

## **FAA RESPONSES TO COMMENTS**

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**1.0 History, Background, and Public Involvement**

<p><b>1.0</b></p>	<p>City of Dania Beach—The FAA has tried to limit the input of Dania Beach and other local residents.</p> <p>This contrasts to the constant contact the FAA has had with Broward County.</p>	<p>The FAA has not limited the input of Dania Beach and other local residents. The public and federal, state, and local agencies were afforded opportunities to participate in the EIS process and to provide input for FAA consideration in the development of the EIS. The FAA has considered all comments submitted by the general public and the agencies throughout the EIS process.</p> <p>The EIS process provided opportunities for communities in or near the project location to state their concerns. Representatives of nearby communities and their residents have had the opportunity to express their concerns during agency and public scoping meetings in January 2005, at project focus group meetings held throughout the EIS process, at an interim public information meeting held in February 2006, during the Draft EIS comment period (March-May 2007), at the FAA public information workshop held concurrent to the public hearing (May 1, 2007), at the FAA public hearing, and during the comment period following the issuance of the Final EIS in June 2008. The Airport Sponsor also held a separate public hearing after issuance of the Draft EIS in June 2007 to provide area residents the opportunity to state their concerns regarding the proposed action.</p> <p>The City of Dania Beach made a request to the FAA to submit additional comments to supplement their previous comments provided on the Final EIS. Those comments, received in October 2008, were reviewed by the FAA to determine if any significant or substantial or new issues were raised regarding the analysis or information contained in the Final EIS that had not previously been submitted, considered. These comments are responded to in Appendix A of this ROD.</p> <p>The FAA's coordination with Broward County is appropriate because Broward County is the Airport Sponsor and the owner/operator of the airport. Broward County requested the FAA to prepare the EIS for their proposed project.</p>
<p><b>1.1</b></p>	<p>Comments submitted to the FAA dated April 20, 2001 and April 29, 2002, and July 23, 2002 on the previous DEIS and SDEIS should</p>	<p>The FAA did not include or consider comments submitted on prior EIS documents of proposed expansion at FLL. This EIS is not an update or continuation of prior analysis. All previous EIS</p>

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	<p>be included in the Administrative Record of this EIS.</p>	<p>documents were terminated and the associated processes were discontinued when the EIS process was reinitiated by the issuance, in January 2005, of the FAA Notice of Intent (NOI) to prepare an EIS and to conduct agency and public scoping. Therefore, comments on prior documents would not be relevant to the existing analysis and document.</p> <p>This same comment was submitted by the City of Dania Beach on the Draft EIS and was addressed in the Final EIS in Appendix P, <i>Response to Comments</i>. See the Final EIS, Appendix P, the Response to Comment 22.4.</p>
<p><b>1.2</b></p>	<p>The comment time allowed on the FEIS is totally inappropriate, especially since we have had to spend time to locate documents that were referenced in the FEIS but not included. For example, the December 7, 2007, letter from Kent George.</p> <p>We know there are other documents missing (from both the information on the FLL web site and the hard copies placed in the libraries) and are trying to track those down as well. FAA has not met the letter, spirit, and intent of public review and comment required by NEPA.</p>	<p>There is no statutory requirement for a specified time period allotted for public comment on a Final EIS. The FAA has afforded a 30-day comment period to allow the opportunity for the public to review new information that was not disclosed in the Draft EIS. The FAA determined that a 30-day comment period was sufficient for the review of the Final EIS. No member of the public or governmental agency requested additional time for review during the 30 day comment period on the Final EIS, which closed on July 28, 2008.</p> <p>The FAA disagrees with the commenter's statement that FAA has not met the letter, spirit, and intent of public review and comment required by NEPA. The FAA has disclosed the appropriate level of analysis in the Final EIS to support the selection of the FAA's Preferred Alternative.</p> <p>Typographical errors in the Final EIS have been corrected. The corrected text is provided in Appendix C <i>Final EIS Errata Documents</i>. Information that was inadvertently omitted from the Final EIS is provided in Appendix D <i>Final EIS Addendum Documents</i>. Information that was inadvertently omitted from the printing of the Final EIS were letters from Broward County to the FAA. These letters were listed in the introduction to Appendix C of the Final EIS but inadvertently omitted during printing. The FAA requested that Broward County post the letters on the County's web site within one week of publication of the Final EIS, and in addition, the letters were provided upon request to a resident of Dania Beach.</p>

**2.0 Proposed Project**

<p><b>2.0</b> EPA—Because the runway would be inoperable during construction, a parallel taxiway just north of the south runway would serve as an interim runway.</p>	<p>Based on a decision made by Broward County during the January 22, 2008 Commission Briefing on the airport master plan, a temporary runway is no longer being considered during the construction period for any of the alternatives.</p> <p>As noted by EPA, the air quality analysis demonstrated not only compliance with all NAAQS for 2012 and 2020 design years for the FAA's Preferred Alternative, but the project causes an improvement in air quality.</p> <p><i>See Chapter Six, Section 6.B.2.3, Table 6.B-2, Impact of Annual Criteria and Precursor Pollutant Emissions.</i></p> <p>When construction on the south runway (Runway 9R/27L) would require all operations to occur on the north runway (Runway 9L/27R), the number of possible aircraft operations at FLL would be reduced as compared to the no action alternatives. The number of annual operations would be reduced further if necessary to avoid unreasonable, unfeasible, and unrealistic levels of departure delay time during construction. A reduction in the annual number of operations would also reduce the use of ground support equipment (GSE).</p> <p>The net result would be a decrease in aircraft and GSE emissions during the construction years below the no action emissions, and the decrease in emissions would likely offset or eliminate the net increase in emissions due to construction. Because of uncertainty in the exact number of annual operations and associated delay times when using just one runway at FLL, a conservative approach was used and total net emissions equal to annual construction emissions were reported in Table 6.B-2.</p> <p>The one runway configuration and the operational delay and construction emissions would be temporary.</p>
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**3.0 Purpose and Need**

<p><b>3.0</b></p>	<p>City of Hollywood—The Terminal Area Forecast underlying the EIS undoubtedly has been rendered obsolete by steep increases in fuel prices. It is reasonable to expect that higher fuel prices will result in higher fares, with a resulting reduction in demand, and/or service reductions, in reaction to deteriorating profitability. Press reports already are carrying accounts of carriers' plans to reduce domestic service.</p>	<p>The FAA received a number of comments on the Final EIS regarding the potential effect of increasing fuel costs on operations at FLL and the reduction in operations announced nationwide by a number of airlines in early 2008. Although the price of fuel and economic fluctuations can affect an airport's operations these variables have been taken into account by the FAA in the FLL TAF and are not considered a substantial change in conditions.</p> <p>The FAA's TAF is updated annually. In the 2008 TAF for FLL, the near term forecast of operations through FY 2009 is based in part on the future schedules of the airlines serving the airport. These schedules would include reductions in response to increased fuel costs. The long term estimates of domestic enplanements through FY 2025 were forecast as a function of real yield at the airport and employment in the metropolitan area. These enplanement forecasts in turn were translated into operation forecasts using assumptions for average seats per aircraft and load factor.</p> <p>The FAA has compared the 2008 TAF for FLL with the 2006 TAF used in the EIS analysis. This comparison shows that the difference in projected operations between the 2006 TAF and the 2008 TAF for 2012 and 2020 is within an acceptable range. See this ROD, Table 1, Comparison of 2006 FAA TAF Operations to 2008 FAA TAF Operations. This comparison confirms the continued validity of the EIS forecast underpinning the purpose and need for this project.</p>
<p><b>3.1</b></p>	<p>City of Hollywood—The FAA has proposed use of runways 13/31 and 9R/27L to relieve congestion on 9L/27R and, as a result, to reduce delays at the airport. Although the agency has not yet identified the benefit of this action in terms of reduced delays, we have to assume that the benefit is not negligible.</p> <p>It follows that the No Action case in the EIS must assume implementation of the new runway use plan and adjust estimated delays accordingly.</p>	<p>Per the Final EIS Section 7.1.1.2.5, the FAA prepared an environmental assessment to document the potential environmental impacts of the proposed use of Runways 9R/27L and 13/31 when the preferred runway cannot efficiently accommodate existing operations at FLL. The purpose for the proposed action was to improve the operational efficiency of the airfield at FLL during times when demand warrants. The existing operations require an operationally flexible runway system that can more efficiently accommodate the number of aircraft operations. The FAA has issued a Finding of No Significant Impact and Record of Decision for this proposed action.</p>

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		<p>The No Action case in the EIS does assume the use of Runways 9R/27L and 13/31 when the preferred runway cannot efficiently accommodate existing operations at FLL.</p>
<p><b>3.2</b></p>	<p>City of Dania Beach—Despite the requirement that an airport master plan be updated every five years the Airport's Master Plan has not been updated since the 1990's.</p>	<p>A Master Plan Update and Part 150 analyses are initiated and prepared by the Airport Sponsor. The FAA's role with regard to these two sponsor-prepared documents is to review and accept in the case of master plans, and approve or reject the recommendations proposed in a Part 150 study. Neither study is mandated by FAA nor is either study required to conduct an FAA EIS.</p>
<p><b>3.3</b></p>	<p>City of Dania Beach—The FAA statement of purpose and need did not specifically provide a date range limitation.</p>	<p>The Final EIS clearly indicates within the Final EIS, Chapter Three, <i>Purpose and Need</i> that the analysis years being addressed by the FAA were 2012 and 2020. As can be seen in Section 3.2.1, 2012 and 2020 are established as the study years being considered.</p> <p>As noted in Chapter Three <i>Purpose and Need</i>, Footnote Seven, page 3-3, "The FAA uses 2012 and 2020 as a basis for analysis because 2012 is the projected earliest implementation year of the Airport Sponsor's Proposed Project and 2020, because it represents a future condition after full implementation of the Airport Sponsor's Proposed Project."</p>
<p><b>3.4</b></p>	<p>City of Dania Beach—The FAA artificially constrained ways in which demand could be accommodated, delay could be lowered, and other forms of capacity could be increased at the airport.</p> <p>This artificial constraint narrowed the statement of purpose and need to eliminate from discussion alternatives that would reduce air carrier delays without the need to spend hundreds of millions of dollars on additional runways.</p>	<p>The City of Dania Beach provided a similar comment on the Draft EIS, and the FAA's response to this comment was provided in the Final EIS, Appendix P, Response to Comment 4.9.</p> <p>In response to this comment, the statement that the FAA has artificially constrained demand is an opinion of the Commenter and the FAA does not agree with this statement. The purpose of the proposed action, as stated by the FAA within the Final EIS, Chapter Three <i>Purpose and Need</i>, is to provide sufficient capacity for existing and forecast demand at FLL.</p> <p>The FAA has determined that sufficient capacity must be provided to meet the existing and forecasted demand at FLL. The FAA did not limit its consideration of its alternatives to runway capacity development on FLL. The FAA considered other measures to increase capacity or decrease demand (such as use of other</p>

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		<p>airports, and operational and demand management) as possible alternatives. Specifically, in Chapter Four, <i>Alternatives</i>, the FAA discusses its consideration of off-site and on-site alternatives. None of the off-site or on-site non runway development alternatives would meet or satisfy the need to provide sufficient airfield capacity to accommodate existing or future aviation demand levels, and they did not reduce delay to a reasonable level in 2020.</p>
<p><b>3.5</b></p>	<p>City of Dania Beach—The FAA's statement of purpose and need alleges insufficient airfield capacity, inadequate infrastructure to accommodate larger aircraft, and insufficient terminal gates.</p> <p>The FAA relied on flawed capacity and demand projections, flawed delay projections, and flawed aviation forecasts to assess the purpose and need.</p> <p>It is improper for the FAA to artificially narrow the discussion in the way that it has through the statement of purpose and need.</p>	<p>The FAA believes that the capacity and demand projections, the delay projections, and the aviation forecasts to assess the purpose and need have been adequately addressed.</p> <p>Comments with similar content were addressed in the Final EIS in Appendix P, <i>Response to Comments</i>. See the Final EIS, Appendix P, the Response to Comments 3.6, 3.14, 3.15, and 3.16.</p> <p>Also, see the Response to Comment 3.4 in this ROD.</p>
<p><b>3.6</b></p>	<p>City of Dania Beach—Our comments in earlier letters relating to capacity have gone unheeded by the FAA, particularly the changing of the word "acceptable" to "established" in the FEIS Pg (3-11).</p> <p>This change did not address any of the deficiencies identified in the letters to the FAA. We are confused as to why various alternatives including demand management strategies and use of other airports were eliminated from detailed consideration when they would clearly increase the "capacity."</p> <p>It is unclear why calculations relating to airfield capacity play a greater role in justifying the need for runway development projects</p>	<p>The FAA believes it has appropriately responded to your previous comments. Comments with similar content regarding capacity and the alternatives analysis were addressed in the Final EIS in Appendix P, <i>Response to Comments</i>. See the Final EIS, Appendix P, the Response to Comments 3.5, 3.6, 3.7, 3.14, 3.15, and 3.16</p> <p>With regard to alternatives not carried forward for consideration, see the discussion provided in the Final EIS, Chapter Four, <i>Alternatives</i>, Section 4.1 <i>Range of Alternatives</i>. Demand management strategies or technical programs can affect airfield capacity but their use primarily increases airfield efficiency. For capacity enhancement, these techniques are no substitute for additional runway pavement.</p> <p>The FAA considered both average annual delay per operation and the practical hourly capacity for the No Action and the runway development alternatives.</p>

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	than calculation relating to throughput capacity.	Also, see the Response to Comments 3.4 and 4.4 in this ROD.
<b>3.7</b>	City of Dania Beach—The FAA defined capacity to include within it the concept of limiting delay. This is confusing at best, circular at worst.	As discussed in the Final EIS Chapter Three, Section 3.3.1.3, a typical delay threshold for aviation analysis is around six minutes of average delay per operation.
<b>3.8</b>	City of Dania Beach—The main problem with relying on the TAF numbers is that in determining future operations at the Airport, the TAF assumes that capacity is in existence at the Airport to accommodate the future demand.  The TAF projections are naturally skewed to inflate future projections of demand at the Airport.	Comments with similar content regarding the characterization of the forecast were addressed in the Final EIS in Appendix P, <i>Response to Comments</i> . See the Final EIS, Appendix P, the Response to Comment 3.17.
<b>3.9</b>	City of Dania Beach—The TAF projections do not account for increases in jet fuel prices. The FAA should have included discussions of these increased costs and how they affect capacity and demand at the Airport.	See the Response to Comment 3.0, in this ROD.
<b>3.10</b>	City of Dania Beach—We would like more information as to what is included in the "projected operational demand" numbers because it should have included the consideration of the reduction in schedules that most of the major carries are implementing and the increases in fuel prices.	See the Response to Comment 3.0 in this ROD.
<b>3.11</b>	City of Dania Beach—The FAA is understating the existing capacity at the Airport. We are confused as to whether the capacity is 113 mixed operations or 84 operations per hour.  An increase in demand does not in any way affect the capacity of the	The existing capacity of the airfield at FLL is 84 operations per hour. See Final EIS Section 3.3.1.2, "When strictly based on the FAA Advisory Circular 150/5060-5, <i>Airport Capacity and Delay</i> , the FLL airfield yields a theoretical capacity of 113 mixed operations <sup>1</sup> per hour. However, this does not reflect actual conditions or demand at FLL. Taking actual conditions and forecast demand into account, the

<sup>1</sup> The term 'mixed operations' is defined as aircraft arrivals and departures using the same runway.

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	<p>airfield or its runways.</p>	<p>throughput of the airfield is 84 operations per hour<sup>2</sup> because there is insufficient general aviation demand to maximize use of Runway 9R/27L, and as discussed in Section 3.2.1,<sup>3</sup> the deficiency in FLL airfield capacity is due to the level of air carrier demand.”</p> <p>Comment noted. An increase in demand does not affect the capacity of an airfield. However, an increase in demand affects the levels of delay at an airport. See the Final EIS Chapter Three, Section 3.3.1.3 <i>Level of Delay</i>.</p>
<p><b>3.12</b></p>	<p>City of Dania Beach—The FAA ignored our earlier comments regarding inaccurate and overstated delay projections.</p> <p>To the extent demand peaks at 20 minutes, many other impacts will decline or stop increasing because fewer airplanes will continue to use the Airport.</p> <p>The FAA seems to have missed that the gross overstatement of delay projections for the No Action Alternative for 2012 and 2020 skewed the entire analysis for all other alternatives. The FAA has ignored its own guidance (<i>FAA Airport Benefit Cost Analysis 10.4.1.3</i>).</p>	<p>The FAA previously responded to a similar comment from the City of Dania Beach regarding “demand peaks at 20 minutes” in the Final EIS in Appendix R, <i>Response to Comments Received After the Close of Comment Period</i>, the Response to Comment LC110.6.</p> <p>As discussed in the Final EIS, Appendix F, Section F.5, aircraft operation delay was calculated for each alternative for the 2012 and 2020 demand levels using a queue modeling methodology. For the No Action alternative, the schedule was de-peaked because when modeled with an unconstrained 2020 demand, delay for the No Action Alternative exceeded reasonable levels. Therefore, based on FAA experience it was assumed that airlines would adjust service patterns in three distinct ways to accommodate demand. First, the demand at the airport would flatten, as airlines increase operations in the periods that currently have fewer operations, essentially filling in the valleys of the schedule. Second, the airlines would move operations to the early morning and late evening hours to lengthen the operational day. Third, the peak operational season would extend to include additional days and or weeks.</p> <p>Regarding the Commenter’s statement referencing the FAA’s Airport Benefit Cost Analysis Guidance, the FAA responded to previous concerns from the City of Dania Beach</p>

<sup>2</sup> Appendix F, *Net Benefits Analysis*, Section F.3, *Capacity Analysis*, for a discussion about runway capacity that serves a homogeneous fleet of large aircraft and how it is different from that of a runway that serves a diversely-sized fleet of large, heavy, and small aircraft.

<sup>3</sup> Chapter 3, Section 3.2.1, *Insufficient Airfield Capacity to Accommodate Projected Aviation Demand with the EIS-Established Threshold of Aircraft Delay*.

