tysons Corner, East Reston, and Reston/Herndon. Traffic will increase in each of the areas where density bonuses are allowed, relative to conditions where no rail line is built and therefore no additional density is allowed. In Tysons, vehicle miles traveled would increase in the range of 2.5 percent, in the eastern Reston in the range of 7 percent and in Reston/Herndon in the range of 9 percent.

Public Comment: The DEIS stated that this [increased densities] will lead to traffic congestion. I believe this is an understatement. Nowhere does it address the number of commuter vehicle traffic coming into Reston daily, which could be easily 22,000, nor does it address an additional 6,000 to 8,000 vehicles from new residents. The only mitigating factor addressed regarding increased congestion is to add turn lanes on Wiehle Avenue. What impact would this traffic have on Reston? Such as: air quality, pedestrian safety,
timely responses of emergency vehicles? How would it impact on the side street parking and traffics? Where will the commuters park? How will they handle such traffic congestion? (0189, 0448-E –4)

Response: All of the neighborhoods located near station facilities could experience increases in traffic and longer, more frequent queuing. One fire station, Fairfax County Fire Company #25 at the intersection of Sunrise Valley Drive and Wiehle Avenue could be affected by these conditions. Increased vehicular traffic in stations areas could affect pedestrian safety. In most instances, on-street parking limits are enforced by local jurisdictions. Chapter 3 of the Final EIS addresses effects on neighborhoods, community services and community cohesion. Further discussion of traffic related effects, including parking, is provided in Chapter 6 of the Final EIS. No long-term impacts to regional air quality are anticipated from the construction and operation of the Project. Air quality effects are discussed in Chapter 4 of the Final EIS.

Public Comment: Quantify the increased traffic, and its impact, from development generated by the availability of rail service. (0392, 0392-L –5)

Response: While it is expected that increased density would result in localized traffic congestion in station areas, the new, transit-oriented urban form related to the Wiehle Avenue Extension would help to increase overall mobility in the corridor, the counties, and the region. More detailed information pertaining to traffic increases and potential mitigation is provided in Chapter 6 of the Final EIS. Station area characteristics and development potential within the Dulles Corridor are discussed in Chapter 5 of the Final EIS.

Public Comment: How will the increased residential development densities in Reston, that are a major feature of the project, impact school boundaries for neighborhoods to the east and south of Reston? (0460, 0460-L –7)

Response: No information on school boundaries is presented in the Final EIS because it is outside the scope of this Project and is unrelated to the selection of a transit alternative in the Dulles corridor. Local governments are responsible for any decisions related to school boundaries.

Public Comment: How will the more intense commercial and residential development in Reston affect traffic volumes and safety on local roads such as Sunset Hills, Hunter Mill, Crowell, Browns Mill and Beulah Roads which are used by commuters as an alternate to the Dulles Toll Road connection between Reston and Tysons Corner? Will this development generate traffic that overwhelms minor arterials and create pressure for road widening? (0460, 0460-L –4)

Response: As specified in Chapter 9 of the Final EIS, traffic increase related to the increase in density will contribute to localized traffic congestion primarily located within the Metrorail station areas. Sunset Hills Road is projected to have an increase in traffic at the Metrorail station area and the other roads specified may also support additional trips. However, additional capacity or improvements needed to accommodate new growth associated with the density bonuses and not specifically caused by the provision of transit are the responsibility of the local jurisdiction and the Virginia Department of Transportation. More detailed discussion of traffic related effects and mitigation is provided in Chapter 6 of the Final EIS. However, the Project’s ridership forecasts are based on regionally adopted population and employment forecasts for the opening and horizon years. The density bonuses associated with the Metrorail Extension are not part of these regionally adopted forecasts and therefore were not calculated as part of the demand forecasting process for the Supplemental Draft EIS and Final EIS. The impacts of congestion due to density bonuses was included in Chapter 9 of the Draft EIS and the Travel Demand Forecasting Methodology and Results Technical Report (June 2002).