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		<p>in the Final EIS, Appendix R, Response to Comment LC110.1, "The net benefit analysis in Appendix F is not a Benefit Cost Analysis (BCA) as defined in FAA policy guidance. The net benefit analysis is intended to demonstrate whether an airfield alternative meets established industry standards for financial feasibility, thus providing a financial indication that an alternative is reasonable.</p> <p>In general, the benefits accrued from improving runway capacity at FLL can be measured in terms of reduced arrival and departure flight delays. Because the alternatives differ in terms of the number, location, and length of runway improvements, the benefit of each alternative is not equal. The Net Benefits Analysis calculated the operational benefit of each alternative. (See Appendix F, Section F.1, <i>Introduction</i>.)</p> <p>The Airport Sponsor will be required to complete a BCA in accordance with FAA <i>Policy and Final Guidance Regarding Benefit Cost Analysis (BCA) on Airport Capacity Projects for FAA Decisions on Airport Improvement Programs (AIP) Discretionary Grants and Letters of Intent (LOI)</i>, published by the FAA December 15, 1999, in order to submit an application for Federal funding.</p>
<p><b>3.13</b></p>	<p>City of Dania Beach—The FEIS failed to quantify how many delays were attributable to capacity deficiencies versus other causes of delay.</p> <p>Without hard numbers of planes not being able to land or taxi because of the lack of space versus mechanical problems or weather, it is impossible to assess whether or not additional capacity is really needed at the Airport.</p>	<p>Comments with similar content regarding the characterization of delay were addressed in the Final EIS in Appendix P, <i>Response to Comments</i>. See the Final EIS, Appendix P, the Response to Comments 3.9 and 3.11. Regarding "hard" numbers, see the Final EIS, Appendix F for a detailed discussion of airfield delay and throughput capacity for each alternative.</p> <p>While weather and potential mechanical problems can contribute to delay at an airport, the delay analysis in the EIS calculates existing delay at FLL using the FAA's database of Aviation System Performance Metrics (ASPM), which is the best source of delay data available, and the most widely used industry reference for actual airport delay statistics. ASPM data does not include performance for general aviation and small air taxi airlines. At FLL, ATC typically assigns those flights to the shorter parallel runway, Runway 9R/27L.</p>

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		Therefore, ASPM delays at FLL reflect the performance of the scheduled carriers, which make up most of the operations and use the longer runways 9L/27R and 13/31. See the Final EIS Chapter Three, Section 3.3.1.3.
<b>3.14</b>	City of Dania Beach—It is unclear if the FAA used a six minute delay target or a six to ten minute delay range to calculate capacity needs at the Airport and to assess the need for increased capacity.	The FAA-established threshold of six minutes of average annual delay per operation is consistent with the Sponsor's desirable range of six to ten minutes of delay. As average annual delay increases above the six-minute delay threshold, the affect on delay to the airport and to the system increases exponentially. The six-minute threshold is consistent with the information contained in FAA's <i>National Plan of Integrated Airport Systems</i> (NPIAS). See Chapter Three, Section 3.3.1.3, <i>Level of Delay</i> .
<b>3.15</b>	City of Dania Beach—The aviation forecasts stated in the FEIS appear to be too high resulting in a deficiency that pervades the entire FEIS.  The FEIS did not provide explained passengers and aircraft operations even though the FEIS was issued in June 2008 well after actual 2007 should have been available.	See the Response to Comment 3.0 in this ROD.  Comments with similar content regarding the characterization of the forecast were addressed in the Final EIS in Appendix P, <i>Response to Comments</i> . See the Final EIS, Appendix P, the Response to Comment 3.17.  Comments with similar content regarding the decline in operations were also addressed in the Final EIS in Appendix P, <i>Response to Comments</i> . See the Final EIS, Appendix P, the Response to Comments 3.41 and 3.43.
<b>3.16</b>	City of Dania Beach—The FAA seems ignorant of the current static state of the airline industry throughout the U.S. and especially at FLL.  None of the air carrier reductions in operations was mentioned in the FEIS or considered in the aviation forecast, the determination of capacity, or the current and projected demand.	See the Response to Comments 3.0, 3.9 and 3.15 in this ROD. Also, see this ROD, Section 1 <i>Description of the Airport Sponsor's Proposed Action and Purpose and Need</i> .
<b>3.17</b>	Town of Davie—The major factors that drive or influence the TAF are economic factors. The current TAF is void of this controlling issue or "price of oil" which is a direct operation cost of the carrier fleet. Reduction of carrier operations at	See the Response to Comment 3.0.  The MITRE study used the same forecast schedule used in the EIS analysis (see Appendix S.1, <i>Simulation of Airport Surface Operations for FLL Environmental Impact Statement Alternatives, Section 2 Study</i>

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	<p>FLL are originating hubs has not been disclosed.</p> <p>The "high" forecast of traffic was mentioned in the MITRE study (Appendix S) and has yet to be quantified or updated.</p>	<p>Approach, The MITRE Corporation, 2008).</p>
<p><b>3.18</b></p>	<p>Town of Davie—The FAA's assumption and projection in the FEIS of 26 minute delays is fatally flawed.</p> <p>In the FEIS, the calculations of delay and the projections of future delays do not reflect the required flat or only slightly escalating rate of growth once the delay reaches 20 minutes.</p>	<p>See the Response to Comment 3.12.</p>
<p><b>3.19</b></p>	<p>Town of Davie—Response to Comment LC112.49 contradicts the statement in the purpose and need section (FEIS Page 3-4).</p>	<p>Both the Response to Comment LC112.49 and the Commenter's referenced statement in purpose and need are correct. The Final EIS states "The airfield, as currently configured, cannot accommodate the existing and forecast of the large air carrier aircraft projected to operate at FLL by 2012 and 2020. The deficiency in FLL airfield capacity is due to the level of air carrier demand." (See the Final EIS, Chapter Three, Section 3.2.2 page 3-4.)</p> <p>The first sentence of the paragraph cited by the Commentor states:</p> <p>"These runway infrastructure conditions create a deficiency in airfield capacity for the large air carrier aircraft operating at FLL. The operational delay caused by this deficiency will increase because the number of large air carrier aircraft operating at FLL is forecast to increase through 2012 and 2020." See the Final EIS, Chapter Three, Section 3.2.1,</p>
<p><b>3.20</b></p>	<p><b>Dania Beach October 6, 2008 Comment Letter - Page 1, paragraph 2</b> All of the runway "build" alternatives, meet the FAA's statement of purpose and need for the project. The local airport sponsor's preferred alternative, B1c, and the FAA's preferred alternative, are the worst alternatives from a cost and</p>	<p>The ROD discusses the FAA's reasons for selecting its preferred alternative. See Section 3.4 <i>The Selected Alternative</i>, of this ROD.</p>

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	<p>environmental perspective. We ask the FAA to reflect seriously on its decision to ensure that, if it approves a runway expansion that the alternative it authorizes is the one that cause the least damage to the environment and to the local residents.</p>	
<p><b>3.21</b></p>	<p><b>Dania Beach October 6, 2008 Comment Letter, II. A. The C1 Alternative achieves the project purpose and need.</b> Since all alternatives meet the purpose and need of the project, the FAA can make decisions based on environmental and cost factors.</p>	<p>The ROD discusses the purpose and need and the FAA’s decision process. See the following sections of this ROD – Section 3.1 <i>The Environmentally Preferred Alternative</i>, Section 3.3 <i>The Preferred Alternative</i>, and Section 3.4 <i>The Selected Alternative</i>.</p> <p>The Purpose and Need in NEPA determines the breadth of reasonable alternatives. However, those alternatives are further analyzed and the EIS analysis reflects the capabilities of each alternative and the specific environmental impacts that may result. This allows an agency to come to a well considered decision that supports the operational needs of the Federal government while minimizing impacts to the environment.</p> <p>Although each of the alternatives carried forward in the EIS was determined to be “reasonable” because they potentially met the Purpose and Need, the alternatives did not meet that Purpose and Need, and each had unique operational considerations and constraints. The FAA strongly considered these capabilities and constraints in light of the environmental impacts, as discussed in Section 3.1 <i>The Environmentally Preferred Alternative</i>, Section 3.3 <i>The Preferred Alternative</i>, and Section 3.4 <i>The Selected Alternative</i> of this ROD. Although there were “reasonable” alternatives that may have resulted in less environmental impacts, these alternatives were not determined to be “practicable” and “possible and prudent.” (Refer to 11990 and 47106 determinations).</p>
<p><b>3.22</b></p>	<p><b>Dania Beach October 6, 2008 Comment Letter</b>, The FEIS’s aviation demand forecasts seriously underestimate future aviation demand in South Florida. The City of Dania Beach believes the best choice is to forestall expansion of the airport until a</p>	<p>The FAA disagrees with the commentor’s conclusion that aviation demand forecasts have been underestimated. The aviation demand forecasts are discussed in this ROD in Section 1, <i>Description of the Airport Sponsor’s Proposed Action and Purpose and Need</i>.</p> <p>See the Response to Comment 3.21 regarding</p>

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<p>time when it is truly needed.</p> <p>However, if the FAA is going to approve a major runway expansion, it should approve the alternative that meets the project objectives at the least cost and with the fewest environmental impacts.</p>	<p>the FAA's decision process.</p> <p>It is important to note that the need for capacity development at FLL is not based solely on future demand and delay. Rather, FLL currently does not have enough capacity to effectively handle the existing demand with a reasonable level of delay.</p>
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**4.0 Alternatives**

<p><b>4.0</b></p>	<p>EPA defers to FAA and the Sponsor regarding the touchdown point of the proposed runway as well as other aspects of airport safety, however, EPA suggests that the touchdown point not be directly over US 1 to minimize the startle effect of motorist. The touchdown point is presumable a defined FAA standard distance from the end of the runway.</p>	<p>The aiming point and touchdown zone markings for landing operations on the proposed 27L Runway end is in accordance with FAA AC-150/5340-1J, Section 2 Runway Marking.</p>
<p><b>4.1</b></p>	<p>EPA is unclear how I-95 can be located within the RPZ since it is an elevated highway.</p>	<p>As defined in FAA Advisory Circular 150/5300-13, <i>Airport Design</i>, highways, and roadways are permitted within the runway protection zone (RPZ). The design criteria for runway safety areas at the ends of runways address the potential for runway overshoot.</p> <p>Although Interstate-95 would be located within the RPZ, it would be outside the Runway Safety Area, and therefore meets the design criteria. In addition, the results of the preliminary TERPS<sup>1</sup> analyses were presented graphically in Appendix E.1.3.1 to show the location and height of known structures and terrain features that exist within the vicinity of the TERPS approach and departure surfaces associated with each of the short-listed airfield development alternatives. The elevation of I-95 was not identified as an issue in the preliminary analysis.</p>
<p><b>4.2</b></p>	<p>City of Dania Beach—The FAA does have the authority to implement pricing schemes to incentivize GA flights to use airports other than FLL.</p> <p>It is completely disingenuous for the FAA to assert that it has no ability to affect FLL's fleet mix.</p>	<p>The FAA never had the authority to control the General Aviation (GA) market. As part of an airport sponsor's FAA grant assurances, the airport sponsor must make a public airport available as an airport for public use.</p> <p>The FAA does not have the authority to implement pricing policies at an airport or affect an airport's fleet mix due to the Airline Deregulation Act of 1978. The 1978 Airline Deregulation Act partially shifted control over air travel from the political to the market sphere. The Civil Aeronautics Board (CAB), which previously had controlled the entry, exit, and pricing of airline services, as well as inter-carrier agreements, mergers, and consumer</p>

<sup>1</sup> TERPS: Terminal Instrument Procedures; FAA Order 8260.3B *United States Standard for Terminal Instrument Procedures (TERPS)*.

**4.0 Alternatives**

		<p>issues, was phased out under the CAB Sunset Act and expired officially on December 31, 1984.</p>
<p><b>4.3</b></p>	<p>City of Dania Beach—It is ridiculous and inconsistent with other statements in the FEIS that the FAA eliminated the possible use of MIA and PBI as an alternative to the proposed project because of a supposed lack of overlapping markets.</p>	<p>Comments with similar content regarding the use of other airports were addressed in the Final EIS in Appendix P, <i>Response to Comments</i>. See the Final EIS, Appendix P, the Response to Comment 4.18.</p>
<p><b>4.4</b></p>	<p>City of Dania Beach—The FAA did not explain what specific demand levels the non runway development alternatives would not accommodate.</p> <p>In addition, the FAA did not consider the possibility of combining some or all of the non runway development alternatives to meet the projected demand at FLL.</p>	<p>The alternatives analysis in Chapter Four of the EIS identified and evaluated a range of reasonable alternatives that could substantially meet the stated purpose and need for the project.</p> <p>The FAA reviewed the off-airport and on-airport alternatives that could feasibly increase capacity and reduce delay at the FLL. The FAA determined that none of the off-site alternatives and none of the non-runway on-site alternatives could feasibly increase capacity and reduce delay and thus meet the stated purpose and need. (See the Final EIS, Chapter Four, <i>Alternatives</i>, Section 4.1.1, <i>Off-Site Alternatives</i>, and Section 4.2.2, <i>On-Site Alternatives</i>.)</p> <p>As specifically discussed in the Final EIS in Section 4.2.2.1, the non-runway development alternatives were reviewed to determine their potential to reduce airfield delays at FLL. The non-runway development projects, while adding taxiway flexibility and reducing ground delays at FLL, would not provide the airfield capacity necessary to accommodate existing and future aviation air carrier demand levels. A primary need at FLL is the need to accommodate air carrier demand.</p> <p>With regard to alternatives not carried forward for consideration, see the discussion provided in the Final EIS, Chapter Four, <i>Alternatives</i>, Section 4.1 <i>Range of Alternatives</i>. Demand management strategies or technical programs can affect airfield capacity but their use primarily increases airfield efficiency. For capacity enhancement, these techniques are no substitute for additional runway pavement.</p>

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	<p>Furthermore, as specifically discussed in the Final EIS, (see the Final EIS, Chapter Four, Section 4.2.2.2) the use of aviation technologies can result in more efficient operations in the enroute, arrival, and departure phases of flight, and ultimately give pilots more flexibility in determining their route, altitude, speed, departure, and landing times but are not capacity improvements; procedural alternatives (see Section 4.2.2.3) such as regional airspace restructuring would not increase airport capacity, but would increase the ability of the airspace to "deliver" more traffic to the airport; demand-management alternatives (see Section 4.2.2.4) manage the efficient use of existing airport facilities through measures such as pricing or regulatory actions implemented by the airport sponsor. Demand-management measures do not increase airport capacity during periods that are already saturated, but assist airport sponsors in balancing aircraft operational demand with available capacity during off-peak periods.</p> <p>The FAA did not consider combining some or all of the non-runway development alternatives because some of these types of alternatives increase efficiency but do not add capacity; some add limited capacity but not enough to address the demand at FLL; and none of these alternatives would accommodate the air carrier aircraft demand that can land or depart at FLL. Therefore, these would not individually or in combination increase airfield capacity at FLL to the level needed to meet existing and future demand and reduce delay. See the Final EIS, Chapter Four, Section 4.2.2 <i>Other Technologies</i> and 4.2.2.3 <i>Procedural Alternatives</i>.</p> <p>Furthermore, as referenced in the FAA <i>Capacity Needs in the National Airspace System 2007-2025</i> (May 2007) research and further study on air traffic management improvements would be required to determine their characteristics and feasibility.</p>
<p><b>4.5</b> City of Dania Beach—We have previously commented on the inconsistencies and confusing aspect of the so call "fatal flaws."</p>	<p>Comments with similar content regarding fatal flaws were addressed in the Final EIS in Appendix P, <i>Response to Comments</i>. See the Final EIS, Appendix P, the Response to Comment 4.4.</p>

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	<p>The FAA should explicitly explain what makes some flaws "fatal" and qualitatively different than the flaws in the Proposed Action and the Preferred Alternative.</p> <p>Why is it a fatal flaw to encroach upon I-95 and the CSX Railroad but not a flaw to encroach upon U.S. Highway 1 or the FEC Railroad? It makes little sense that the FAA considers encroaching on a passenger terminal to be a fatal flaw but not the demolition of the Hilton Hotel, the Atlantic Village development, or the potential condemnation of entire residential neighborhoods.</p>	<p>No residential neighborhoods are identified for potential condemnation for the development of the proposed project or as recommended noise mitigation.</p>
<p><b>4.6</b></p>	<p>City of Dania Beach—The assumption that Concourse A was part of the No Action Alternative was incorrect because Concourse A has not yet been approved.</p> <p>These expansion projects, including the use of the Secondary Runways, should have been included in the FEIS rather than separately analyzed, and highlight the improper segmentation that has been occurring throughout the Airport's expansion.</p>	<p>As noted in the Final EIS in Chapter Four, <i>Alternatives</i>, Footnote 53, at the time of publication of the Final EIS, the proposed addition of Concourse A to Terminal 1 was being considered by the FAA as part of a separate NEPA document. The potential impacts of the Concourse A project are discussed in the <i>Environmental Assessment for the Development of Concourse A at Terminal 1 (Broward County, 2008)</i> and were disclosed in the Final EIS in Chapter Seven, <i>Cumulative Impacts</i>.</p> <p>The addition of Concourse A was assumed to be in place for the No Action Alternative. The FAA processed the Concourse A project separately from the proposed action analyzed in the EIS because the FAA had determined that the Concourse A project had independent utility from the projects considered in this EIS because the development of Concourse A has no direct relationship to the Proposed Action. The development of Concourse A is not needed to support the FAA's Preferred Alternative. The FAA issued a Finding of No Significant Impact (FONSI) and Record of Decision (ROD) in July 2008 for the Concourse A project.</p> <p>The use of the "Secondary Runways" is not an expansion project. As noted in the Final EIS, Chapter Four, Section 4.1.3, with the No Action Alternative, the airfield would be operated in accordance with the current air traffic procedures. The current air traffic procedures include the use of Runways 9R/27L and 13/31</p>

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		<p>when the preferred runway cannot efficiently accommodate existing operations at FLL. The environmental assessment the FAA was preparing to document the potential environmental impacts of the proposed use of Runways 9R/27L and 13/31 when the preferred runway cannot efficiently accommodate existing operations at FLL is discussed in Chapter Seven, Section 7.1.2.5. The FAA issued a FONSI and ROD in June 2008 for the air traffic procedures analyzed in the EA.</p> <p>The use of the "Secondary Runways" was independently analyzed in an Environmental Assessment because the use of the Secondary Runways was determined to have independent utility from the alternatives considered in the EIS. The use of the Secondary Runways is an operational decision with respect to the runway infrastructure as it exists. Approval and construction of any of the build alternatives would include new operational procedures appropriate to that infrastructure.</p>
<p><b>4.7</b></p>	<p>City of Dania Beach—Currently, The Atlantic Village property is valued at \$65 million, and has been given the go ahead by both the FAA and Broward County.</p> <p>The FAA failed to discuss acquiring the Atlantic Village property. The cost of acquisition should have been factored into the FEIS analysis because the Atlantic Village Marina will inevitably have to be acquired with the FAA's Preferred Alternative. Condominiums are clearly an incompatible land use within the RPZ.</p> <p>We believe the FAA's position is incorrect as a matter of Florida and Federal law.</p>	<p>The Commenter is incorrect in the statement that the Atlantic Village property has been given the "go ahead" by both the FAA and Broward County. The site plan approval by the City of Dania Beach in June 2008. The FAA has no jurisdiction with regards to the City of Dania Beach site plan approvals.</p> <p>With regards to the Commenter's statement that the EIS failed to discuss acquiring the Atlantic Village property, the vacant parcel on which the Atlantic Village Marina development is currently proposed is commercial land use. Commercial land use is considered by the FAA to be a compatible with airport operations; and it would not require noise mitigation or acquisition; and thus was not included in the cost for any of the EIS alternatives. The FAA's standards for development within an RPZ are outlined in the FAA Advisory Circular 150/5300-13, Airport Design, dated 6/19/2008:</p> <p>The FAA has issued numerous determinations to the developer regarding the proposed Atlantic Village Marine site. Therefore, the developer is aware of the issues associated with the RPZ, the congregation of people and noise, and regardless of this information, it appears that the developer has decided to move forward with</p>

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		<p>this proposed project. The FAA does not plan to participate in the funding to acquire or mitigate noise impacts of this proposed development.</p> <p>The Commenter is not specific as to Florida or Federal law. The Final EIS discusses the City of Dania Beach’s Comprehensive Plan and zoning ordinance which includes compatible land use and addresses building height restrictions around airports. See Chapter Five, <i>Affected Environment</i>, Section 5.C.2.2.4 and Appendix J.2. The planning and zoning requirements of the City of Dania Beach should apply to any future development of the Atlantic Village Marina site. The FAA assumes that these requirements should result in a denial of development orders that would be “incompatible with airport/heliport uses, pursuant to the Development Review Requirements subsection of the Plan Implementation Requirements section of the Dania Beach Land Use Plan” (B.C.P. #15.03.02) or that would create unsafe conditions at FLL. (City of Dania Beach Zoning Ordinance Secs. 33-35).</p>
<p><b>4.8</b></p>	<p><b>Dania Beach October 6 2008 Comment Letter, I.C. The C1 Alternative would create fewer safety and security concerns than the B1 Alternatives.</b> When considering safety, it is clear that the C1 Alternative is a better choice than the B1 Alternative.</p> <p>The C1 Alternative would also avoid unsolvable security problems that would be created by the B1 Alternatives.</p>	<p>See this ROD, Section 3.3 <i>The Preferred Alternative</i>, and Section 3.4 <i>The Selected Alternative</i>, for a comparative discussion of the alternatives. The FAA determined all of the alternatives met FAA safety standards.</p>

**5.0 Affected Environment**

<p><b>5.0</b> City of Dania Beach—The FAA's use of the 60 DNL to define the affected areas failed to take into account many areas still affected by development.</p>	<p>Comments with similar content regarding potential affected areas and the 60 DNL noise contour were addressed in the Final EIS in Appendix P, <i>Response to Comments</i>, the Response to Comment 5.0.</p>
<p><b>5.1</b> The baseline data and the projections used in the Final EIS need to be updated.</p>	<p>As noted in Chapter Five, <i>Affected Environment</i>, Section 5.A, Introduction and Background, the data collected for the existing (baseline) year condition was compiled from information obtained between 2004 and 2006. The FAA has determined the data collected for the baseline is still relevant and reasonably representative at the time of the Final EIS publication because conditions have not changed significantly in and around the vicinity of the FLL.</p> <p>Regarding future projections, see the Response to Comment 3.0 in this ROD</p>

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**6.0 Environmental Consequences (General)**

<p><b>6.0</b> City of Dania Beach—Because the FAA not only includes in the FEIS demand projections through 2030, but also has used these levels to encourage the most ambitious runway expansion there is no good reason why environmental impacts including noise, should not be evaluated through 2030.</p>	<p>Comments with similar content were addressed in the Final EIS in Appendix P, <i>Response to Comments</i>. See the Final EIS, Appendix P, the Response to Comment 6.0 regarding the 2030 demand projections and the assessment of environmental impacts through 2030.</p>
<p><b>6.1</b> City of Dania Beach—With a 2014 completion date impacts for 2012 do not reflect impacts of the completed project but rather reflect impacts only during construction. Even the 2020 impacts were not identified or discussed for each alternative.</p> <p>The FAA should forecast environmental impacts through 2030 and perhaps even longer, as the Proposed Project will function far into the future, and many of the worst impacts can be expected to occur in later years in the project.</p>	<p>Comments with similar content were addressed in the Final EIS in Appendix P, <i>Response to Comments</i>. See the Final EIS, Appendix P, the Response to Comment 6.0 regarding the 2030 demand projections and the assessment of environmental impacts through 2030.</p>

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<p><b>7.0</b></p>	<p>EPA supports this air quality improvement aspect of the FLL expansion, although continued increases in operations at FLL over time can be expected to diminish this environmentally beneficial aspect.</p> <p>EPA's DEIS concern that the proposed project would result in a violation of the PM2.5 NAAQS has been addressed. The project is predicted to be in compliance with all NAAQS for 2012 and 2020 design years.</p>	<p>As noted by EPA, the air quality analysis demonstrated not only compliance with all NAAQS for 2012 and 2020 design years for the FAA's Preferred Alternative, but the project causes an improvement in air quality.</p> <p><i>See Chapter Six, Section 6.B.2.3, Table 6.B-2, Impact of Annual Criteria and Precursor Pollutant Emissions.</i></p> <p>When construction on the south runway (Runway 9R/27L) would require all operations to occur on the north runway (Runway 9L/27R), the number of possible aircraft operations at FLL would be reduced as compared to the no action alternatives.</p> <p>The number of annual operations would be reduced further if necessary to avoid unreasonable, unfeasible, and unrealistic levels of departure delay time during construction. A reduction in the annual number of operations would also reduce the use of ground support equipment (GSE). The net result would be a decrease in aircraft and GSE emissions during the construction years below the no action emissions, and the decrease in emissions would likely offset or eliminate the net increase in emissions due to construction. Because of uncertainty in the exact number of annual operations and associated delay times when using just one runway at FLL, a conservative approach was used and total net emissions equal to annual construction emissions were reported in Table 6.B-2.</p> <p>The one runway configuration and the operational delay and construction emissions would be temporary.</p>
<p><b>7.1</b></p>	<p>EPA and the City of Dania Beach—HAP emissions should be evaluated using dispersion modeling and toxicity values in a screening level assessment for locations in the vicinity of the airport.</p> <p>While EPA does not have national ambient air quality standards to serve as benchmarks for HAP, a screening level analysis can identify health risks that can be compared</p>	<p><i>See Appendix G of the Final EIS, Attachment G.1, Appendix G.1.B, Hazardous Air Pollutant (HAP) Evaluation.</i></p> <p>The air quality analysis includes an inventory of HAPs associated with sources of emissions identified at the airport. Further analysis, such as dispersion analysis or a toxicity weighting analysis is not required and was not conducted for HAPS. However, the FAA and USEPA are currently working together to establish a standardized methodology to</p>

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	<p>with acceptable risk ranges. EPA does not concur with FAA that "scientific uncertainties and lack of established standards and methodologies" justifies eliminating a screening level analysis from the information that should be presented in the FEIS.</p>	<p>address HAPS in future FAA NEPA documents. The FAA will use the standardized methodology in all of its future NEPA documents once it has been approved.</p>
<p><b>7.2</b></p>	<p>EPA believes FAA response to FEIS comments 7.4 and 7.15 appear to be contradictory.</p> <p>EPA suggests that the proposed FLL expansion offers an excellent opportunity for further "greening" of the airport by reducing GHGs.</p>	<p>Comments with similar content regarding minimizing or mitigating air quality impacts at FLL were addressed in the Final EIS in Appendix P, <i>Response to Comments</i>. See the Final EIS, Appendix P, the Response to Comment 7.4. FAA sees no contradiction in Response to Comments 7.4 and 7.15. EPA does not indicate how the comments are supposedly contradictory. Response to Comment 7.4 notes that the proposed project already has a beneficial impact on air quality as it reduces emissions. In effect, the proposed project is mitigating adverse air quality. Response to Comment 7.15 notes there is no EPA guidance/standards on how to address Green House Gases (GHG's) and that FAA is working to develop guidance on how to address GHG's from aviation sources.</p> <p>The mitigation of environmental impacts is required when there are significant impacts which exceed thresholds. There is no requirement that a federal agency develop necessary mitigation measures, only that there be adequate discussion of potential mitigation measures. The EIS air quality analysis demonstrated that no potential significant adverse air quality impacts would be caused by the FAA's Preferred Alternative. The Proposed Project causes a decrease in emissions that actually results in an improvement to air quality at FLL.</p> <p>Comments with similar content were addressed in the Final EIS in Appendix P, <i>Response to Comments</i>. See the Final EIS, Appendix P, the Response to Comment 7.15. Comment 7.15 states the FAA should begin to disclose carbon dioxide (CO2) emissions in NEPA document analysis, implying a program should be developed for all airports not just FLL. The FAA's response to Comment 7.15 describes the FAA's current efforts to disclose greenhouse gas emissions at airports, which</p>

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		would not necessarily be limited to NEPA documentation.
<b>7.3</b>	EPA recommends consideration of various programs and approaches that could be used to minimize or mitigate air quality impacts.	<p>See the Response to Comment 7.2.</p> <p>The FAA's Preferred Alternative would cause a decrease in emissions that actually result in an improvement to air quality at FLL.</p>
<b>7.4</b>	EPA does not concur that airport expansion alternatives cannot be evaluated in an EIS based on potential health effects. EPA believes the alternatives can be compared with one another regardless of other sources that may exist.	<p>Comments with similar content regarding health effects and an assessment of a single source of emissions in a local area were addressed in the Final EIS in Appendix P, <i>Response to Comments</i>. See the Final EIS, Appendix P, the Response to Comment 7.27. The subject of human health effects caused by HAP emissions was raised during the air quality scoping for this EIS. The FAA believes the emission inventories allow comparison of alternatives as EPA suggests.</p> <p>FAA believes that in addition to many technical difficulties and uncertainties, the health effects to persons living in the vicinity of an airport can not be applied in a meaningful way when the HAP evaluation would be limited to a single source in a local area.</p> <p>Each project alternative was compared to the no-action alternative of the same future year in the General Conformity evaluation provided in Appendix Q.3, <i>Air Quality General Conformity Evaluation of FAA's Preferred Alternative</i>. The evaluation of net emissions is an indication of the potential for significant air quality impacts that would indicate the need for dispersion analysis if net emissions were greater than or equal to the relevant thresholds under the General Conformity Rule.</p> <p>However, the net emissions caused by the FAA's Preferred Alternative were demonstrated to be negative (i.e., a decrease in air emissions), as shown in Appendix Q of the Final EIS, Table Q.3-6. As such, there would be no potential for the FAA's Preferred Alternative to cause significant adverse impacts to air quality.</p>
<b>7.5</b>	EPA believes the text was not changed in response to FEIS comment 22.2. The ROD should	The FAA has added a definition to the following terms in the Addendum to the Glossary provided in the Record of Decision:

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	<p>address these.</p>	<p>Avigation Easement, Stormwater Pollution Prevention Plan, and Throughput.</p> <p>The list of Acronyms in the Final EIS did contain RPZ, RSA, EMAS, and SWPPP.</p>
<p><b>7.6</b></p>	<p>City of Dania Beach—The air quality analysis appears premised on the incorrect assumption that air traffic will either be the same or increase under the No Action Alternative.</p> <p>The analysis also appears to have ignored the basic premise that both aircraft traffic and emissions will increase as a result the additional capacity provided by the Preferred Alternative.</p> <p>The capping or leveling off of aircraft at an average of 20 minutes of delay is something the FAA should have considered.</p>	<p>Comments with similar content were addressed in the Final EIS in Appendix R, <i>Response to Comments Received After the Close of the Comment Period</i>. See the Final EIS, Appendix R, the Response to Comment LC112.49.</p> <p>The project alternatives are designed to meet the demand for aircraft operations that would occur at FLL with or without the airfield improvements. Aircraft traffic and emissions are predicted to increase at FLL regardless of any additional capacity provided by the Preferred Alternative. Therefore, the number of aircraft operations under the No Action alternative would be the same as for each of the alternatives for a given year.</p> <p>The FAA responds to airport delay by evaluating those development projects proposed by an Airport Sponsor that could result in a reduction in delay or an increase in capacity. Market demand is another factor that influences the level of delay that the flying public will accept.</p>
<p><b>7.7</b></p>	<p>City of Dania Beach—The FAA's decision not to provide emissions data for emissions from 2020 for all the alternatives further showcases the error in the FAA's assumption that increased capacity will not impact air traffic at the Airport.</p> <p>Surely the emissions levels at the Airport in 2020 under any of the build alternatives would be greater than the emissions under a 2020 No Action Alternative.</p>	<p>See the Final EIS, Chapter Six, Section 6.B.2.3, <i>Future Conditions – Emission Inventory</i>, and Section 6.B.2.3, <i>Criteria and Precursor Pollutant Emission Inventory</i>, Table 6.B-1, <i>Emission Inventory of Criteria and Precursor Pollutants</i>, and Table 6.B-2, <i>Impact of Annual Criteria and Precursor Pollutant Emissions</i>.</p> <p>See also Section 6.B.2.4, <i>Criteria Pollutant Dispersion Analysis</i>, Table 6.B-12, <i>Maximum Criteria Pollutant Design Concentrations</i>, and Table 6.B-13, <i>Impact of Criteria Pollutant Concentrations</i>.</p> <p>The analysis of future conditions was revised in the Final EIS to include the same level of analysis for 2020 conditions as provided for 2012 conditions.</p> <p>The commenter's assumption that 2020</p>

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		<p>emissions levels being greater under any of the build alternatives is incorrect. With any of the build alternatives the level of delay would be reduced, thus reducing the time aircraft idle on the ground waiting to take-off which would result in less emissions.</p>
<p><b>7.8</b></p>	<p>City of Dania Beach—The FEIS erroneously concluded that the emissions from motor vehicles and the fuel used by stationary source would be the same for the No Action Alternative as the Preferred Alternative.</p>	<p>Comments with similar content were addressed in the Final EIS in Appendix R, <i>Response to Comments Received After the Close of the Comment Period</i>. See the Final EIS, Appendix R, the Response to Comment LC112.49.</p> <p>Each year the number of aircraft operations is expected to increase at FLL, with or without the Proposed Project. However, within each year of analysis, the number of aircraft operations for the No Action alternative and each of the project alternatives is the same. As such, there is no increase in the number of motor vehicles or fuel used by stationary sources at the airport as a result of any proposed project alternative. Consequently, the emissions from vehicles would be constant for each project alternative within a given future year.</p> <p>Although fuel storage and emission sources from other stationary sources would increase from year to year, emissions from stationary sources are based on the number of annual operations. As the number of operations at the airport within a given year, under each of the alternatives, would be the same, then emissions from the stationary sources based on the number of operations is the same, within a given year.</p>
<p><b>7.9</b></p>	<p>City of Dania Beach—The FAA failed to use the most recently available data in determining the future air emissions (e.g. the use of 2005 as the baseline and 2003 as the basis for the weather data)</p>	<p>See the Final EIS, Appendix G.1, <i>Final Technical Report-air Quality Assessment Methodology and Procedure</i>, Section 3.3.2, <i>Dispersion Weather Data</i>.</p> <p>FAA used 2005 weather data to estimate emissions and calculate pollutant concentrations for the 2005 baseline year. For future conditions, FAA applied five consecutive years of weather data in sensitivity analysis to determine the weather year that would cause the worst-case pollutant conditions.</p>

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		<p>The five-year database that would provide the most recent five consecutive years of complete and credible data was determined to be the years 1999 through 2003. Sensitivity analysis showed that the highest concentrations of pollutants were predicted when applying 2003 weather data. Therefore, 2003 weather data was applied to all dispersion analyses for future conditions in the Final EIS.</p>
<p><b>7.10</b></p>	<p>City of Dania Beach—The FAA improperly concluded that the soot and oily deposits in communities near FLL are primarily due to non Airport sources.</p> <p>They then jumped to the conclusion that soot in neighborhoods surrounding the Airport was not caused by aircraft flying overhead without any analysis of the actual soot in the neighboring communities.</p>	<p>Comments with similar content were addressed in the Final EIS in Appendix P, <i>Response to Comments</i>. See the Final EIS, Appendix P, the Response to Comment 7.44.</p> <p>The FAA has conducted several soot deposition studies at airports across the country, including major commercial airports located in urbanized areas. The uniform results from the samples collected on and near the airport bore little chemical resemblance to either unburned jet fuel or soot from jet exhaust. Instead, the collected material was found to be chemically similar to general urban pollution, particles from burning heavy fuels, and motor vehicle exhaust. As such, the FAA concluded that soot and oily deposits in communities near Fort Lauderdale are primarily due to non-Airport sources.</p>
<p><b>7.11</b></p>	<p>Town of Davie—The Town continues to be concerned that Air quality impacts (and associated impacts to vulnerable populations, especially children) have not been adequately assessed.</p>	<p>See the Final EIS, Chapter Six, Section 6.B.4, <i>Conclusion</i>.</p> <p>The EIS assessed the six NAAQS criteria pollutants. The analysis demonstrated that the concentration levels of the pollutants included in the study meet all the Federal, State, and local requirements for healthful air quality, which would apply to all vulnerable populations, including children. In fact, the proposed project would reduce air emissions and have a beneficial impact on air quality. See the Final EIS Chapter Six <i>Environmental Consequences</i>, Section 6.H.1.3 Children's Environmental Health and Safety Risks.</p>
<p><b>7.12</b></p>	<p>Town of Davie—Comment LC112.52 requested clarification as to how the final four receptors were determined in light of the fact that the explanation provided in the draft document was in error.</p>	<p>See in the Final EIS, Chapter Five, Section 5.B.2.2.1, <i>Criteria Pollutant Dispersion Analysis</i>, Table 5.B-5, <i>Criteria Pollutant Design Concentrations – 2005 Existing Conditions</i>; Appendix G, Attachment G.1, Section 3.3.3, <i>Dispersion Receptors</i>, Section 1.2, <i>Broward</i></p>

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	<p>The response to the comment provides an explanation of the factors used in the determination and notes that the “text in Draft FEIS Section 5.B.2.2.1 has been revised.” The revisions to the referenced section do not include the detail provided in the response.</p>	<p><i>County Air Quality Status Exhibit G.1-5, Airport and Parking Lot Dispersion Receptor Locations.</i></p> <p>The information in the Response to Comment LC112.52 (contained in the Final EIS, Appendix R) provided a summary of information found in several sections of the Final EIS as noted above with the following exception: revised modeling results in the Final EIS show that the highest concentrations of 24-hour SO<sub>x</sub> and PM<sub>2.5</sub> were estimated to occur at Receptor T9; the maximum three-hour concentration of SO<sub>x</sub> emissions would occur at Receptor T4; and the 24-hour maximum concentration of PM<sub>10</sub> would occur at Receptor R2. All these receptors are located in the “terminal core,” as shown on Exhibit G.1-5.</p>
<p><b>7.13</b></p>	<p>Town of Davie—In several of the FAA’s responses there is a reference to “updated planning information,” but again, there is no detail about or reference to what that updated information is.</p> <p>The FAA’s Response to Comment 112.59 makes reference to “The updated information is included in the FEIS in Table 6.B-2.”</p>	<p><i>See the Final EIS, Appendix Q.3, Section Q.3.6, Dispersion of Construction Emissions, Table Q.3-7, Dispersion Analysis of Criteria Pollutants for the Year of Highest Construction Emissions for the FAA’s Preferred Alternative. See also Appendix E, Alternatives.</i></p> <p>The Response to Comment LC112.59 (contained in the Final EIS, Appendix R) stated in part: “The construction emissions inventory presented in the Draft EIS was revised based on updated planning information. The updated information is included in the EIS in Table 6.B-2.” The updated information in the table relates to the inventory of construction emissions for each 2012 and 2020 project alternative, and the annual construction emissions leading up to the year of project completion. The table is adequately footnoted to provide reference information. Updated construction schedules, on which the construction emissions inventory was based, is found in the Final EIS in Appendix E.</p>
<p><b>7.14</b></p>	<p>Town of Davie—The Town is concerned with the response to Comment LC112.62 which requested that the health risk effects of the calculated air pollutant emissions be assessed.</p> <p>There are appropriate modeling</p>	<p><i>See the Final EIS, Appendix G, Attachment G.1, Appendix G.1.B, Section G.1.B.1.4, Characteristics of Hazardous Air Pollutants (HAPs).</i></p> <p>The FAA is in the process of conducting research on the development of appropriate methodologies and tools available to assess</p>