Public Comment: The Draft EIS fails to assess the impact on the character, infrastructure, and financial resources of communities throughout the corridor in a meaningful way. The focus of the analysis should
be placed on social and community character and infrastructure, and the direct, secondary, and cumulative impacts. (0510 9-1)

Public Comment: The evaluation of development projections in the Draft EIS is unduly subjective. The approach used (relying on professional judgment in determining development projections) undermines the reliability of the Draft EIS. A more clear explanation of methodology is needed. (0510 9-8)

Response: Secondary and cumulative effects are presented in Chapter 9 of the Final EIS. The process used to evaluate secondary and cumulative effects is based on the guidance provided in the Federal Highway Administration Technical Advisory, Guidance for Preparing and Processing Environmental and Section 4(f) Documents (1987). Chapter 9 of the Final EIS further describes the methodology used.

Public Comment: The Draft EIS makes no effort to assess or advance the principles of sustainable development. It should do so, apart from whatever requirements NEPA imposes. (0510 9-7)

Response: It is not within the authority of the Project Team to advance the principles of sustainable development, nor would it be appropriate for the Final EIS to advocate any particular form of development. Implementation of the principles of sustainable development is under the control of the local jurisdictions in the study area. Some elements of sustainable development, such as implementation of transit-oriented development, are included and analyzed in Chapter 5 of the Final EIS, as appropriate.

Public Comment: The Draft EIS does not address the impact of increased density on the environmental resources described in Chapter 4. (0510 9-6)

Response: Chapter 9 of the Final EIS describes the potential effects of secondary development on elements of the human and natural environment. Long-term effects on these resources are presented in Chapters 3 and 4, respectively.

Public Comment: Section 9.4, Cumulative Effects, does not include enough detail. It simply states that all projects/alternatives are likely to have minor effects to environmental resources. A drive on the Toll Road between Hunter Mill Road and Route 7 shows that this statement is incorrect. (0510 9-5)

Response: Section 9.4 of the Final EIS describes the cumulative effects of the No Build, LPA and relevant, reasonably foreseeable actions that could contribute to cumulative effects. Based on coordination with the Federal Aviation Administration, one reasonably foreseeable action was identified, the Dulles Airport Runways Project. Four resources were identified for evaluation: water resources, air quality, historic resources and Section 4(f) resources. Technical analysis conducted for the Final EIS determined that the LPA would not result in major impacts to the resources identified and therefore, would not contribute substantially to potential cumulative effects related to other relevant, foreseeable projects, such as the Dulles Airport Runways Project.

Clarification of Travel Patterns

Public Comment: Also the reverse commute market, the analysis shows that of the new transit trips, nearly three-quarters of them would be coming in the reverse direction, helping to balance out use of the metro system, making a much more efficient use of a rail system, rather than have it be all in one direction. And this is because of the increasing employment in the corridor, as well as the opportunity to walk to work. As a matter of fact, the analysis showed that at the Reston Parkway station, with mixed use, you have a tripling of pedestrian activity, 461 walking and biking trips to 1187. (0141, 0167-T –4)

Response: Secondary development near station areas would support the reverse commute market through the increase of employment densities near stations.
Need Linkage Between Increased Density Measures and Mitigation Measures

**Public Comment:** We are afraid that the county will zone increased density but road mitigation measures or metrorail will be delayed or never happen. We therefore recommend approval of increased density zoning only when mitigation measures are actually implemented and funds are not only approved but are released for the operating segment that includes the Mid Corridor service. Higher density facilities should be timed to coincide or follow the arrival of metrorail and road mitigation measures. (0170, 0170-T –17)

**Response:** As stated in Chapter 3 of the Final EIS, all current land use plans and zoning ordinances were reviewed for the evaluation of land use impacts. The plan language adopted by the local government identifies that bonuses are eligible once a full funding grant agreement has been obtained. The Project Team will work with the local government to develop mitigation measures and to support transit usage in the corridor; however, the approval of site-specific projects and regulation of the form and timing of development is under the jurisdiction of the local governments in the area.