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	<p>programs available to calculate incremental health risks and therefore, without a more explicit reference or explanation, the stated conclusion that there is no "meaningful way" to assess health effects is incorrect.</p>	<p>hazardous air pollutants (HAPs) at airports. While modeling programs may be available to calculate incremental health risks, these models are not able to discern the unique aspects of aircraft operations and their contribution to the formulation of HAPs.</p> <p>The FAA's <i>Select Resource Materials and Annotated Bibliography on the Topic of hazardous Air Pollutants (HAPs) Associated with Aircraft, Airports, and Aviation</i>, concluded that "current available methods of predicting HAPs concentrations near airports using computerized atmospheric dispersion models have several potentially significant limitations and the accuracy of the results is mostly unknown." The FAA maintains that until further research provides accurate models that can address the specifically unique characteristics of aircraft flight, there is no meaningful way to assess health effects at airports. See Appendix G of the Final EIS, Attachment G.1, Appendix G.1.B, <i>Hazardous Air Pollutant (HAP) Evaluation</i>. As noted by EPA, EPA does not have national ambient air quality standards to serve as benchmarks for HAPs.</p> <p>The air quality analysis includes an inventory of HAPs associated with sources of emissions identified at the airport. Further analysis, such as dispersion analysis or a toxicity weighting analysis is not required and was not conducted for HAPS. However, the FAA and USEPA are currently working together to establish a standardized methodology to address HAPS in future FAA NEPA documents. The FAA will use the standardized methodology in all of its future NEPA documents once it has been approved.</p>
<p><b>7.15</b></p>	<p>DEP/Southeast District's Air Section—</p> <p>Tables G.1.B-8 through G.1.B-26 do not include the particulate matter (PM) contributions from aircraft; listing this information would be beneficial.</p>	<p>See the Final EIS, Appendix G.1.B, <i>Hazardous Air Pollutant (HAP) Evaluation</i>, Section G.1.B.2.3, <i>Speciation Profiles</i>, Table G.1.B-2, <i>Aircraft Speciation Profiles</i>, and HAP emissions inventory Tables G.1.B-8 through G.1.B-26.</p> <p>Emission factors for the calculation of particulate matter (PM) emissions that would occur during the operation of aircraft engines are provided in FAA Emissions and Dispersion Modeling System (EDMS) for a select group of jet aircraft, but almost no data is provided for</p>

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		<p>turboprop or piston-engine aircraft.</p> <p>Emissions of PM for those aircraft without PM data in EDMS were estimated pursuant to FAA guidelines from the USEPA AP 42 <i>Compilation of Air Pollutant Emission Factors</i>, 4<sup>th</sup> Edition, 1989, Table II-1-9, <i>Aircraft</i>. The AP-42 does not contain emission factors for PM-related HAPs from aircraft engines. Therefore, HAP emissions resulting from PM emissions from aircraft were not estimated.</p> <p>The tables referred to in the comment are located in Appendix G.1.B in the Final EIS. Each table includes "Diesel Particulate Matter" emissions in the list of types of HAPs.</p>
<b>7.16</b>	<p>DEP/Southeast District's Air Section—</p> <p>No new stationary air sources are planned for this EIS. Future stationary sources or major modification to equipment or operations of existing sources would require appropriate permits.</p>	<p>Any required permits necessary for the establishment of new on-airport stationary air sources would need to be obtained by the Airport Sponsor.</p>

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**8.0 Noise and Land Use**

<p><b>8.0</b></p>	<p>EPA—In addition, 8,297 people in 3,650 units would be located within the 60-65 DNL in 2012. Residential areas with an undetermined portion (no 2012 data found in the FEIS) of these 8,297 people in the 60-65 DNL was presumably also considered incompatible land use by FAA. In addition, 9,749 people in 4,234 units would be located within the 60-65 DNL in 2020.</p> <p>Of these 2,184 people were considered incompatible land use by FAA.</p>	<p>The identified land uses between the 60-65 DNL noise contours are considered compatible by FAA in accordance with 14 C.F.R. <i>Part 150 Airport Noise Compatibility Planning, Appendix A, Table 1</i>. The disclosure of land uses between the 60-65 DNL noise contours is provided for local planning purposes only.</p>
<p><b>8.1</b></p>	<p>EPA does not consider that new residents would be exposed to noise even by the No Action to be relevant to the need for airport noise mitigation.</p> <p>EPA believes the Sponsor and FAA are responsible for mitigation substantive aircraft noise exposures of residents within the 65+ DNL contour and for significant increases within and outside the 65+ DNL contours. Mitigation should address the proposed projects and periodically address substantive incremental increases between projects.</p> <p>The response to DEIS comment 8.1 and 8.2 does not necessarily identify the requested enumeration of the new residences affected by noise.</p>	<p>All analyses and impacts were assessed using guidelines established by FAA Order 1050.1E, Change 1, <i>Environmental Impacts: Policies and Procedures</i>, dated March 20, 2006, and Order 5050.4B, <i>National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions</i>. The No Action Alternative serves as the Baseline for comparison with the other alternatives and therefore determines the extent of impacts.</p> <p>As discussed in the ROD, Section 4 <i>Summary of Mitigation Measures</i>, the Airport Sponsor will be required to prepare a mitigation program to address the incompatible land uses within the 65 DNL of the FAA's Preferred Alternative. This requirement will be a part of Federal grant assurances that are required for receipt of Federal funding to carry out such mitigation. The Airport Sponsor's mitigation program will include a phasing schedule that will define the order in which noise mitigation measures will be implemented.</p> <p>The Part 150 land use compatibility guidelines, the Federal Interagency Committee on Noise (FICON) guidelines for defining noise impacts outside of the 65 Day-Night Average Sound Level (DNL), and the FAA's Air Traffic Noise Screening Model (ATNS, FAA-AEE- 99-01) provide the criteria by which land uses are evaluated for compatibility with aircraft noise.</p> <p>All land uses within areas below 65 DNL are considered compatible with airport operations.</p>

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<p><b>8.2</b></p>	<p>City of Dania Beach—The noise impacts of the No Action Alternative are exaggerated compared to the action alternatives because there will be fewer flights with higher levels of delay.</p> <p>By increasing capacity, the FAA is increasing the number of operations, and hence increasing noise impacts.</p>	<p>As discussed in the Final EIS Appendix F <i>Net Benefits Analysis</i>, Section F.5, when modeled with an unconstrained 2020 demand, delay for the No Action Alternative exceeded reasonable levels. Therefore, the EIS analysis assumed that airlines would adjust service patterns in three distinct ways to accommodate demand. First, the demand at the airport would flatten, as airlines increase operations in the periods that currently have fewer operations, essentially filling in the valleys of the schedule. Second, the airlines would move operations to the early morning and late evening hours to lengthen the operational day. Third, the peak operational season would extend to include additional days and or weeks. Therefore, there would not be fewer flights. The EIS noise analysis reflects these adjustments for the No Action Alternative.</p> <p>For a discussion of the projected number of operations at FLL, which are based on the FAA TAF, see the Response to Comment 3.0 in this ROD.</p>
<p><b>8.3</b></p>	<p>City of Dania Beach—The noise analysis was deficient because it used 2005 as the baseline year and did not take into account the use of the Performance Based Navigation techniques such as Area Navigation (RNAV) and Required Navigation Performance (RNP), which was authorized for use at FLL by the FAA in 2006.</p>	<p>The EIS follows the methodologies and significance criteria included in FAA Order 1050.1E for the assessment of aircraft noise impacts (see Appendix H, <i>Noise</i>, for a summary of the requirements of FAA Order 1050.1E). Order 1050.1E requires that all input into the Integrated Noise Model be reasonably reflective of current conditions. The 2005 operations data was used because it was the most recent data available that would reflect current conditions.</p> <p>Actual radar data was used to verify general flight corridors and runway use. Thus, Performance Based Navigation (“PBN”) procedures in use at FLL would have been captured in the radar track data.</p> <p>Comments with similar content regarding Performance Based Navigation were addressed in the Final EIS in Appendix P, <i>Response to Comments</i>. See the Final EIS, Appendix P, the Response to Comment 8.16.</p>
<p><b>8.4</b></p>	<p>City of Dania Beach—Using 2005 as a baseline has the effect of overstating current noise levels at the Airport, which subsequently</p>	<p>See the Response to Comment 8.3.</p>

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	<p>has the effect of understating the actual increases in noise that result from various alternatives.</p>	
<p><b>8.5</b></p>	<p>City of Dania Beach—The DNL contour is by no means the only appropriate measure of noise impacts and does not take into account loudness, the number of events, the time of day of the event, seasonal differences, impacts on wildlife, or sporadic noise events involving high levels.</p>	<p>The EIS follows the methodologies and significance criteria included in FAA Order 1050.1E for the assessment of aircraft noise impacts (see Appendix H, <i>Noise</i>, for a summary of the requirements of FAA Order 1050.1E). The EIS discusses supplemental noise analysis in Appendix H, <i>Noise, Supplemental Noise Analysis Grid Point Data</i>.</p> <p>As discussed in the Final EIS, Chapter Five <i>Affected Alternative</i>, Section 5.C.1.2.1 Methodology and Data Sources, the analysis of noise exposure around the airport was prepared using INM Version 6.1, the most recent version available at the initiation of this EIS analysis. The INM is a state-of-the-art computer model that is used by the FAA to predict the noise exposure levels from aircraft operations at civilian airports. Inputs to the INM include the number of aircraft operations during the period evaluated, the types of aircraft flown, the time of day when they are flown, how frequently each runway is used for arriving and departing aircraft, and the routes of flight used to and from the runways. Substantial variations in any one of these factors may, when extended over a long period of time, cause marked changes to the noise exposure around the airport. The INM calculates noise exposure for the area around the airport and outputs contours of equal noise exposure. For this EIS, equal noise exposure contours for the levels of 60, 65, 70, and 75 DNL were calculated.</p> <p>Comments with similar content regarding the wildlife in John U. Lloyd State Park and West Lake Park were addressed in the Final EIS in Appendix P, <i>Response to Comments</i>. See the Final EIS, Appendix P, the Response to Comments 8.58 and 8.80.</p> <p>Comments with similar content regarding noise and wildlife were addressed in the Final EIS in Appendix P, <i>Response to Comments</i>. See the Final EIS, Appendix P, the Response to Comment 11.6.</p>
<p><b>8.6</b></p>	<p>City of Dania Beach—Reliance on</p>	<p>FAA Order 1050.1E requires that noise</p>

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	<p>the 65+ DNL contour does not comport with contemporary scientific thinking.</p> <p>Even though the FAA mentioned other metrics, the only metric used for actual evaluation purposes is the DNL contour.</p> <p>The DNL standard ends up leaving out areas, John U. Lloyd State Park for example that are severely impacted by a proposed project.</p>	<p>contours be prepared using the DNL noise metric. The 65 DNL noise contour has been established as the threshold of significance for noise impacts. DNL is the average sound level over a 24-hour period for an average annual day.</p> <p>Consistent with FAA Order 1050.1E, Paragraph 14.5, the FAA may consider supplemental noise metrics. The Day-Night Average Sound Level (DNL) noise contour is the FAA-accepted methodology to identify incompatible land uses and significant impacts.</p> <p>The supplemental metrics included in the Draft EIS are provided in Appendix H, <i>Noise, Supplemental Noise Analysis Grid Point Data</i>.</p> <p>The definitions of the supplemental metrics disclosed in the Final EIS are provided in the <i>Glossary: Grid Analysis, Maximum Noise Level (Lmax), Single-event, Sound Exposure Level (SEL), and Time Above (TA)</i>.</p> <p>Comments with similar content regarding the John U. Lloyd State Park were addressed in the Final EIS in Appendix P, <i>Response to Comments</i>. See the Final EIS, Appendix P, the Response to Comments 8.67, and 9.4.</p>
<p><b>8.7</b></p>	<p>City of Dania Beach—The elevated runway will increase the impact of sideline noise on residents to the south. Any ground noise attenuation that occurs will be diminished as a result of the elevated runway. The computer modeling used did not appear to account for the increasing elevation of the noise source over the length of the runway.</p>	<p>The INM model includes the elevation of each proposed runway end; however, it assumes a flat hard surface for ground attenuation. This represents a worst-case scenario because it does not account for the potential noise reduction from structures or natural surroundings. Therefore, the noise contours provided in the Final EIS disclose the potential noise effects with an elevated runway on the south airfield and use the most conservative approach to ground attenuation.</p>
<p><b>8.8</b></p>	<p>City of Dania Beach—The FEIS should have informed the citizens currently protected by the buffer of the large increase in noise that they will inevitably have to endure as a result of the Proposed Project.</p>	<p>The FAA assumes the commenter is referring to the Aviation Greenbelt. See the Final EIS, Chapter Six, Section 6.C.1.2 <i>Analysis of the Effectiveness of the Aviation Greenbelt Noise Berm</i>.</p> <p>As discussed in this section, the noise berm is somewhat effective reducing noise of aircraft that are on the ground either taxiing, takeoff roll, or after landing. Once an aircraft is airborne, the noise berm has no effect on the</p>

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		<p>noise from that aircraft.</p> <p>For the first row of homes in Melaleuca Gardens, if no other noise sources were present, the noise berm would reduce noise from aircraft on the ground by up to 8 dB. However, because Melaleuca Gardens is exposed to aircraft that are both on the ground and in the air, the perceived reduction in noise would be less.</p> <p>For the Airport Sponsor's Proposed Project, Runway 9R/27L would be redeveloped to slope from the western end to a maximum height of 45 feet above Mean Sea Level (MSL) at a point approximately in the middle of the runway. Because the redeveloped runway elevation would be higher than the noise berm, the berm could have little to no effect on noise from aircraft operations.</p> <p>Also, see the Response to Comment 8.7 in this ROD.</p>
<p><b>8.9</b></p>	<p>City of Dania Beach—The FEIS ignored vibration effects caused by low-frequency or "C-weighted" aircraft noise.</p> <p>The FEIS failed to evaluate nighttime impacts exclusively, and did not provide additional contour maps to reflect impacts solely from nighttime flying.</p> <p>The FAA did not respond in any way to our comments and failed to discuss the potential negative health impacts associated with airport noise in the FEIS.</p>	<p>The noise analysis was prepared in accordance with accepted methodologies and significance criteria included in FAA Order 1050.1E for the assessment of aircraft noise impacts (see the Final EIS, Appendix H, <i>Noise</i>, for a summary of the requirements of FAA Order 1050.1E). Order 1050.1E requires the use of the Integrated Noise Model (INM) to create noise exposure contours.</p> <p>The existing or potential conditions at FLL do not call for the FAA to conduct supplemental analysis to address low frequency or "C-weighted" aircraft noise, such as at a joint use facility for commercial fleet and military fleet or extensive helicopter activity. Because of the existing and projected fleet mix and operating conditions at FLL, it is highly unlikely such noise impacts would occur. Therefore, no low frequency or C-weighted analysis was conducted.</p> <p>The INM analysis provides a measure of the average noise level over a 24-hour day. It is the 24-hour, logarithmic (or energy) average, A-weighted sound pressure level with a 10-decibel penalty applied to the nighttime event levels that occur between 10:00 p.m. and 7:00 a.m.</p>

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		Comments with similar content regarding health effects were addressed in the Final EIS in Appendix R, <i>Response to Comments Received After the Close of the Comment Period</i> . See the Final EIS, Appendix R, the Response to Comment LC111.2.
<b>8.10</b>	<p>City of Dania Beach—The noise analysis operated under the false assumption that 2012 represented the year of anticipated project implementation.</p> <p>Because the project is unlikely to be completed by 2012, the FAA should have expanded its noise analysis to a year when it is guaranteed the project will be complete.</p>	The FAA has based the recommended mitigation on the 2020 noise contours for the FAA's Preferred Project. Therefore, the noise mitigation measures capture the incompatible land uses within the 65 DNL noise contour based on the 2020 forecast of operations.
<b>8.11</b>	<p>Town of Davie—There is no reason or justification given for why Exhibit C to the Town February 29, 2008 Comments is not applicable to the EIS.</p> <p>It is evident that the actual aircraft are flying lower than those modeled in the INM and thus the existing noise contours are erroneous.</p>	<p>The noise modeling includes an analysis of actual radar data (FLL Airport Noise and Operations Monitoring System (ANOMS)) to determine track locations, flight profiles, and aircraft altitudes. The track locations and profiles used in the Integrated Noise Model accurately assess all procedures currently in use at the airport.</p> <p>It is likely that some aircraft are flying at lower altitudes. Those events are captured in the INM modeling using the airport's ANOMS data. These single events are a part of the data set that results in an annual average day noise level over a 24-hour period that is represented in the 65+ DNL noise contours. The noise contour analysis presented in the Final EIS is based on the INM modeling.</p>
<b>8.12</b>	<p>Town of Davie—The radar data from FLL demonstrates that the FEIS is relying on flawed data when using the noise models.</p> <p>By showing planes flying at a higher altitude, the noise impact on the Town is underestimated and, therefore, the noise analysis is flawed.</p>	See Response to Comment 8.11 in this ROD.
<b>8.13</b>	Town of Davie—The arrivals from the north are held high so as not	The FAA has and continues to operate the Runway Use Program consistent with FAA

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	<p>to impact those communities that hold agreements with the airport sponsor.</p> <p>The FAA has allowed this practice without approval as mandated in FAA Order 8400.9.</p>	<p>Order 8400.9. Further, assuming the Commenter is correct regarding how arrivals from the north are handled, FAA Order 8400.9 is neither applicable, nor does it require approval as implied by commenter.</p>
<b>8.14</b>	<p>Town of Davie—Maps of single-event noise metrics should have been included with the FEIS.</p> <p>There was not a single page of text that explained how to interpret the grid point data.</p>	<p>The noise analysis was prepared in accordance with accepted methodologies and significance criteria included in FAA Order 1050.1E for the assessment of aircraft noise impacts (see the Final EIS, Appendix H, <i>Noise</i>, for a summary of the requirements of FAA Order 1050.1E).</p> <p>A description of the metrics and data points used in the grid point analysis can be found in the Final EIS in Chapter Five, Affected Environment Section 5.C.1.2.1 <i>Methodology and Data Sources</i>.</p>
<b>8.15</b>	<p>Town of Davie—The FEIS makes no analysis of supplemental metrics; rather, grid point data is provided without any explanation.</p>	<p>The Final EIS did provide supplemental metrics in the form of a grid point analysis.</p> <p>A description of the metrics and data points used in the grid point analysis can be found in the Final EIS in Chapter Five, Affected Environment Section 5.C.1.2.1 <i>Methodology and Data Sources</i>.</p>
<b>8.16</b>	<p>Town of Davie—There are historic sites in the Town of Davie (i.e., Old Davie School Museum, a National Historic Place) and, therefore, a supplemental noise analysis should have been included in the FEIS.</p> <p>Failure to disclose the single-event noise metrics constitutes a significant flaw in the FEIS and shows the FEIS was not in compliance with FAA Order 1050.1E.</p>	<p>These historic sites in the Town of Davie were outside the Area of Potential Effect (APE) and therefore no supplemental noise analysis was required or conducted. See the Final EIS Chapter Five, Section 5.D.1 <i>Historic, Architectural, Archeological, and Cultural Resources</i> for a discussion of the APE.</p>
<b>8.17</b>	<p>Town of Davie—The FEIS' Land Use Compatibility Analysis and Noise Analysis and Land Use Impact Assessment fail to consider impacts and address issues required by NEPA.</p> <p>The FEIS was not revised to</p>	<p>As stated in Chapter Six, Section 6.C.2.2, <i>Consistency With Local Plans</i>, the existing comprehensive plans outlining land use and transportation policies for jurisdictions within the Study Area were reviewed to determine reasonable consistency with land use plans of public agencies responsible for development in the area. None of the alternatives would</p>

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	<p>include references to any of Davie's comprehensive plan goals, objectives and policies, special area plans, redevelopment plans, and the like.</p>	<p>require land use or zoning changes in any of the surrounding jurisdictions and the proposed development would be consistent with all land use and comprehensive plans as described in Chapter Five, Section 5.C.2, <i>Land Use Compatibility</i>. Therefore, none of the runway development alternatives would contribute to cumulative impacts with regard to land use and comprehensive plans.</p> <p>This comment has been previously addressed in the Final EIS. See Appendix P, the Response to Comment 14.7.</p>
<p><b>8.18</b></p>	<p>SFRPC—The SFRPC recommends that if this project is approved the appropriate mitigation strategies are employed to sufficiently address the impacts.</p>	<p>The appropriate mitigation measures are included as conditions in the FAA's Record of Decision. Inclusion of these conditions in the ROD fully commits the Airport Sponsor to implementation of recommended mitigation measures.</p>
<p><b>8.19</b></p>	<p>SFRPC—The expansion of the airport will significantly increase noise levels from aircraft activity. The applicant is still updating their Noise Study.</p> <p>Resulting mitigation efforts should consider varying flight paths and schedules. Noise impacts to existing structures, especially residential and "noise sensitive" facilities, should to be adequately addressed.</p>	<p>Noise impacts from the airport are expected to increase with or without the proposed project as the number of operations is forecast to increase. Any significant noise impacts that would occur from implementation of the FAA's Preferred Alternative will be mitigated. See Chapter 8 FAA's Preferred Alternative for specific discussion of mitigation for noise impacts. The Airport Sponsor is not currently in the process their Part 150 Noise Compatibility Study. Once the Airport Sponsor re initiates the study the public will be notified by the Airport Sponsor.</p> <p>Changes to flight schedules are outside the purview of the FAA. Changes in flight paths would have to be proposed by the Airport Sponsor and submitted to the FAA for review and approval. Adequate mitigation to those sensitive facilities that would be impacted by FAA's Preferred Alternative is discussed in detail in the Final EIS in Chapter Eight.</p>
<p><b>8.20</b></p>	<p>The Part 150 Noise Study has never modeled noise contours for the elevated configuration of the South Runway. Before any decisions are made, the Part 150 noise studies should be run to determine if hundreds of residents will be affected and thereby drastically affect the costs used for</p>	<p>The Part 150 Study is a separate and voluntary study conducted by the Airport Sponsor and is not part of, nor required by, the EIS process.</p> <p>Fort further information regarding the FLL Part 150 Study the commenter should contact the Airport Sponsor.</p> <p>See Response to Comments 8.7 in this ROD.</p>

**8.0 Noise and Land Use**

	<p>the feasibility study and decision on which alternative is best.</p>	<p>Although the Part 150 Noise Study has not generated noise contours with the elevated configuration, the noise contours in the FEIS for the Preferred/Selected Alternative did include the elevation of the runway. Therefore, the FEIS noise contours reflect non-compatible uses resulting from Alternative B1b.</p>
<p><b>8.21</b></p>	<p>Table H.1-2 <i>Temporary Noise Monitoring Resulting, Site No. TM10</i> shows the SEL Range at 73.4-77.9 with max range at 63.9-68.0, with peak aircraft group as turbo prop. The extension of the runway would accommodate turbo jet aircraft.</p> <p>How can actual measurements by turbo props be more than the project noise by turbo jets? Are the projected noise contours for both an east and a west operation?</p>	<p>The measured events disclosed in Table H.1-2 represent the noise levels from a specific aircraft on a specific day. Modeled noise levels, using the INM, represent the average noise levels from many different types of aircraft. Therefore, it is reasonable that measured and modeled noise levels at specific locations may have different results.</p> <p>The aircraft noise impact assessment was prepared using the methodologies and significance criteria provided in FAA Order 1050.1E, <i>Environmental Impacts: Policies and Procedures</i>. (See the Final EIS, Appendix H, <i>Noise</i>, to review the requirements of FAA Order 1050.1E.)</p> <p>Day-Night Average Sound Level (DNL) is the approved FAA metric to describe airport and aircraft noise affects. DNL is used to describe the <u>average</u> sound over a 24-hour period, typically an average day over the course of a year.</p> <p>Yes, the projected noise contours reflect both east and west operations in proportion to the amount of time FLL operated in east or west flow throughout the year.</p>
<p><b>8.22</b></p>	<p><b>Dania Beach October 6 2008 Comment Letter, D. The C1 Alternative would cause fewer noise impacts than either the B1 Alternatives or the No Action Alternative.</b> The C1 Alternative provides the rare opportunity to expand an airport while reducing noise impacts.</p>	<p>Comment Noted. See this ROD, Section 3.3 <i>The Preferred Alternative</i>, for a comparative discussion of the alternatives including the potential environmental noise impacts.</p>

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**9.0 Public Properties and Resources**

<p><b>9.0</b></p>	<p>State Historic Preservation Officer—The Division of Historical Resources has conducted a review in accordance with Section 106 and 36 CFR Part 800 and it is the opinion of this office that the proposed undertakings will have no effect on historic properties.</p>	<p>Comment noted.</p>
<p><b>9.1</b></p>	<p>City of Dania Beach—There are several parks within the Study Area, at least one of which—Brooks Park—will be physically used by the FAA's Preferred Alternative.</p> <p>The FEIS also indicated that implementing the FAA's Preferred Alternative would result in noise levels increasing significantly in John U. Lloyd Park and West Lake Park when compared to the No Action Alternative.</p> <p>The FEIS conclusion that the proposed project will not constructively use public parks under 4(f) under the Department of Transportation Act is seriously flawed. To ensure a more accurate determination, the FAA should have analyzed the amount of time that aircraft will be audible above background not just above 65 dBA in all areas of these parks.</p>	<p>As discussed previously in the Final EIS, in Appendix P, Response to Comment 9.1, the on airport site formerly referred to as "Brooks Park" was closed prior to the issuance of the NOI. During a prior EIS effort at FLL the FAA, in coordination with Broward County determined that "Brooks Park" was not a 4(f) facility as the only facilities at this site were picnic tables, which were relocated to an on airport viewing area.</p> <p>Further 4(f) coordination with Broward County during this EIS process has confirmed this prior determination.</p> <p>Comments with similar content regarding public parks were addressed in the Final EIS in Appendix P, <i>Response to Comments</i>. See the Final EIS, Appendix P, the Response to Comments 8.58, 8.80.</p>
<p><b>9.2</b></p>	<p>City of Dania Beach—The Proposed Project will inevitably "use" Brooks Park at a minimum, therefore the FEIS should have provided detailed analysis as to why the various alternatives that do not "use" these parks are not prudent and feasible under 4(f).</p>	<p>See the above Response to Comment 9.1.</p> <p>Comments with similar content regarding public parks were addressed in the Final EIS in Appendix P, <i>Response to Comments</i>. See the Final EIS, Appendix P, the Response to Comments 8.58, 8.80, and 9.1.</p>
<p><b>9.3</b></p>	<p>Town of Davie—The FEIS fails to follow substantive procedural and legal requirements with respect to parks.</p> <p>The FAA typically relies on a Part 150 Noise Study to determine if a project would constructively use a Section 4(f) resource.</p>	<p>Comments with similar content regarding Section 4(f) resources were addressed in the Final EIS in Appendix R, <i>Response to Comments Received After the Close of the Comment Period</i>. See the Final EIS, Appendix R, the Response to Comments LC112.1 and LC112.2, as well as Final EIS in Appendix P, <i>Response to Comments</i>.</p>

**9.0 Public Properties and Resources**

	<p>The FEIS also fails to respond to or specifically address these comments.</p>	<p>See the Final EIS, Appendix P, the Response to Comments 8.58, 8.80, and 9.1.</p> <p>The FAA disagrees with the Commenter's assertion that 4(f) determinations are reliant on Part 150 Noise Study analysis. The only connection between Section 4(f) and FAR Part 150 is that Table 1 in Part 150 which is used to make an initial determination of compatible noise levels over various land uses.</p> <p>If there are resources protected by section 4(f) the FAA must make a determination as to whether or not the proposed action will "take or effect" those properties as described in the statute. If there is not a physical taking then a determination must be made as to whether a "constructive" use has occurred. This declaration is found in the Final EIS, Chapter Six, Section 6.D.2.1 on page 6.D-9.</p>
<p><b>9.4</b></p>	<p><b>Dania Beach October 6 2008 Comment Letter, F. The C1 Alternative would also minimize park impacts associated with the B1 Alternatives.</b> The C1 Alternative would avoid use of the Brooks Park that is located directly in the path of the proposed runway expansion under the B1 Alternative. Implementing the C1 Alternative would also result in a reduction of noise impacts to parks surrounding the airport that are not in the direct path of the proposed runway expansion, thus avoiding constructive use of parks.</p>	<p>The FAA analysis determined there are no significant impacts to parks from any of the alternatives considered in the EIS.</p> <p>Comments with similar content regarding Brooks Park, John U. Lloyd State Park, West Lake Park were addressed in the Final EIS in Appendix P, <i>Response to Comments</i>. See the Final EIS, Appendix P, the Response to Comments 8.58, 8.80, and 9.1.</p> <p>See this ROD, Section 3.3 <i>The Preferred Alternative</i>, for a comparative discussion of the alternatives including the potential environmental noise impacts.</p>

**10.0 Water Resources**

<p><b>10.0</b></p>	<p>EPA believes the response to DEIS comments 10.5 does not specifically refer to the prevention of the contamination of the Biscayne Aquifer although compliance with the NPDES and the SWPPP would certainly be beneficial to aquifer and water quality.</p> <p>The response should have also indicated that EPA retains federal oversight of the program.</p>	<p>The FAA acknowledges that EPA retains Federal oversight of the program.</p>
<p><b>10.1</b></p>	<p>City of Dania Beach—The FEIS did not bother explaining in detail the quality of wetlands that each alternative will impact.</p>	<p>See the Final EIS, Chapter Five, Section 5.E.2.2 <i>Existing Conditions</i> and Chapter Six, Section 6.E.2.2 <i>Wetlands Located Within the Limits of Disturbance for the Runway Development Alternatives</i>, for a detailed discussion including the quality of the wetlands that each alternative will impact.</p>
<p><b>10.2</b></p>	<p>City of Dania Beach—The statement as to the amount of impact from the C1 Alternative is misleading.</p> <p>The local Sponsor appears to have rigged its design of facility relocation to show-falsely-wetland impacts in the C1 Alternative.</p>	<p>Wetland impacts for all alternatives were evaluated based on State of Florida guidelines which have also been adopted by the USACE. See the Final EIS, Chapter Five Section 5.E.2 for regulations and regulatory involvement and Chapter Six, Section 6.E.2 <i>Wetlands</i>.</p> <p>Wetland impacts and facility impacts for Alternative C1 were delineated and disclosed by the FAA, not the Airport Sponsor. For Alternative C1, the 15.40 acres of impacts to wetlands are due to airport property and tenant leasehold facility relocations to avoid impacts to wetlands. It may be possible, with further planning, design, and engineering, that these relocated facilities could be relocated on airport property to avoid impacts to wetlands.</p>
<p><b>10.3</b></p>	<p>City of Dania Beach—The FAA should have analyzed secondary wetland impacts for all possible alternatives, not just the alternative it is predestined to choose.</p>	<p>The wetland analysis was conducted in accordance with state and Federal regulatory agency input. Secondary impacts to wetlands are determined after design plans are prepared and during the permit process. However because the South Florida Water Management District commented that secondary impacts be addressed for the proposed runway extension, the FAA disclosed the potential secondary impacts in the</p>

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		<p>Conceptual wetlands Mitigation Plan for the FAA's Preferred Alternative, which is provided in the Final EIS in Appendix M <i>Biological Resources</i>.</p>
<p><b>10.4</b></p>	<p>City of Dania Beach—The FEIS failed to discuss impacts caused by aircraft emission of polycyclic aromatic hydrocarbons.</p> <p>The FAA also falsely assumed that stormwater mitigation measures and Best Management Practices will resolve any water quality issues that arise.</p>	<p>See the Final EIS, Appendix G.1.B, <i>Hazardous Air Pollutant (HAP) Evaluation</i>, Section G.1.B.2.1.2, <i>FAA Guideline</i>.</p> <p>Although an evaluation of HAP emissions due to airport projects is not required under the National Environmental Policy Act (NEPA) or by the provisions of the Clean Air Act (CAA), including the 1990 Amendments, the FAA determined that an evaluation of airport-related hazardous air pollutant (HAP) emissions should be included in the EIS based on comments received during the scoping process.</p> <p>The HAP evaluation includes a project-level emission inventory of selected HAPs based on the criteria and precursor pollutant emission inventory prepared to satisfy other regulatory requirements for the air quality assessment.</p> <p>As directed by EPA during the agency coordination for this EIS, the FAA Orlando ADO was directed to use the HAP methodology used in the EIS for the Chicago O'Hare International Airport Modernization Program (ORD OMP).</p> <p>The ORD OMP EIS provides emission (speciation) profiles for all aircraft, lead emissions from piston-engine aircraft, all profiles for APU operations, and all speciation profiles for emergency generators. Speciation profiles for the 16 polycyclic aromatic hydrocarbons (PAH) was not included in the ORD OMP EIS guidance and was not evaluated.</p> <p>The HAP inventory is provided for disclosure purposes only and should not be relied on as an interpretation of health risks, should not be compared to other sources of HAPs in the region, or compared to HAP emissions reported for other airports. See the Final EIS,</p>

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		<p>Appendix G.1.B, <i>Hazardous Air Pollutant (HAP) Evaluation</i>.</p> <p>The water quality analysis and evaluations support the conclusion that the FAA's Preferred Alternative and all of the runway development alternatives would not exceed standards for surface water quality or water quality standards for groundwater. See the Final EIS, Chapter Eight, <i>FAA's Preferred Alternative</i>, Section 8.5.6 and Chapter Six, <i>Environmental Consequences</i>, Section 6.E.1.4.</p>
<p><b>10.5</b></p>	<p>City of Dania Beach—The FAA should have included some discussion as to what specific coastal resources exist in the Detailed Study Area and what impacts to these resources will result from implementation of each alternative.</p>	<p>The Commenter is referred to the Final EIS Chapter Five Section 5.E.4 <i>Coastal Resources</i> for a discussion of coastal resources, specifically coastal reefs and coastal barrier islands within the Detailed Study Area. There are no coastal reefs or costal barrier islands within the Detailed Study Area.</p> <p>The EIS analysis of coastal resources supports the conclusion that the FAA's Preferred Alternative and all of the runway development alternatives would have no impact to coastal reefs or coastal barrier islands.</p> <p>The State of Florida has issued a preliminary consistency determination for the Proposed Action based on the findings presented in Chapter Six, Section 6.E, Table 6.E.4-1, <i>Florida Coastal Management Program Consistency Review Statute/Scope Consistency</i>. For the FAA's Preferred Alternative the FAA will ensure that the proposed action is undertaken in a manner consistent to the maximum extent practicable with the Florida Coastal Management Program.</p>
<p><b>10.5</b></p>	<p>Town of Davie—The Town remains concerned about the potential for cumulative and secondary impacts associated with Airport expansion to impact the remaining wetlands in the vicinity of the project. Increased capacity of FLL may result in an increased demand for additional</p>	<p>See the Response to Comment 14.7 regarding the Final EIS analysis for potential cumulative and secondary impacts to wetlands. Development that occurs outside the Study Area is beyond the scope of the FAA's responsibility to assess potential environmental impacts.</p>

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	development adjacent to FLL, potentially in wetlands both within and outside the Study Area.	Although, with increased demand (which occurs with or without enhancement at FLL), it is reasonable to assume that some development may occur around the airport it does not necessarily follow that there would be increased pressure to develop wetlands or that such development could or would be approved by state and local agencies having jurisdiction over these lands or that such development would occur as a result of the proposed project.
<b>10.6</b>	<p>Town of Davie—The FAA should initiate a program to acquire, restore and manage for preservation all remaining wetlands within and adjacent to FLL as part of this project.</p> <p>Only the preservation and perpetual management of these wetlands will ensure the presence of functional wetland habitats in the vicinity of FLL in the future.</p>	It is not a certainty that there would be increased pressure on wetlands. Even if such pressure were to develop, the regulatory agencies with jurisdiction would presumably meet their responsibilities.
<b>10.7</b>	<p>DEP/SFWMD—The SFWMD notes that while a general overview of potential secondary impacts is provided the FEIS does not provide a comprehensive summary of all potential secondary impacts to wetland resulting from the proposed runway expansion.</p> <p>Secondary impacts must be fully addressed as part of the Environmental Resource Permit application process.</p> <p>The proposed off-site wetland mitigation must be completed prior to or concurrently with any authorized wetland impacts.</p>	<p>The FAA has disclosed the potential secondary impacts in the Conceptual Mitigation Plan for the FAA’s Preferred Alternative, which is provided in the Final EIS in Appendix M. Further evaluation of secondary impacts would be addressed by the Airport Sponsor as part of the Environmental Permit Process.</p> <p>With regards to wetland mitigation, FAA will ensure that coordination with USACE, EPA and other resource agencies will continue beyond the EIS process. Further, FAA will continue to assist the Airport Sponsor in ensuring that the appropriate type and level of mitigation will be implemented.</p>
<b>10.8</b>	<p>DEP—The state has determined that at this stage the proposed activity is consistent with the Florida Coastal Management Program (FCMP).</p> <p>The applicant must address the concerns identified by our reviewing agencies prior to project implementation.</p>	Comment noted. Also, see the Response to Comment 10.7.