Need to Integrate Transportation Planning and Land Use Planning

**Public Comment:** We also have some concerns about the DEIS and the planning it reflects. This is a complex project. In order for it to succeed, it will be necessary to consider and coordinate all the elements. This includes assuring that the kind of land use planning that will bring about the quantity and quality of development, that will make the project viable, occurs. Now we have heard repeatedly that these departments do not do land use planning, this is a local government function, and that you use COG, whatever, plan -- system to plan. We know that, but frankly we think that much more can and must be done. The agencies involved prepare transportation analysis with the use of models, and these models incorporate a definition of the surrounding land use. There is nothing preventing you from preparing scenarios of the alternative land use patterns over time to demonstrate to local planners what the result of these patterns will have on transportation factors. (0158, 0158-T –3)

**Public Comment:** This is a complex project and in order for it to succeed, it will be necessary to consider and coordinate all the elements. This includes assuring that the kind of land use planning that will bring about the quantity and quality of development that will make the project viable occurs. Now we have heard repeatedly that you do not do land use planning, that this is a local government function and that you use the COG round-whatever to plan. We know that, but frankly we think that much more can and must be done. (0158, 0223-M –2)

**Public Comment:** The agencies involved prepare transportation analyses with the use of transportation models, and these models incorporate a definition of the surrounding land use. There is nothing preventing you from preparing scenarios of alternate land use patterns over time to demonstrate to local planners what the result of these patterns will have on transportation factors. You should certainly work with local planners and citizens in defining what alternatives to analyze. This is not planning, it is providing your expertise to assist decision makers on these complex issues. It will constitute integration of land use and transportation planning, which is a mandate of the regional plan and it can be part of an EIS. (0158, 0223-M –3)

**Public Comment:** Traffic Impacts Resulting from Increased Density that can be Granted Near Rail Stations: If the rail alternative is built, landowners can be granted increased density near the rail stations. If this density is built, there will be additional automobile traffic because not everyone will ride the rail system. Further, these projects may be built long before the rail system is completed. This traffic increase is a direct impact of the rail alternative and, therefore, must be considered in the impact analysis. The EIS should be revised to discuss the traffic impacts of all density increases along the Dulles Corridor that could be implemented if rail is built, including both existing and proposed density bonuses. The EIS should discuss the impact of this additional automobile traffic in Tysons Corner. (0392, 0392-L –17)
Public Comment: Metrorail allows the highest densities of the station areas of any options and will generate the greatest ridership, but unless substantial mitigation efforts are made, there will be major congestion at the station areas. This congestion could easily spread throughout Reston. We understand that the current traffic analysis includes traffic at all stations due to metro, but not traffic due to the increased authorized densities. This raises doubts about the adequacy of the recommended mitigation measures. The final EIS traffic analysis should include the increased densities with and without mitigation measures. Mitigation measures should result in no more congestion than the no-build alternative. (0170, 0170-T –16)

Response: The Comprehensive Plan and the General Plan for Fairfax and Loudoun Counties, respectively, provide for existing development characteristics and density bonuses at the proposed new Metrorail station locations. Station area characteristics and development potential are discussed in Chapter 5 of the Final EIS. Chapter 6 addresses proposed mitigation measures for transportation effects related to LPA. However, the Project’s ridership forecasts are based on regionally adopted population and employment forecasts for the opening and horizon years. The density bonuses associated with the Metrorail Extension are not part of these regionally adopted forecasts and therefore were not calculated as part of the demand forecasting process for the Supplemental Draft EIS and Final EIS. The impacts of congestion due to density bonuses was included in Chapter 9 of the Draft EIS and the Travel Demand Forecasting Methodology and Results Technical Report (June 2002). It should be noted, however, that the increase in traffic associated with the density bonus would be mitigated through the counties in coordination with the Virginia Department of Transportation. In Fairfax County there is a non-degradation clause in its Comprehensive Plan that will be used to measure the traffic impact of the increased density. Thus, mitigation of traffic impacts due to density increases rests with the counties.