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	<p>The state's final review of the project's consistency with the FCMP will be conducted during the environmental permitting stage.</p>	
<p><b>10.9</b></p>	<p>SFRPC—The applicant should determine the extent of sensitive wildlife and vegetative communities in the vicinity of the project and require protection and or mitigation of disturbed habitat.</p> <p>If additional potable water is required, the applicant should demonstrate availability to meet water supply needs. Given the region's limited water supply, the applicant should also employ conservation methods and consider including capacity to reuse water on site. Additionally the applicant should ensure water quality is minimally impacted by surface water runoff.</p> <p>The applicant should consider utilizing alternative fuel vehicles to reduce greenhouse gas emissions from increased traffic and improve existing air quality conditions.</p>	<p>Regarding wildlife and vegetative communities, comments with similar content were addressed in the Final EIS in Appendix P, <i>Response to Comments</i>. See the Final EIS, Appendix P, the Response to Comment 11.0.</p> <p>Regarding potable water, see the Final EIS Section 6.E.1.4.3 Water Supply, which discusses that Broward County's future water supply requirements have been addressed by the Florida State legislature through the development of the 10-Year Water Supply Facilities Work Plan (Plan), as mandated by Chapter 163, Florida Statutes. This Plan was developed to address coordination issues pertaining to future land use and water supply planning in Florida.</p> <p>The Broward County Water and Wastewater Services (BCWWS) has evaluated the water demand for Retail District 3A (includes FLL) and concluded that water supply needs for the BCWWS District 3A Service Area will be met in both the short-term and long-term. Because the forecast increase in aircraft operations at FLL is the same regardless of whether or not the airfield is expanded, and because the FLL water supply needs will be met in both the short-term and long-term, it can be concluded that the water demand needs at FLL will be met.</p> <p>Regarding reducing greenhouse gas emissions see the Response to Comment 7.2 provided in this ROD. Also, see the Final EIS, Appendix P, the Response to Comment 7.4.</p>
<p><b>10.10</b></p>	<p><b>Dania Beach October 6 2008 Comment Letter, E. The C1 Alternative would avoid the need to cause any impacts to wetlands surrounding the Airport.</b> The</p>	<p>The 15.50 acres of impacts to wetlands for Alternative C1 are due to airport and tenant facility relocations. It may be possible, with further planning, design, and engineering, that these relocated</p>

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<p>discussion in the FEIS obscures the fact that no aspect of the development of the north runway or associated navigational aids under the C1 Alternative need impact any wetlands at all. The supposed impacts to wetlands under C1 derive entirely from discretionary facility relocations that are unnecessary to the project purpose. Because the C1 Alternative would result in no impacts to wetlands and the B1 Alternatives would result in impacts to more than 15 acres of wetlands, the C1 Alternative is a better choice from the standpoint of wetlands impacts.</p>	<p>facilities could be relocated on airport property to avoid impacts to wetlands.</p> <p>The ROD discusses the FAA's decision process. See the following sections of this ROD – Section 3.1 <i>The Environmentally Preferred Alternative</i>, Section 3.3 <i>The Preferred Alternative</i>, and Section 3.4 <i>The Selected Alternative</i>, Section 4.4 <i>Identification of Wetlands and Consideration of Executive Order 11990, Protection of Wetlands</i>.</p>
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**11.0 Biological Resources**

<p><b>11.0</b></p>	<p>USFWS—The U.S. Fish and Wildlife Service has already consulted on this project and provided our concurrence letter dated January 31, 2008. We offer no further comments on the Final EIS.</p>	<p>Comment noted.</p>
<p><b>11.1</b></p>	<p>City of Dania Beach—The FEIS should explain what time of day the burrowing owl surveys were conducted in November 2004 because it is possible that burrowing owls are on the property but were not seen during this particular survey.</p>	<p>Prior to initiating construction activities, the Airport Sponsor will be required to conduct a survey for the Burrowing Owl, a state-listed species. The survey would be conducted in accordance with state regulations to determine the absence or presence of the burrowing owl. This requirement is a condition of the FAA Record of Decision.</p> <p><i>See the ROD, Section 6, Findings, Determinations, and Certifications.</i></p>
<p><b>11.2</b></p>	<p>NMFS/EFH—The FAA does not present a preferred alternative in the final EIS.</p>	<p>The FAA's Preferred Alternative (Alternative B1b) is identified in the Final EIS in Chapter Eight, Section 8.4, <i>Identification of FAA's Preferred Alternative</i>.</p>
<p><b>11.3</b></p>	<p>NMFS/EFH—Consultation History.</p> <p>In our comments on the draft EIS, NMFS specifically requested that the final EIS include a full assessment of cumulative effects; the FAA or lead federal agency's views regarding the effects of the action on EFH; a compensatory mitigation plan; and Unified Mitigation Assessment Method (UMAM) scores of the mitigation site. In addition, we provided two EFH conservation recommendations.</p>	<p>An Essential Fish Habitat (EFH) Assessment is included in the Final EIS in Chapter Six, Section F.1.4, <i>Essential Fish Habitat (EFH) Assessment</i>.</p> <p>As a follow-up to the National Marine Fisheries Service (NMFS) comments on the Draft EIS, the FAA prepared additional information for the EFH assessment in a report titled <i>Direct, Secondary, and Cumulative Effects on Essential Fish Habitat</i> as well as a <i>Conceptual Wetland Mitigation Plan</i> to address the NMFS comments and Conservation Recommendations. These documents and FAA's response to the NMFS Conservation Recommendations were provided to NMFS in February 2008. These documents and agency coordination letters are also provided in the Final EIS in Appendix M, <i>Biological Resources</i>.</p> <p>The FAA's responses to NMFS/EFH comments on the Draft EIS were provided in the Final EIS in Appendix P, Section 11 <i>Biological Resources</i> as Comment 11.2, however the response was incorrect.</p> <p>The corrected response to Comment 11.2 contained in the Final EIS, Appendix P is provided below:</p>

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		<p>The additional information requested was provided to the NMFS via a letter and attachment from the FAA in February 2008. This information included a report titled <i>Direct, Secondary, and Cumulative Effects on Essential Fish Habitat</i>. Section 4.0 of that report summarized the comments provided by NMFS and FAA's responses including:</p> <ul style="list-style-type: none"> <li>— The FAA's views regarding the effects of the action on the Essential Fish Habitat (EFH)</li> <li>— The FAA's responses to the EFH Conservation Recommendations</li> </ul> <p>The <i>Conceptual Mitigation Plan</i> was provided as an attachment to the <i>Direct, Secondary, and Cumulative Effects on Essential Fish Habitat</i> report and included UMAM Scores for the proposed mitigation at West Lake Park.</p> <p>This information is provided in the Final EIS, Appendix M, <i>Biological Resources</i></p>
<p><b>11.4</b></p>	<p>NMFS/EFH—Responses to Information Requests and EFH Conservation Recommendations.</p> <p><i>A full assessment of cumulative effects.</i> The Final EIS Chapter 7 provides a more thorough evaluation of cumulative effects. NFMS concludes that this information need has been sufficiently addressed.</p>	<p>Comment noted.</p>
<p><b>11.5</b></p>	<p>NMFS/EFH—Responses to Information Requests and EFH Conservation Recommendations.</p> <p><i>The FAA's, or lead federal agency's, views regarding the effects of the action on EFH.</i></p> <p>The final EIS (Section 6.F.1.7) states that the FAA has determined there will be no significant impacts to EFH resulting from the implementation of any of the runway development alternatives. While we believe that additional information about the mitigation proposal is needed before NMFS could agree with the FAA's determination, NMFS finds that the FAA has met the requirement for making a determination.</p>	<p>Comment noted.</p>
<p><b>11.6</b></p>	<p>NMFS/EFH—Responses to Information Requests and EFH Conservation Recommendations. <i>A compensatory mitigation plan.</i></p>	<p>The wetland mitigation measures discussed in Section 6J of the Draft EIS and Final EIS documents provided a general mitigation strategy for wetland impacts. More detailed</p>

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	<p>The final EIS includes conceptual mitigation measures that the FAA would consider as part of the proposed project or alternatives (Section 6J). The EFH assessment should fully describe how mangrove impacts would be mitigated. While we agree with the general approach of the conceptual plan, more detail is needed, including Unified Mitigation Assessment Method (UMAM) scores at the mitigation sites, to determine what all functional losses would be mitigated. NMFS concludes that this information need has not been sufficiently addressed.</p>	<p>conceptual wetland mitigation for the FAA's Preferred Alternative was discussed in the Final EIS in Chapter Eight, <i>FAA's Preferred Alternative</i>, Section 8.6.3 and additional information was provided in the Final EIS Appendix M.3, <i>Conceptual Wetland Mitigation Plan</i>. See the Responses to Comments 11.2 and 11.5.</p> <p>The already-permitted UMAM Functional Gain credit scores for the West Lake Park mitigation project, as referenced in the United States Army Corps of Engineers (USACE) Permit Number SAJ-2002-00072 and South Florida Water Management District (SFWMD) Permit Number 06-04016-P, are provided in the Final EIS in Appendix M.3, <i>Conceptual Wetland Mitigation Plan</i>.</p> <p>Table 3.3-1 of the <i>Conceptual Wetland Mitigation Plan</i> (Appendix M.3 in the Final EIS) provides the estimated wetland impacts for the Proposed Action. Table 4-1 in that same report provides the estimated mangrove credits available at West Lake Park.</p>
<p><b>11.7</b></p>	<p>NMFS/EFH—Responses to Information Requests and EFH Conservation Recommendations. <i>Unified Mitigation Assessment Method (UMAM) scores.</i></p> <p>The only way to determine the amount of mitigation necessary to offset 3.05 acres of mangrove wetlands would be to have UMAM scores for the mitigation site, which were not included in the draft EIS nor are they provided in the final EIS. The compensatory mitigation plan should include all necessary UMAM scores to determine that all functional losses can be mitigated. We conclude that this information need has not been sufficiently addressed.</p>	<p>See the Response to Comment 11.6 above.</p>
<p><b>11.8</b></p>	<p>NMFS/EFH—Responses to Information Requests and EFH Conservation Recommendations. <i>EFH Conservation Recommendations provided in response to review of the draft EIS.</i></p>	<p>Regarding the FAA's response to the NMFS EFH Conservation Recommendations, see the Response to Comment 11.3 above.</p>

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	<p>The EFH assessment section in the final EIS does not make any reference to the EFH conservation recommendations provided in the response to our review of the draft EIS.</p> <p>The FAA maintains that it is Broward County's responsibility to develop the permits for the mitigation, but the EFH section did not summarize the analysis that led the FAA to this conclusion.</p>	
<p><b>11.9</b></p>	<p>NMFS/EFH—The NMFS can not conclude that the habitat conservation goals of the Magnuson-Stevens Act have been met for this project nor can we conclude that the FAA has met the procedural requirements of the Magnuson-Stevens Act.</p>	<p>Coordination with NMFS was conducted by the FAA throughout the EIS process to identify and document potential impacts and mitigation opportunities.</p> <p>In response to the NMFS Conservation Recommendations the FAA will ensure that the Airport Sponsor, in consultation with NMFS, will develop a mitigation and monitoring plan as part to the 404 permit process. Based on the preceding, NFMS has indicated that the FAA has completed its coordination in accordance with the Magnuson-Stevens Act.</p>

**12.0 Hazardous and Solid Waste**

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<p><b>12.0</b> SFRPC—Ensure increases in hazardous materials and waste will be transported, handled, and stored in the safest and most secure manner possible.</p>	<p>Hazardous building materials removed from on-airport facilities would be collected by a licensed contractor familiar with the handling of such materials. Materials such as mercury-containing lamps, switches and thermostats, batteries, lead pipes, and lead roof flashings can be disposed of at the appropriate recycling facilities. Non-recyclable materials would be transported by a licensed contractor to a hazardous waste disposal facility.</p> <p>Any hazardous materials removed during demolition would be handled and disposed of in accordance with Chapter 62-730 of the Florida Administrative Code (FAC and any other applicable Federal, state and local regulatory requirements).</p> <p><i>See the ROD, Section 6, Findings, Determinations, and Certifications.</i></p>
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**13.0 Social Resources**

<p><b>13.0</b></p>	<p>EPA believes the FAA should consider neighboring demographics in the development of its ROD and also provide an overall EJ conclusion.</p>	<p>Per the guidance in U.S. DOT Order 5610, <i>Environmental Justice and Minority Populations and Low-Income Populations</i>, the appropriate unit of geographic analysis may be a governmental jurisdiction, a neighborhood, a census tract, or other similar unit. The proposed airport expansion construction areas and areas that could be subject to mitigation are within the EIS Study Area and encompassed by the jurisdiction of Broward County. Broward County has been determined by the FAA to be the appropriate unit of geographic unit under analysis for the determination of potential environmental justice impacts.</p> <p>The FAA believes that it has provided a conclusion for environmental justice analysis and impacts. Based on the analysis in the Final EIS, the FAA determined that the implementation of the FAA's Preferred Alternative would not result in disproportionate impacts to low-income or minority populations within the EIS Study Area. See the Final EIS, Chapter Six, <i>Environmental Consequences</i>, Section 6.8.1.2 <i>Environmental Justice</i>.</p>
<p><b>13.1</b></p>	<p>EPA notes that there should be no significant adverse effect on children's health related to the six criteria pollutants.</p> <p>EPA believes that section 5.H-8 in the FEIS does not consider the impacts of aircraft noise exposure on children's health, but based on EPA's independent review, EPA notes that there appears to be no schools or noise sensitive public facilities frequented by children in the immediate project area.</p>	<p>Comment noted. Impacts of aircraft noise on children's health were not considered in Chapter Five, <i>Affected Environment</i>, Section 5.H.1.3 <i>Children's Environmental Health and Safety</i> (page 5.H-8). The potential noise impacts are disclosed in the Final EIS, Chapter Six, <i>Environmental Consequences</i>, Section 6.C.1 <i>Airport Noise</i>.</p> <p>The impacts of aircraft noise exposure on populations, including children, are disclosed in the Final EIS, Chapter Six <i>Environmental Consequences</i>, Section 6.C.1 <i>Airport Noise</i>.</p> <p>The noise analysis does not address a specific population, but FAA agrees with the commenter that it is assumed that there are no schools or noise sensitive public facilities frequented by children in the immediate project area.</p>
<p><b>13.2</b></p>	<p>EPA believes Section 5.H-5 in the FEIS does not quantify residential or business relocations, or provide the</p>	<p>The Commenter is correct in that Section 5.H.1.1 Socioeconomic Impacts, which is located on page 5.H-5 in Chapter Five</p>

**13.0 Social Resources**

	<p>demographic characteristics of those that will be displaced. Other issues, such as disruptions of established communities are also not discussed.</p> <p>If this information is located in other sections of the FEIS, it should be referenced in this section, and if not, should be summarized in the ROD.</p>	<p><i>Affected Environment</i>, does not discuss impacts. This is the Affected Environment section of the EIS which provides the existing conditions of the project study area.</p> <p>Residential impacts are provided in Chapter Six <i>Environmental Consequences</i>, Section 6.C.1 Airport Noise. No residential relocations would be required for any of the runway development alternatives.</p> <p>Impacts to local businesses are discussed in Section 6.C.2.1 Property and Land Use Impacts. The FAA's Preferred Alternative would require the full or partial acquisition of the Hilton Fort Lauderdale Airport Hotel and the Dania Boat Sales properties.</p> <p>Potential disruptions to local communities are discussed in 6.H.1.1 Socioeconomic Impacts.</p>
<p><b>13.3</b></p>	<p>EPA believes the response to DEIS comment 22.3 could have been better addressed by referring to Broward County's economic impact study in Section 5.H.2 or acknowledging that the FLL expansion could induce further local growth which in turn would have its own additional developmental impacts.</p>	<p>The forecast increase in aircraft operations occur with or without the Proposed Action. As the EIS analysis demonstrates the forecast increase in vehicular traffic and the level of service on local roads is the same with or without the Proposed Action. The Broward County Metropolitan Planning Organization is responsible for programming improvements to local roads.</p>
<p><b>13.4</b></p>	<p>City of Dania Beach—The FEIS conclusion that implementation of any of the runway build alternatives would have no significant socioeconomic impacts are not valid.</p>	<p>The socioeconomic impact analysis was prepared in accordance with FAA regulations. See the Final EIS, Chapter Six, Section 6.H.1, <i>Socioeconomic Impacts; Environmental Justice; and Children &amp; Environmental Health and Safety Risks</i>, and Chapter Six, Section 6.H.2, <i>Secondary (Induced) Impacts</i>, which includes a regional economic impact analysis of construction activities associated with the runway development alternatives.</p> <p>Also see the Response to Comment 4.7 in this ROD.</p>
<p><b>13.5</b></p>	<p>City of Dania Beach and Town of Davie—The FEIS fails to have any meaningful discussion of security issues associated with building a major runway over U.S. 1 and the FEC Railway and impacts that may</p>	<p>Comments with similar content were addressed in the Final EIS in Appendix P, <i>Response to Comments</i>. See the Final EIS, Appendix P, the Response to Comment 4.16. While coordination with the Department of Homeland Security</p>

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	result to traffic following a terrorist event.	typically occurs during the project design, the FAA has already initiated coordination with DHS. The FAA's Selected Alternative has met all standards as outlined in AC 150/5300-13 Airport Design.
<b>13.6</b>	City of Dania Beach—The FAA fails to acknowledge or discuss the negative impact that aircraft overflight may have on property values or the quality of life in the community around the Airport.	Data is inconclusive regarding the negative effect that aircraft overflight may have on property values. The FAA has not recognized a methodology to determine the potential impacts to quality of life on a community. Quality of life issues are subjective and vary based on individual perceptions. Therefore, the determination of an impact on quality of life is speculative and outside the purview of the FAA's scope of analysis.
<b>13.7</b>	<p>City of Dania Beach—The FAA should have used information from a more recent year to estimate economic impacts today. By using 2002 numbers the FAA inflated the economic impact from the Proposed Project.</p> <p>In addition the FEIS only stated the positive economic impacts caused by expansion and failed to discuss the negative effects such as the loss of jobs in Dania Beach because businesses may have to shut down or relocate.</p>	<p>A formal economic impact study is not part of a NEPA document; however, to the extent practicable, the FAA does assess the potential socioeconomic and induced socioeconomic impacts that could result from the implementation of a proposed project or alternatives. The most recent Broward County economic impact study was dated December 2002.</p> <p>The economic impact analysis presented in the EIS was used to quantify the regional economic impacts resulting from the construction activities associated with the runway development alternatives.</p> <p>All of the runway development alternatives result in beneficial economic impacts to the local community as a result of job creation and increased earnings.</p> <p>It is not anticipated that the acquisition and relocation of the Fort Lauderdale-Hollywood Airport Hilton Hotel and the Dania Boat Sales would result in a significant loss of jobs in Dania Beach. At this time the relocation site for these businesses has not been determined.</p>
<b>13.8</b>	City of Dania Beach—That the Greenbelt will ensure no visual impacts from the elevated runway, yet will be unable to shield noise impacts caused by the elevated runway should have been explained in the FEIS.	<p>See the Final EIS, Chapter Six <i>Environmental Consequences</i>, Section 6.H.3.2.</p> <p>The airport is bounded on three sides by major transportation facilities - on the east by U.S. Highway 1, on the north by Interstate-595, and on the south by Interstate-95. On the south side of the</p>