Public Comment: But overall, we can build the rail system that will work here, that can focus development, can save open space, can maximize traffic ridership and reduce traffic congestion. I think we have made good progress. I think a lot of good public comments are coming in, and indicating we need to do a lot more on the land use side, though. (0149, 0180-T –14)

Public Comment: In conclusion, we support rail provided we get the land use right and provided we get the best routing in Loudoun. Let's build the rail system that can focus development, save open space, maximize transit ridership, and reduce traffic congestion. (0149, 0205-M –5)

Public Comment: The metrorail alternative, with our recommended modifications, will help keep Reston a vital and thriving community. (0170, 0170-T –18)

Response: Under the No Build Alternative, the density bonuses would not be triggered and development would continue to be driven by market conditions throughout the corridor. This would likely lead to a dispersed pattern of development and would be highly auto-oriented, leaving people with few travel choices. Implementation of the LPA would help focus development in and around station areas.

Growth Needs to be Tied to Ensuring Quality of Life

Public Comment: It is, therefore, essential that we carefully plan for our region's growth in a manner that promotes our quality of life. This plan includes the wise use of our region's diminishing development land, the preservation of our air and water quality, and the provision of rail and roadway corridors along which high-density, smart growth development can be channeled to help reach these ends. (0142, 0142-T –4)

Public Comment: As the growth of our region's economy and population is both desirable and inevitable, these policies will help ensure an excellent quality of life by sustaining a vital economy, by preserving our urban areas, and by protecting our natural environment. Moving forward with the Dulles Corridor Rapid Transit Project as soon as possible will help our region meet these goals. (0142, 0142-T –7)
Response: The Dulles Corridor is a vibrant, diverse mix of businesses, neighborhoods, recreational amenities and an international airport that continues to attract population and employment growth at almost twice the rate of the region. The central and eastern portions of the corridor currently experience some of the region’s worst traffic congestion. An investment in efficient and reliable transportation facilities to meet the travel needs will contribute to the area’s economic, social, and environmental quality.

Transit Ridership Benefits Significantly by Transit-Oriented Development

Public Comment: For those who have not had a chance to read the "Traffic Analysis and Station Access Study Technical Report," I want to note the beneficial impact of the recent changes to the Fairfax County Comprehensive Plan adopted by the Board of Supervisors. This analysis did not include anticipated transit-related development at the stations in Loudoun County because County staff has not yet developed comparable data. The total ridership for the four-station Tysons Corner alignment is forecast to be 86,900, of which 38,300 are new riders. The same analysis done using the transit-related growth forecasts projects 101,100 total riders, of which 54,400 are new riders. This represents an 18 percent increase to total Corridor ridership and, most notably, the number of new transit riders increased by 43-45 percent depending on the alternative selected for Tysons Corner. (T-4 has the largest increase because it has the most stations in Tysons Corner.) The increase in new riders result in an improvement in the cost-effectiveness of the Metrorail investment. This highlights the dramatic relationship of land use to the transportation investment and the need to "get it right" this time. (0141, 0443-E –13)

Public Comment: Another table indicates that of the nearly 27,100 work trips forecast under the transit-relate growth scenario, more than 20,400 trips (74 percent) originate from outside of the Corridor, indicating that rail in the Dulles Corridor would help to support a growing reverse commute market. As the report states "an important benefit of increased employment densities around Metrorail stations in the Dulles Corridor would be the utilization of excess capacity on a.m. outbound and p.m. inbound trains, which would result in more transit passengers being carried without an increase in operating costs, and consequently, an improvement in project cost effectiveness. (0141, 0443-E –14)

Response: The analysis, to which the commenter refers, was completed for the Draft EIS but was not re-analyzed during completion of the Final EIS. The data produced for the Draft EIS do, however, provide a reasonable understanding of the impacts to ridership of increasing density in areas where density bonuses are allowed after implementation of rail. As noted in the response, both total riders and new riders increase with the implementation of the density bonuses, thus supporting the density bonus concept.

Use of High Density Land Use Projections in Measuring Ridership

Public Comment: Because the Dulles Rail (NVMISM) Model makes overly optimistic assumptions of rail ridership based on pie-in-the-sky projections of high density land use at projected rail stations, for argument purposes, will not consider those "transit-related growth forecasts," just the "regionally approved forecasts" that are not dependent on high density land use (See pages 379-391, “Traffic Analysis and Station Access Study-Technical Report.” My reasons for this are as follows:
1. Master Plan Amendment rail density at key "sub-units" is greater than BRT density. Comparable assumptions about the impact of transit on ridership will automatically favor rail, since rail density is higher.
2. The study does not appear to break out that portion of ridership projections which is the result of redevelopment.
3. All maximum density increases written into the plan require a residential development component with minimums and maximum (maximum up to 75%), also a non-residential component that includes office, hotel, and support retail. Is it likely even by 2025 that the Wiehle/Dulles Road crossing by itself would support three or four hotels with probably a minimum of 750 rooms? As read the planning document it does not appear that a hotel is an option, it's a requirement.
4. With the exception of the 17 acres including the present commuter lot, existing development would appear to have a useful life well beyond 2025, with values much greater than land value even assuming maximum redevelopment and $35/floor area required (FAR) square footage for land. Hence the assumption of maximum redevelopment in place and generating trips by 2025 is not realistic.

5. Required apartment rents on the aforementioned 17 acres would appear to be about $2500/month today. This would increase for market rate apartments as necessary to subsidize the required on-site dispersed affordable housing component. Will there be 1,000 renters at this level? If there are condos will buyers accept proximity to current 12 lanes of traffic and a rail lane? Will renters?

6. Master Plan Amendment appears to require maintenance of current transportation systems (i.e. roads, I assume) at predevelopment levels. I can't see how this is possible, particularly for the 17 acre site with the addition of a net of nearly 700,000 sq. foot office space, 1,000 apartments, and a transit station.

7. Air Rights over freeways is virtually non-existent. The only place I have found urban blocks built above a freeway is on the Cross Bronx Expressway in New York. Developers I have spoken to say that it is expensive to build over a freeway due to high insurance costs. Plus, in light of terrorism, I doubt few people will want to build tall buildings above a freeway. All of the above are factors in my conclusion that the density forecast is unlikely in the time frame given; if not realized but used for ridership projections, the latter are high. (0112, 0462-L –22)

Response: Growth projections for the Metrorail station areas are presented in the Final EIS and reflect the regionally adopted land use projections, as prepared by the Metropolitan Washington Council of Governments, and the density bonuses permitted by local governments. The economic effects of station area development are discussed in Chapter 5 of the Final EIS. The projected development totals are presented as a form of worst-case scenario in that the level of projected development is close to build-out in some sections of the corridor. In developing these projections, the Project Team did not go to the level of detail identified in these comments by projecting specific projects in specific locations that would define the specifics of redevelopment feasibility, rental prices, or a detailed evaluation of the specific requirements adopted in the Comprehensive Plan language. The projections were developed from calculating build-out for the general areas included in the Metrorail station area and do not include such items as air rights development and are more general than the information requested by the commenter. Once build-out was determined, the level of growth was projected based on general assessments of the percentage of growth that might occur and using a standard land use mix. As stated in the Final EIS, the actual level of growth might be much lower.

Need to Apply Effective Methodologies to Measure Impacts

Public Comment: The cumulative and secondary effects were not adequately analyzed in the Draft EIS. The methodology is biased since it assumes that infill, joint development, and redevelopment are desirable and positive effects. In addition, the methodology is flawed because it underestimates the adverse impacts of the worst-case scenario by not describing the worst-case scenario. It only assumes that development will only proceed within the present parameters for density allowed under the Fairfax County Comprehensive Plan and the mix of uses permitted. The Draft EIS should apply various factoring tools to arrive at a more plausible worst-case scenario. For example, there is a demonstrated history of special exceptions to permitted uses, and changes to increase the allowed density, and other changes from what is allowed under the plan. A multiplier of 1.2 could be applied to reflect an assumption that for 20% of all parcels, county authorities will authorize more intense and dense usage than is currently allowed under the Comprehensive Plan. (0510 9-3)

Public Comment: Another shortcoming in the methodology for cumulative and secondary effects results because a quantitative methodology was used to evaluate effects in transit station areas but a qualitative methodology in assessing effects along regional transportation facilities. (0510 9-4)

Response: Secondary and cumulative effects are presented in Chapter 9 of the Final EIS. The process used to evaluate secondary and cumulative effects is based on the guidance provided in
Public Comment: The Draft EIS does not differentiate between the BRT alignment options when discussing the secondary and cumulative effects of the BRT Alternative. It also does not describe the intense pressure that would be borne by the low-density residential neighborhoods between Reston and Tysons Corner. The pressure exerted by increased car traffic to avoid tolls, and nearby density at the Wiehle Avenue Station is not discussed. (0510 9-2)

Response: BRT was eliminated from further consideration after the public and agency review and comment on the Draft EIS. Chapter 9 of the Final EIS discusses the secondary and cumulative effects of the LPA.