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		<p>airport and north of Griffin Road there is a landscaped Aviation Greenbelt.</p> <p>The Aviation Greenbelt which is 25 feet in height plus additional height for landscaping which includes shrubbery and trees will visually shield a majority of the elevated runway from Melaleuca Gardens. The sloped runway will be 45 feet at the eastern most end and approximately 25 feet in height directly across from Melaleuca Gardens.</p> <p>None of the runway development alternatives would create a substantial impact on the view as seen from parcels adjacent to the airport. The views within the airport vicinity are currently characterized by the existing network of highways, terminal buildings, runways, taxiways, and ancillary transportation infrastructure. These view characteristics should remain unchanged with implementation of any of the runway development alternatives.</p> <p>The noise attenuation affect of the Aviation Greenbelt is discussed in the Final EIS, Chapter Six, Section 6.C.1.2 Analysis of the Effectiveness of the Aviation Greenbelt Noise Berm.</p>
<p><b>13.9</b></p>	<p>Town of Davie—The Town still objects to the fact that the study area used in the Environmental Justice analysis is all of Broward County, not the Study Area established for the FEIS for the other sections. No explanation or methodology for establishing the study area used for this section of the analysis is provided in the FEIS.</p>	<p>See Response to Comment 13.0.</p>
<p><b>13.10</b></p>	<p>Town of Davie—The analysis fails to identify three Community Development Block Grant Target areas, assess potential impacts to the area and address the impacts in the FEIS.</p> <p>Further, the analysis incorrectly compares the impacted area to the County population as a whole, not the Study Area.</p>	<p>During preparation of the EIS analysis, the FAA coordinated with the Town of Davie to obtain existing and future land use and through that coordination process the FAA was not made aware of these Community Development Block Grant Target areas or their location.</p> <p>A comment with similar content was addressed in the Final EIS in Appendix P, <i>Response to Comments</i>. See the Final</p>

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		EIS, Appendix P, the Response to Comment 13.10.
<b>13.11</b>	Town of Davie—The FAA has admittedly failed to hold specific meetings with minority and low income residents in areas most vulnerable to airport expansion.	A comment with similar content was addressed in the Final EIS in Appendix P, <i>Response to Comments</i> . See the Final EIS, Appendix P, the Response to Comment 1.2.
<b>13.12</b>	SFRPC—If mobile homes are purchased by the applicant, the number of affordable housing units will be reduced. Additionally, if the expansion creates new job opportunities there may not be sufficient affordable housing for new employees. Provisions should be made to ensure an adequate supply of affordable housing units within close proximity to the airport.	Since no residential relocations are required for implementation of the FAA's Preferred Alternative, the assessment or determination of whether there is affordable housing is not required.
<b>13.13</b>	DEP/FDOT—Due to the proximity of several FHWA limited access facilities; please verify that the preferred alternative will not require coordination/approval from FHWA.	During development of the EIS, the FAA coordinated with FHWA, and will continue its coordination during the design, construction, and implementation of FAA's Preferred Alternative.
<b>13.14</b>	DEP/FDOT—Please provide further clarification on the closure of Airport Perimeter Road.  The FEIS states there will be no impacts to surrounding roads with respect to Level of Service.	As discussed in the Final EIS Section 6.H.2.1.1, the closure of Airport Perimeter Road in the southwest corner of the airport (from north of Griffin Road to south of Lee Wagener Boulevard) and in the southeast corner of the airport (parallel to U.S. Highway 1) is proposed as part of Alternative B1b (the FAA's Preferred Alternative). Delay at the intersection of SE 42nd Street and Ravenswood would increase slightly with implementation of the alternative. No further degradation of delay would occur at the Study Area intersections as a result of the closure of South Airport Perimeter Road.  As discussed in the Final EIS Section 6.H.2 Secondary (Induced) Impacts, the roadway and intersection capacity analysis conducted for this EIS are preliminary and include only the at grade intersection improvements included in the Broward County MPO 2030 Plan Update. Based on modeling, all of the intersections around the airport exceed LOS D (i.e., they are at LOS E or F for either AM or PM peak hour), with the exception of S.E. 42nd Street and Ravenswood.

**13.0 Social Resources**

		No improvements are planned by the Broward County MPO for the intersection of Ravenswood Road and SE 42nd Street. This intersection is not expected to experience a significant growth in traffic volume and would operate within an acceptable LOS for all study years and for all alternatives. All other study intersections will continue to experience unacceptable LOS with or without the implementation of any of the proposed airport development alternatives. Appendix O, Surface Transportation, contains the results of the roadway modeling output.
<b>13.15</b>	DEP/FDOT—Permits from FDOT will be required for the related runway work in the right of way for the two roadways.  Close coordination with FDOT will be required as the design proceeds.	FAA acknowledges the FDOT comments.
<b>13.16</b>	DEP/FDOT—Please coordinate with FEC for comments. If the expansion requires construction near or over the FEC railroad tracks, approval and permits will be required from FEC.	Comment noted. During development of the EIS, the FAA coordinated with FEC, and will continue its coordination during the design, construction, and implementation of FAA's Preferred Alternative.
<b>13.17</b>	DEP/FDOT—Potential impacts should be closely coordinated with FDOT and Port Everglades if the runway expansion requires any shifts of the existing FEC tracks because it may impact the future FEC station at the Airport-Seaport Intermodal Center.	Comment noted. During development of the EIS, the FAA coordinated with FDOT and FEC, and will continue its coordination during the design, construction, and implementation of FAA's Preferred Alternative.
<b>13.18</b>	SFRPC—If the proposed expansion will increase vehicular traffic and the need for parking, several transit options should be considered to alleviate traffic and improve connectivity. Transit connections to surrounding areas should be incorporated to provide access to employees and travelers without cars, as well as reduce parking demand.  The applicant should collaborate with relevant transportation agencies to incorporate transit solutions.	A comment with similar content was addressed in the Final EIS in Appendix P, <i>Response to Comments</i> . See the Final EIS, Appendix P, the Response to Comment 13.3.

**13.0 Social Resources**

<b>13.19</b>	SFRPC—The applicant should ensure that the potential danger of a raised runway over U.S. 1 will be adequately mitigated.	The issue of whether there is potential danger of a raised runway is a safety issue rather than a mitigation issue. Prior to construction, and during the design phase of the project, the FAA will ensure that all required safety and design standards will be met for the FAA's Preferred Alternative (B1b). Also, see the Final EIS, Appendix P, the Response to Comment 4.16 for a discussion of coordination with Federal and state agencies during the EIS process.
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**14.0 Cumulative**

<p><b>14.0</b></p>	<p>EPA believes a brief description of the positive or negative environmental impacts would have been appropriate for the Air Traffic EA as well as for the other similarly discussed.</p> <p>The focus of the cumulative impacts section should be to determine and document how the nearby past, present and foreseeable future projects would affect relevant resources.</p>	<p>As discussed in the Final EIS Chapter Seven, <i>Cumulative Impacts</i>, Section 7.1.1.2.5 <i>Proposed Use Of Runways 9R/27L and 13/31 When The Preferred Runway Cannot Efficiently Accommodate Existing Operations at the Fort Lauderdale-Hollywood International Airport</i>, there were no significant environmental impacts. The FAA issued a Finding of No Significant Impact and Record of Decision in June 2008 on the Air Traffic EA.</p> <p>Cumulative impacts were analyzed in accordance with CEQ and NEPA regulations. When FAA conducted this cumulative impact analysis, it determined that when applying appropriate mitigation with the level of impacts that could occur, no significant cumulative environmental impacts would result from implementation of FAA's Preferred Alternative and the other projects identified in Cumulative Impacts.</p>
<p><b>14.1</b></p>	<p>EPA—For Air quality additional quantitative or qualitative discussion of off-airport sources or projects emissions from Port Everglades, cruise and container tanker vessels, overall motor vehicular traffic, nearby power plants, etc. relative to overall Broward County air quality would have been appropriate.</p>	<p>The emissions inventories and the air quality analyses for the FAA's EIS was prepared for emissions sources (aircraft, GSE, stationary sources, vehicle traffic, etc.) in accordance with the guidance in FAA Order 1050.1E <i>Environmental Impacts: Policies and Procedures and Procedures</i> and FAA Order 5050.4B, <i>NEPA Implementing Instructions for Airport Actions</i>. The FAA did not analyze cruise ships or container emissions because the number of cruise ships is independent and assumed to be the same with each of the alternatives. In addition, the nearby emissions from the nearby power plant would be similar for all alternatives. Vehicular traffic was assessed on airport property and at intersections near the Airport.</p>
<p><b>14.2</b></p>	<p>EPA—For Noise, other important off-airport noise sources are presumed to have a noise component, although presumably less significant than the airport.</p>	<p>As noted in the Final EIS, Chapter 7, <i>Cumulative Impacts</i>, Section 7.3.2, the other noise sources EPA references would occur on compatibly developed land or along existing transportation corridors.</p>
<p><b>14.3</b></p>	<p>City of Dania Beach—The FAA did not specifically discuss cumulative impacts of any particular alternative along with the Airport expansion.</p> <p>At least for Air Quality when several major sources of air pollution in the area are added to</p>	<p>See the Response to Comment 14.0 and the Response to Comment 14.1.</p>

**14.0 Cumulative**

	the Proposed Project clearly there would be a cumulative impact.	
<b>14.4</b>	<p>City of Dania Beach—The cumulative impacts discussion failed to mention or discuss the cumulative impact of additional gate and terminal expansion (e.g. development of 67 to 77 additional gates).</p> <p>The FAA should have included alternatives that limit the number of gates as a way to limit passenger demand and the need for runway expansion.</p>	<p>The additional gates and expanded terminal were included as a component of the Airport Sponsor’s Proposed Project. See the Final EIS, Chapter Two, <i>The Proposal</i>, Section 3.2.3. The environmental impacts were disclosed in Chapter Six, <i>Environmental Consequences</i>.</p> <p>Limiting the number of gates at an airport does not limit passenger demand rather it limits infrastructure capacity, which results in increased airport delay as aircraft wait for gates to become available.</p>
<b>14.5</b>	<p>Town of Davie—The Cumulative Analysis section in the FEIS fails to identify numerous studies, both complete and ongoing.</p> <p>The FEIS must include all the Town’s relevant planning and study efforts in the Cumulative Analysis.</p> <p>The FAA is required to determine if any environmental management systems (EMS) provide a factual basis for assessment of environmental impacts. The FAA should ascertain whether any EMS techniques would be appropriate for this project.</p>	<p>See the Response to Comments 14.0 and 14.1 regarding cumulative analysis.</p> <p>The FAA reviewed the Town of Davie’s comprehensive plan and zoning policies. The Final EIS includes a summary of the Town of Davie comprehensive plan and zoning policies that are relevant to the FAA’s Preferred Alternative in Section 5.C.2.2.5 and Appendix J.2. <i>Land Use Policies</i>. In conducting the cumulative impacts analysis, the FAA reviewed available project information within the Study Area to identify past, present, and reasonably foreseeable future projects.</p> <p>There is no FAA requirement to use EMS techniques during the assessment of environmental impacts. In compliance with Executive Order (EO) 13423, <i>Strengthening Federal Environmental, Energy, and Transportation Management</i>, FAA has implemented an EMS. It is the FAA’s discretion as to the specific FAA programs that would be covered or addressed in an agency EMS and there is no Federal requirement at this time mandating that environmental documents including environmental assessments and environmental impact statements’ be included in an EMS.</p>
<b>14.6</b>	<p>Town of Davie—The FEIS does not analyze whether the various projects will have synergistic effects, however, and mostly just describes in generic terms the impacts of the other individual projects. The cumulative effect of the expansion of the Port and Airport are far greater than the</p>	<p>See the Response to Comment 14.0 and 14.1. Also, see Table 7.1 Summary Analysis of Cumulative Impacts to Wetlands and EFH, and Table 7.2 Cumulative Environmental Impacts, in the Final EIS.</p> <p>The FAA has included cumulative impacts analysis in the EIS which took into consideration not only the FAA’s Preferred</p>

**14.0 Cumulative**

	<p>sum of the individual effects of each one. The FEIS fails to discuss these synergistic effects.</p>	<p>Alternative but other projects and activities in the Airport vicinity. This analysis discloses potential impacts that could result from the implementation of the FAA's Preferred Alternative in conjunction with these other projects and activities. The FAA believes that its cumulative impacts analysis addresses these synergistic effects.</p>
<p><b>14.7</b></p>	<p>Town of Davie—The Town is concerned that expansion of the Airport – particularly with an expansion of Runway 9R-27L into the wetlands east of U.S. 1 – will combine with other projects to cause grievous harm to these natural resources.</p>	<p>Comments with similar content regarding impacts to wetlands located east of FLL were addressed in the Final EIS in Appendix P, <i>Response to Comments</i>. See the Final EIS, Appendix P, Section 10.0 Water Resources. Also, see Table 7.1 Summary Analysis of Cumulative Impacts to Wetlands and EFH.</p>

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**15.0 FAA's Preferred Alternative**

<p><b>15.0</b></p>	<p>EPA's FEIS Noise Mitigation Recommendations.</p>	<p>The FAA land use compatibility guidelines provided in <i>FAR Part 150 Airport Noise Compatibility Planning</i> (Appendix A, Table 1), stipulate that residential units, other than mobile home parks, are compatible with noise levels of below 65 DNL.</p> <p>For noise levels between 65-70 DNL and 70-75 DNL residential land use is permitted where the community determines that residential or school uses must be allowed. Measures to achieve outdoor to indoor Noise Level Reduction (NLR) of at least 25 dB and 30 dB should be incorporated into building codes and be considered in individual approvals. Normal residential construction can be expected to provide a NLR of 20 dB, thus, the reduction requirements are often stated as 5, 10, or 15 dB over standard construction and normally assume mechanical ventilation and closed windows year round. However, the use of NLR criteria will not eliminate outdoor noise problems.</p> <p>For noise levels of 75 DNL and above, the FAA land use compatibility guidelines stipulate that residential land uses and related structures are not compatible and should be prohibited.</p> <p>As noted in Chapter 8, <i>FAA's Preferred Alternative</i>, Section 8.6.2.1, the FAA has identified those properties that may be eligible for participation in a land use mitigation measure. Broward County's responsibility is to decide how to apply the mitigation to eligible properties. The implementation of the mitigation measures identified in the Final EIS are a condition of this Record of Decision.</p> <p>The FAA has identified residential units that may be eligible for participation in a compatible land use mitigation measure. Broward County's responsibility is to decide how to apply the mitigation. The mitigation areas and the mitigation measures identified in the EIS are part of this ROD. The conditions of approval set forth in this ROD in Section 8 (<i>Conditions</i></p>
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15.0 FAA's Preferred Alternative

		<p><i>and Approvals</i>), requires that the Airport Sponsor implement noise mitigation measures addressing the impacts within the 65 DNL noise exposure contour that result from the FAA's Preferred Alternative (B1b). The participation of the individual home owner and/or property owner will be voluntary in any of the offered mitigation measures.</p> <p>Broward County proposed seven noise mitigation principles. The FAA has determined that that the County's principles numbered one, two, three, and five are appropriate to address the incompatible land uses within the 2020 65 DNL noise contour of the FAA's Preferred Alternative (B1b). Only the sound insulation and easement elements of principle number four are appropriate. Broward County will determine how any one or a combination of these measures would be implemented. See this ROD Section 4.2 Recommended Mitigation for Incompatible Land Use.</p> <p>As noted in the Response to Comment 8.1 in this ROD, the Airport Sponsor will be required to prepare a mitigation program to identify all incompatible land uses that would qualify for noise mitigation within the 65 DNL and the FICON areas of the FAA's Preferred Alternative. This commitment is part of the Record of Decision issued by the FAA and furthermore will be a part of Federal grant assurances that are required for receipt of Federal funding to carry out such mitigation.</p> <p>Areas of incompatible land use defined using the FICON criteria of 1.5+ dB within the 65+ DNL noise contour and 3.0 dB within the 60-65 DNL noise contour are located within the areas recommended for mitigation in this EIS. To compare the area of 3.0 dB within the 60-65 DNL noise contour with the areas recommended for mitigation, including the contiguous areas of residential land use outside the 65 DNL noise contour, see the following exhibits:</p>
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**15.0 FAA's Preferred Alternative**

		<p>— Final EIS, Chapter Eight, <i>FAA's Preferred Alternative</i>, Exhibit 8-4, <i>FAA's Preferred Noise Exposure Contour</i></p> <p>— Final EIS, Chapter Six, <i>Environmental Consequences</i>, Exhibit 6.C.1-15, <i>Area of 3 db Increase Within the 60-65 DNL 2012 Alternative</i></p>
<b>15.1</b>	EPA—FAA has selected four of Broward County principles as the FAA's preferred alternative.	See Response to 15.0.
<b>15.2</b>	EPA—Overall commitment, 65+ DNL Specifics & Commitment, Contiguous Neighborhoods specifics & commitment, and 60 DNL Significant elevation mitigation & Commitment.	<p><u>Overall Commitment</u> — See the Response to Comments 8.1 and 15.0.</p> <p><u>65+ DNL Specifics &amp; Commitment</u> — See the Response to Comments 8.1 and 15.0.</p> <p><u>Contiguous Neighborhoods Specifics &amp; Commitment</u> — See the Response to Comments 8.1 and 15.0.</p> <p><u>60 DNL Significant Elevation Mitigation &amp; Commitment</u> — See the Response to Comments 8.1 and 15.0.</p>
<b>15.3</b>	EPA has not provided concurrence of a final noise mitigation plan. While NEPA only requires that mitigation be considered, EPA believes that the public disclosure process would be better served if noise mitigation specificity and commitments are included in the FEIS as well as the ROD.	<p>For NEPA disclosure purposes and in consultation with the Airport Sponsor, the FAA identified mitigation measures to address the potential noise impacts resulting from the FAA's Preferred Alternative. As noted in Response to Comment 8.1, the Airport Sponsor will be required to prepare a mitigation program to identify all incompatible land uses within the 65 DNL and the FICON areas of the FAA's Preferred Alternative.</p> <p>The Airport Sponsor's implementation of the noise mitigation is a condition of the Record of Decision.</p> <p>At the time the Draft EIS was published, Broward County had not clearly defined their noise mitigation objectives. Therefore, based on the available information provided by the Airport Sponsor, only conceptual noise mitigation was identified in the Draft EIS. Since the issuance of the Draft EIS, the County has defined their noise mitigation objectives and the FAA made a reasonable determination of appropriate mitigation in the Final EIS.</p>