B. Supplemental Draft EIS Comments

Public Comments

Increase Development May Result in More Traffic Congestion

Public Comment: I really feel like the rail will increase overdevelopment in Reston.
0071 0080-4

Public Comment: [A]ny economic benefits incurred from subsequently added residential communities or businesses will be accompanied by more intra-Reston congestion, overcrowding, environmental damage and higher taxes.
0105 0123-4

Public Comment: Rail to Wiehle or rail to Herndon or Dulles will not solve the local traffic problem. Reston was not designed to move traffic. It was a nicely developed town or place where people could go from their house to work.
0073 0083-1

Public Comment: With the volume of traffic on Toll Road I find it hard to believe we need to increase density around the rail route!
0030 0031-2

Response: The analysis of development potential is discussed in Chapter 5 of the Final EIS and presents a discussion of the potential effects of density bonuses in the corridor at Metrorail station areas, including Reston. Secondary effects of potential development are discussed in Chapter 9 of the Final EIS. The actual level of development within the corridor are under the control of local government. Any mitigation needed to support the increase in densities is also under the jurisdiction of Fairfax and Loudoun counties, and they have included measures in their land use regulations.

Public Comment: The facts are rail will not only NOT help the congestion but will in fact increase the congestion. It has been recognized and stated in the DEIS and the SDEIS and in fact, I submit, there will be serious increases of the congestion in this region just because of continued as planned development and that does not even consider the doubling and tripling of densities near proposed rail stops that are scheduled to be allowed when the agreement for funding is reached.
0107 0125-9

Response: Over the next twenty years, congestion in the Dulles Corridor and the region will be increasing due to population and employment growth, regardless of the Dulles Corridor Rapid Transit Project. The Project would provide an alternative mode of transportation within the region. While it is stated in the Final EIS that the Project alone would not eliminate congestion on the
Dulles Toll Road and other regional roadways, the Project would substantially increase the transportation capacity of the Dulles Corridor.

Changes in Development Intensity

Public Comment: The impact on the current development in Tysons Corner would be great. The next step would be an effort to markedly increase the intensity of development along the Route 7 corridor.

Response: The actual level of development within the corridor is under the control of local jurisdictions. The level of development projected in the Final EIS represents the maximum allowable development under current zoning for the purpose of impact assessment. The timing and increase in densities in Tysons Corner is under the jurisdiction of Fairfax County. Chapter 5 of the Final EIS present an analysis of the potential effects of increasing densities and quantify the effects of implementing density bonuses in the corridor at Metrorail station areas. However, the Project’s ridership forecasts are based on regionally adopted population and employment forecasts for the opening and horizon years. The density bonuses associated with the Metrorail Extension are not part of these regionally adopted forecasts and therefore were not calculated as part of the demand forecasting process for the Supplemental Draft EIS and Final EIS. The impacts of congestion due to density bonuses was included in Chapter 9 of the Draft EIS and the Travel Demand Forecasting Methodology and Results Technical Report (June 2002).

Support for Transit Oriented Development

Public Comment: [Reston Association] supports mixed-use, transit-oriented development in the Wiehle station area consistent with the Fairfax County Comprehensive Plan.

Public Comment: [Reston Citizen's Association] supports mixed-use, transit-oriented development in the Wiehle station area, consistent with the Fairfax County Comprehensive Plan.

Public Comment: I strongly support the concept of planning for intensive, urban scale mixed use development allowing for significant residential, commercial, retail and public uses within a reasonable walking distance of the rail transit stations in the Dulles Corridor.

Public Comment: DCRA supports the location and design of rail stations so that the development of transit-oriented development (TOD) is encouraged.

Public Comment: The Committee for Dulles strongly supports the concept of planning for intensive urban-scale mixed-use development that allows for significant residential and commercial retail and public uses within a close proximity of these rail stations.

Response: Implementation of the LPA would help focus development in and around station areas, contributing to a new transit-oriented urban form for the Dulles Corridor. Chapter 3 of the Final EIS describes the land use plans adopted by local governments within the Dulles Corridor, all of which contain guidelines to support transit, higher densities, mixed-use development, and walkable, bike-friendly development patterns in close proximity to the Metrorail stations. These recommendations have been adopted in the Comprehensive Plan of Fairfax County and the General Plan of Loudoun County, and would be implemented by the counties through application of their respective zoning ordinances.
Clarify Development Assumptions Used in SDEIS

Public Comment: What quantity and mix of uses and activities within the impact area of the Wiehle Avenue station are or have been used in the supplemental DEIS?

Response: The regionally adopted land use and population forecasts developed by MWCOG (Round 6.2) were used in the Supplemental Draft EIS. In order to reflect the most current data, the Final EIS was updated to reflect the MWCOG Round 6.3 data. The future of land use at Wiehle Avenue under the Wiehle Avenue Extension and Full LPA would be similar to that described in Chapter 3 of the Final EIS.

9.2 Cumulative Effects

A. Draft EIS Comments

No comments pertaining to this topic were received.

B. Supplemental Draft EIS Comments

Public Comments

More Detailed Information on Changing Development Character is Needed

Public Comment: b. The SDEIS needs to provide detailed explanation as to the contribution of the project to cumulative effect, particularly regarding the “Change in Development Character” east of Wiehle Avenue (e.g., TABLE 2-2). The geographic extent and type of change needs to be provided in detail in order to meet social impact assessment requirements of the NEPA process.

Response: Information provided in the secondary and cumulative effects discussion of the Supplemental Draft EIS was updated for the Final EIS to reflect coordination with the Federal Aviation Administration regarding proposed Dulles Airport improvements. Determining the cumulative environmental consequences of an action requires delineating the cause-and-effect relationships between relevant, reasonably foreseeable actions and the resources, ecosystems, and human communities of concern. One project, the Dulles Airport Runways Project was identified as having the potential to influence the cumulative effects analysis for the Dulles Corridor Rapid Transit Project. Chapter 9 of the Final EIS discusses the cumulative effects related to the Dulles Corridor Rapid Transit Project. This chapter also describes the methodology used in identifying sensitive resources and determining the area of effect for the secondary and cumulative effects analysis. More specific information pertaining to community effects is discussed in Chapter 3 of the Final EIS.

9.3 Mitigation

A. Draft EIS Comments

State Agency Comments

Consider Environmentally Friendly Methods

State Comment: Consider environmental attributes when purchasing materials. For example, the extent of recycled material content, toxicity level, and amount of packaging should be considered and can be specified in purchasing contracts. (0407, 0407-A –14)
State Comment: Consider contractors’ commitments to the environment (such as an EMS) when choosing contractors. Specifications regarding raw materials and construction practices can be included in contract documents and requests for proposals. (0407, 0407-A –15)

State Comment: Choose sustainable materials and practices for infrastructure and building construction and design. These could include asphalt and concrete containing recycled materials, and integrated pest management in landscaping, among other things. (0407, 0407-A –16)

Response: Construction of the LPA would adhere to industry standards and utilize Best Management Practices to minimize effects on environmentally sensitive resources identified. Consideration of environmentally friendly methods and materials will be given during preliminary engineering and final design.

Public Comments

Consider Environmentally Friendly Methods

Public Comment: All build alternatives should address life-cycle environmental impacts of the required construction, types of transit equipment, and operation and maintenance of each design. (0487 9-1)

Response: The Final EIS included an analysis of anticipated effects of the LPA, which encompass many of these issues as required by the National Environmental Policy Act of 1969 (NEPA), as amended.

Need for Further Explanation of Environmental Effects

Public Comment: Metrorail allows the highest densities at the station areas of any options, and will generate the greatest ridership, but unless substantial mitigation efforts are made, there will be major congestion at the station areas. This congestion could easily spread throughout Reston. We understand that the current traffic analysis includes traffic at the stations due to Metro, but not traffic due to the increased authorized densities. This raises doubts about the adequacy of recommended mitigation measures. (0210, 0210-M –10)

Response: Analysis of travel effects related to secondary development primarily focused on station area travel patterns in relation to ridership, transit mode share, pedestrian and bicycle trips, total person and vehicle trips, vehicle miles traveled, and traffic volumes at selected intersections. While it is expected that increased density will result in localized traffic congestion in station areas, the new, transit-oriented urban form related to the LPA would help to increase overall mobility in the corridor, the counties, and the region. Information pertaining to the potential development character and effects is discussed in Chapter 5 of the Final EIS. Transportation related effects are discussed in Chapter 6 of the Final EIS.

Public Comment: The Final EIS traffic analysis should include the increased densities, with and without mitigation measures. Mitigation measures should result in no more congestion than the no-build alternative. (0210, 0210-M –11)

Response: A discussion of traffic-related impacts and mitigation is presented in Chapter 6 of the Final EIS.

Mitigation Plan

Public Comment: Designate a managing entity to coordinate implementation of the mitigation plan and ensure compliance and reports to stakeholders. In the mitigation plan, designate the specific responsibilities of each agency, along with cost share, timeline, and monitoring. (0026 Francesca Bravo, Falls Church)
Response: The Virginia Department of Rail and Public Transit (DRPT) is responsible for overall project management and implementation. It will be responsible for implementing mitigation measures included in the Federal Transit Administration’s Record of Decision (ROD) for this Project. The ROD will be developed after the 30-day circulation period of the Final EIS. DRPT will prepare a mitigation monitoring plan to identify responsibilities for specific measures and track their completion.

Public Comment: Ensure that the general project budget includes separate allocation to fund post implementation mitigation measures to address unanticipated adverse future effects of the project. (0430 9-2, Falls Church)

Public Comment: Ensure that the general project budget includes separate allocation to fund post implementation mitigation measures to address unanticipated adverse future effects of the project. (0388 9-2)

Public Comment: There is an inadequate mitigation plan, unclear mitigation responsibilities, and passing the buck between the Project and other local, state, and state transportation agencies. Conclusions on impacts and mitigation are very sketchy. (0430 9-1)

Response: The Project will be responsible for mitigating Project-related impacts only. Mitigation for all impacts have been identified and developed as part of the Final EIS and will be finalized during preliminary engineering and/or final design. The overall Project budget will include monies for mitigation of Project-related impacts. The Federal Transit Administration’s (FTA) Record of Decision (ROD) to be prepared after the circulation of the Final EIS will outline specific, agreed upon mitigation for the Project.

Public Comment: Concerned about the construction and implementation of the Metrorail Alternative at Hallcrest Heights. Based on the responses provided, seems like the noise issues can be addressed and the commenter hopes that the Project Team will work with state and local governments to identify and fund necessary mitigation measures. (0141 9-1)

Response: Chapter 4 of the Final EIS discusses noise impacts related to the Dulles Corridor Rapid Transit Project. The Hallcrest Heights neighborhood was identified as having a severe noise impact under both the Wiehle Avenue Extension and the full LPA. To mitigate the long-term noise effects from Metrorail operations on the Hallcrest Heights residential community, parapet and trackside sound barriers would be installed along the alignment at the locations shown in Figure 4.7-5 of the Final EIS.

Public Comment: Coordinate with VDOT and Fairfax County regarding shared mitigation costs and measures for sound barriers, measures to address cut-through traffic. Mitigation measures for new noise and traffic impacts should be provided in the Final EIS and responsible agencies should seek programming in the Commonwealth and regional transportation plans. (0388 9-1)

Response: Mitigation for Project-related noise and traffic impacts is proposed in the Final EIS and will be refined during preliminary engineering. Coordination with appropriate local government, and state and federal agencies regarding implementation of specific mitigation measures will occur as required.

B. Supplemental Draft EIS Comments

No comments pertaining to the topic of mitigation were received.