**15.0 FAA's Preferred Alternative**

		<p>The Final EIS provides more specific information as to the types of mitigation measures and the location of the neighborhoods where these mitigation measures would be implemented. However, the Airport Sponsor will be responsible for scheduling and prioritizing the implementation of the noise mitigation measures in accordance with the conditions of the Record of Decision.</p> <p>The FLL Streamlining MOA between FAA and EPA provides for a streamlined NEPA review (Milestone 3 - <i>Determination of Environmental Consequences/General Mitigation Consensus</i>), and does not reference a review of a final mitigation plan.</p>
<p><b>15.4</b></p>	<p>EPA recommends implementation of our noise mitigation approach together with FAA's noise mitigation identified in the FEIS during development of the ROD; EPA further recommends application of mitigation to all residents in the 65+ DNL contour and the 60-65 DNL contour; FAA's mitigation plan would start with residences within the highest noise contours.</p> <p>EPA agrees with FAA's approach unless there are some eligible residents in the 2012 condition that would not be covered by the 2020 condition and mitigation.</p>	<p>Comment noted. Those areas of incompatible land use within a contiguous residential community that is bisected by the 65 DNL noise contour are included in the recommended mitigation measures contained in Chapter Eight (<i>FAA's Preferred Alternative</i>) of the Final EIS.</p> <p>The Airport Sponsor may choose to implement mitigation in other areas within the 60-65 DNL noise contour independent of this Proposed Action. One-hundred percent of the mitigation funding for those areas would be the responsibility of Broward County.</p> <p>All of the incompatible land uses within the 65+ DNL noise contour for 2012 are also included in the 65+ DNL noise contour for 2020.</p>
<p><b>15.5</b></p>	<p>EPA recommends the ROD be made available to all affected parties and participants and suggest the Sponsor and/or FAA conduct follow-up meetings to further coordinate the final noise mitigation plan with affected residents.</p>	<p>FAA's Record of Decision has been made available at various public locations for review and to all interested parties. In addition, the FAA's Record of Decision will be available for review on the FAA's website and Broward County website.</p> <p>It will be the Airport Sponsor's responsibility to coordinate the final noise mitigation plan with affected residents.</p>
<p><b>15.6</b></p>	<p>EPA wishes to emphasize that the noise mitigation for the present FLL expansion EIS should fully mitigate its noise exposure impacts and not</p>	<p>All of the mitigation disclosed in the Final EIS addresses impacts that would result from the implementation of the FAA's Preferred Alternative. The recommended noise mitigation measures include all</p>

**15.0 FAA's Preferred Alternative**

	depend on the Part 150 process for such noise mitigation.	incompatible land uses located within the 65 DNL noise contour of the FAA's Preferred Alternative. If Broward County chooses to pursue noise mitigation beyond what is disclosed in the Final EIS it is their option, and such measures could be addressed in a Part 150 Noise Compatibility Study.
<b>15.7</b>	EPA recommends mitigation for unavoidable wetland losses should continue to be coordinated with the USACE, EPA, and other resource agencies; conceptual mitigation should include in-kind mitigation to offset impacts to freshwater wetlands or justify why out-of-kind mitigation is appropriate; EPA recommends that the Sponsor coordinate with the EPA and other regulator agencies to finalize the total amount and type of mitigation credits which may be available at the West Lake Park Mitigation site.	With regard to the wetland mitigation, the FAA will ensure that coordination with USACE, EPA and other resource agencies will continue beyond the EIS process. Further, FAA will continue to assist the Airport Sponsor in ensuring that the appropriate type and level of mitigation will be implemented.
<b>15.8</b>	City of Dania Beach is concerned that the FAA and its local sponsor, Broward County, are pursuing a plan of redevelopment based solely on a desire to have a larger airport without a real need.  FAA has dismissed operational restrictions at the airport that were agreed to by Broward County in an Interlocal Agreement entered with the City of Dania Beach.	A discussion of existing and future need for the Proposed Action is provided in Section 1 The Proposed Project and the Purpose and Need, of this ROD. Comments with similar content were addressed in the Final EIS in Appendix P, <i>Response to Comments</i> . See the Final EIS, Appendix P, the Response to Comments 3.0, 3.41, and 3.49 regarding the need for this project. Regarding the Interlocal Agreements, see the Response to Comment 8.23.
<b>15.9</b>	City of Dania Beach—The FAA did not provide any details regarding how or to what extent the north runway alternatives will limit future growth.  It remains unclear how the Airport Sponsors goals and objectives should be a consideration for the FAA in choosing its Preferred Alternative.	See this ROD, Section 3 <i>Summary of Alternatives Considered</i> for a discussion of the north runway alternatives and impacts to airport property and future growth. See this ROD, Section 3.3, <i>The Preferred Alternative</i> for a discussion of FAA's consideration of the Airport Sponsors goals and objectives.
<b>15.10</b>	City of Dania Beach—The FAA has made a decision based on "future expansion" beyond the 2020 timeframe that was not described in the FEIS and disclosed to the public.	The future analysis beyond 2020 was used for the purposes of calculating the net benefits ratios which are presented for two evaluation periods: 2007 to 2020 and 2007 to 2030. See Appendix F of the Final EIS, Section F.6 <i>Net Benefits Analysis</i> . The 2020 net benefits ratio indicates the

**15.0 FAA's Preferred Alternative**

		<p>project's ability to provide a positive return on investment over a shorter period of time (from the end of construction to 2020) while the 2030 ratio represents the benefits accrued over the life of the project (from the end of construction to 2030) from a purely economic basis. The intent of carrying the net benefit analysis to 2030 is to merely demonstrate whether there is an economic benefit further out in time. A full BCA for the Proposed Action will be conducted prior to Federal funding.</p>
<p><b>15.11</b></p>	<p>City of Dania Beach—The Airport Sponsor has deliberately tried to eliminate the C1 alternative from consideration by entering into long term leases with tenants in the C1 footprint despite specific FAA guidance restricting its ability to do so.</p>	<p>The EIS analysis focused on the availability of existing on-airport property and tenant leaseholds depicted by the 2004 FLL Leasehold Identification Map and the assumption that in-kind replacements (in terms of gross leasehold displacements) would be offered by Broward County to tenants that would be displaced with each alternative. While some changes have occurred to on airport tenant leasehold areas since the EIS analysis was prepared, the FAA's tenant relocation analysis was conducted based on the information contained in the 2004 FLL Leasehold Identification Map and does not include any additional changes resulting from lease renewals or new leaseholds that may have been approved by Broward County since that time. See this ROD Section 3, <i>Summary of Alternatives Considered</i> for a discussion of Alternative C1's potential impacts to airport property.</p> <p>The FAA does not have the authority to restrict an Airport Sponsor from entering into leases with its tenants. The FAA, however, has cautioned Broward County regarding actions that would prejudice the outcome of the EIS analysis.</p>
<p><b>15.12</b></p>	<p>City of Dania Beach—The Airport Sponsor's concerns over the actual relocation of facilities makes little sense. If the Airport Sponsor wanted the ability to expand beyond 2020 then the FAA should have refined its statement of purpose and need and its impacts analysis.</p>	<p>See Response to Comment 15.9 in this ROD regarding the relocation of facilities and Response to Comment 6.0 in Appendix P of the Final EIS regarding the ability of the Airport Sponsor to expand airport facilities beyond 2020.</p>

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	The reality is that the Airport Sponsor's only concern is its ability to expand the Airport's capacity beyond 2020.	
<b>15.13</b>	City of Dania Beach—The FAA failed to select the least environmentally damaging practicable alternative as its Preferred Alternative.	See Section 3.1 <i>The Environmentally Preferred Alternative</i> , 3.3 <i>FAA's Preferred Alternative (B1b)</i> , and 3.4 <i>The Selected Alternative</i> of the Record of Decision. The FAA has acknowledged that the Environmentally Preferred Alternative and the FAA's Preferred Alternative are different. The FAA has considered not only environmental impacts, but also the practicability and prudence of the available alternatives in its selection.
<b>15.14</b>	The EIS should be reevaluated because there are other alternatives that are less costly and whose configuration will ultimate provide more capacity for FLL.	The FAA's Preferred Alternative is identified in Section 3.3 <i>FAA's Preferred Alternative (B1b)</i> , and the FAA's reason for selecting Alternative B1b are discussed in Section 3.4 <i>The Selected Alternative</i> of this ROD. According to FAA Order 5050.4B Paragraph 1007e.(7), the approving FAA official selects the preferred alternative after reviewing each alternative's ability to fulfill the agency's mission while considering their economic and environmental impacts, and technical factors.
<b>15.15</b>	Why is the airport being reduced from three runway airport to a two runway airport?	The FAA's reasons for selecting Alternative B1b which is a two runway configuration are discussed in Section 3.4 <i>The Selected Alternative</i> of this ROD.
<b>15.16</b>	What is the real cost of the FAA's Preferred Alternative when you include the cost of mitigation and acquisition?	The estimated project cost for FAA's Preferred Alternative presented in the Final EIS is an order of magnitude cost of \$810,149,900 (in 2007 dollars) that includes project design, construction, and indirect costs. See Final EIS Chapter Four, <i>Alternatives</i> , Table 4-5 <i>Summary of Costs Alternatives B1b/B1c</i> . The project cost includes the acquisition of the Fort Lauderdale Airport Hilton Hotel and the Dania Boat Sales. The acquisition of those two businesses is part of the project construction costs and is not considered mitigation because those properties are required to construct the FAA's Preferred Alternative.  The estimated cost of the recommended noise mitigation for the FAA's Preferred Alternative is discussed in the Final EIS, Chapter Eight, <i>FAA's Preferred Alternative</i> .

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		<p>These estimated noise mitigation costs range from \$180,172,270 (for the voluntary sound insulation of residential structures and the voluntary acquisition of mobile homes) to \$456,403,520 (for the voluntary purchase assurance/sound insulation of residential structures and the voluntary acquisition of mobile homes). The Airport Sponsor will determine which of the recommended noise mitigation measures will be selected for implementation. That decision will determine the final cost for noise mitigation.</p> <p>The estimated cost of the wetland mitigation for the FAA's Preferred Alternative will be determined during design and permitting.</p>
<p><b>15.17</b></p>	<p>Air Transport Association of America, Inc.—Concern about the proposed expansion of the noise mitigation program well beyond the 65 DNL contour to “address a neighborhood/ subdivision area as a whole to ensure, to the extent practicable, that community cohesion will be maintained . . .</p> <p>While we recognize that FAA guidance permits use of Airport Improvement Program (AIP) grants to sound insulate homes outside of the 65 DNL when contiguous to homes within the noise impacted area “if necessary to achieve equity in the neighborhood,” this exception is limited by that same guidance to a “reasonable additional number of other wise ineligible parcels” (FAA Order 5100.38C, §810.b at 137.</p> <p>In this case, the proposal to expand noise mitigation broadly on the basis of neighborhoods or subdivisions, instead of through a more refined case-by-case analysis, would nearly double the number of properties considered eligible for federal grants – from 1,051 to 2,074 housing units.</p> <p>This is not a trivial distinction – the Final EIS estimates that this approach would add over \$52 million</p>	<p>The FAA acknowledges the Commenter’s comment however the FAA has discretion in its application and recommendation of mitigation for noise impacts.</p> <p>In applying the noise mitigation measures within the contiguous neighborhoods the FAA determined that it was reasonable to include all structures located within specific neighborhood and street boundary lines. Failure to do so would create inequities both economically and for quality of life within a community with comparable property values and housing characteristics. Therefore the FAA has correctly applied the intent of the guidance contained in FAA Order 5100.38C, §810.b at 137. Also see FAA Advisor Circular 150/5020-1 <i>Noise Control and Compatibility Planning for Airports</i>, August 5, 1993.</p> <p>The Commenter’s statement that the FAA has expanded the “noise mitigation broadly” is the Commenter’s opinion.</p> <p>See the Response to Comment 15.16 for a discussion of the recommended noise mitigation measures and estimated cost. The funding of noise mitigation comes from the noise set aside pool within AIP funds.</p> <p>The Commenter’s statement that “maintaining neighborhood cohesion sounds</p>

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	<p>to the cost of the sound insulation program, and \$178 million to a purchase assurance/sound insulation program. Including such a large percentage of housing units outside the 65 DNL will expend scarce AIP funds that are needed for other, more pressing airport needs.</p> <p>While maintaining "neighborhood cohesion" sounds appealing, it is not a legitimate purpose for expenditure of the Airport and Airways Trust Fund, which was created "to provide for the expansion and improvement of the Nation's airport and airway system."</p>	<p>appealing, it is not a legitimate purpose for expenditure of the Airport and Airways Trust Fund" is the Commenter's opinion.</p>
<p><b>15.18</b></p>	<p>If during construction, a decision to length 9R/27L to more than the preferred alternative becomes apparent; will a new EIS be required?</p>	<p>If significant changes to the FAA's Selected Alternative are necessary, the FAA would evaluate the need to prepare a Supplement to the existing EIS or a Written Reevaluation.</p>
<p><b>15.19</b></p>	<p>Will the noise berm be extended on the south side of the new runway? If not, why not?</p>	<p>No. The extension of the noise berm is not part of the FAA's Selected Alternative and therefore there are no plans for its extension. Any plans to extend the noise berm would need to be initiated by the Airport Sponsor.</p>
<p><b>15.20</b></p>	<p><b>Dania Beach October 6 2008 Comment Letter, II. C. BCAD's criticisms of the C1 Alternative are not grounds to reject the C1 Alternative as impracticable or imprudent.</b> It is apparent from BCAD's criticisms and from actions taken by BCAD that BCAD seeks to eliminate the C1 Alternative from consideration by any means. The C1 Alternative remains the least expensive and the most practicable and prudent alternative to implement.</p>	<p>See Section 3.4 <i>The Selected Alternative</i> of this ROD. The FAA has considered not only environmental impacts, but also the practicability and prudence of the available alternatives in its selection. For the reasons found in Section 4.4 and Section 6.2 <i>Determinations under 49 U.S.C. Section 47106 and 47101</i>, the FAA disagrees with the Commentor's conclusion that the C1 is practicable and prudent.</p>

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**16.0 Net Benefits**

<b>16.0</b>	City of Dania Beach—The Net Benefits Analysis (Appendix F in the FEIS) contains the economic justification for the proposed Airport expansion. The FAA failed to address or remedy any of the problems identified by Dania Beach in previous comments.	The FAA responded to previous comments on the Net Benefit Analysis provided by the City of Dania Beach. See the Final EIS Appendix R, <i>Comments Received After the Comment Period</i> , LC110.1 through LC110.12.
<b>16.1</b>	City of Dania Beach—The FAA tried to avoid having to comply with various FAA guidance by stating that this was not a benefit cost analysis but used to calculate operational benefit. The FAA should have provided in detail reasoning as to why Dania Beach is incorrect in its statements.	See Response to Comment 16.0 above. The Commentor has not indicated what guidance it believes FAA has not complied with.
<b>16.2</b>	City of Dania Beach—The FEIS should have discussed induced demand in the Net Benefits Analysis and at a minimum explained why the phenomenon was not included.	The FAA explained why induced demand was not included in the Net Benefit Analysis in the previous response to the City. See Appendix R, <i>Comments Received After the Comment Period</i> , LC110.7.
<b>16.3</b>	<p>Town of Davie—8. Considering that</p> <p>(a) the Airport Sponsor has not limited its projections to 20 minute delays and</p> <p>(b) that that the Airport Sponsor will be “required to complete a Benefit Cost Analysis in accordance with FAA Policy and Final Guidance Regarding Benefit Cost Analysis (BCA) on Airport Capacity Projects for FAA Decisions on Airport Improvement Programs (AIP) Discretionary Grants and Letters of Intent (LOI), published by the FAA December 15, 1999, in order to submit an application for Federal funding” (See Appendix R LC 110.3);</p> <p>How can the airport sponsor expect to be approved for federal funding if its projections are not consistent with the FAA Airport Benefit-Cost Analysis Guidance which cap delays at 20 minutes?</p>	The Benefit Cost Analysis and federal funding are separate federal processes from the EIS.
<b>16.4</b>	<b>Dania Beach October 6 2008 Comment Letter, I.A. The C1 alternative is cheaper.</b> This cost savings is so substantial that FAA should pick another alternative only under extraordinary circumstances, none of which exist here.	See Section 3.4 <i>The Selected Alternative</i> of this ROD. The FAA has considered not only environmental impacts, but also the practicability and prudence of the available alternatives in its selection.

**16.0 Net Benefits**

<p><b>16.5</b></p>	<p><b>Dania Beach October 6 2008 Comment Letter, II. B. The C1 Alternative is practicable from a logistics and cost perspective.</b> The FEIS demonstrated that the C1 Alternatives can be built, as a matter of sound engineering and is practicable from a constructability standpoint, and thus from a logistics standpoint, the C1 Alternative is practicable, feasible, and prudent.</p> <p>The C1 Alternative costs approximately \$276 million less to implement than the B1 Alternatives, thus the C1 Alternative is prudent and feasible from a cost perspective.</p> <p>Even if the FEIS underestimated costs associated with the C1 Alternative by half, the C1 Alternative still would cost less to implement than the B1 Alternatives.</p>	<p>See Section 3.3 <i>FAA's Preferred Alternative (B1b)</i>, and 3.4 <i>The Selected Alternative</i> of the Record of Decision.</p> <p>The FAA disagrees with the Commentor's assessment that the C1 is "practicable, feasible, and prudent". Although the C1 Alternative is capable of being built as a matter of sound engineering principles, this does not, alone, meet the criteria of 40 CFR §230.10(a)(2). Rather, the FAA must also consider whether the alternative is logistically sound in light of the overall project purposes. Further, the FAA considers more than constructability when determining whether an alternative is possible and prudent under 49 U.S.C. §47106(c)(1)(C). The specific concerns the FAA has with the C1 alternative are enumerated in sections 3.3 <i>The Preferred Alternative</i> and 3.4 <i>The Selected Alternative</i> of this ROD.</p>
<p><b>16.6</b></p>	<p><b>Dania Beach October 6 2008 Comment Letter, II. C. 1. BCAD's cost estimates relating to its preferred alternative fail to include several key costs.</b> The FEIS indicates that BCAD did not calculate the full costs of implementing the B1 Alternatives.</p> <p>For example, BCAD and the FAA did not adequately consider the cost of acquiring homes in the study area (the Melaleuca Gardens neighborhood of Dania Beach); cost of acquiring the Atlantic Village property; and the cost of relocating the Hilton/Wyndham Hotel.</p> <p>Finally the FEIS acknowledges that implementing the B1 Alternatives would require the redevelopment or reconfiguration of Terminal 4.</p> <p>All the information we have been able to assemble indicates that the B1 Alternatives are consistently far more expensive than the C1 Alternative.</p>	<p>The FAA prepared the comparative cost estimates for the EIS alternatives. The comparative cost estimate for the EIS alternatives was prepared at a planning level of detail and included facility relocation costs and the redevelopment of Terminal 4. The estimated cost of facility relocations addressed in-kind replacement costs (such as utility infrastructure, structure square footage, vehicle, and aircraft parking areas). See the Final EIS Chapter Four Alternatives, Section 4.4 Projected Costs, and Appendix E Airfield Planning, Engineering and Constructability Review Section E.1.6 Facility Impacts.</p> <p>The FAA did consider the acquisition of the Hilton/Wyndham Hotel and the Dania Boat sales. No Atlantic Village property is required to implement the FAA's Selected Alternative. No acquisition of homes is required in the Melaleuca Gardens neighborhood. See Section 4.2 <i>Recommended Mitigation for Incompatible Land Use</i> in this ROD.</p> <p>The FAA has considered not only environmental impacts, but also the practicability and prudence of the available alternatives in its selection. See Section</p>

**16.0 Net Benefits**

		<p>3.3 <i>FAA's Preferred Alternative (B1b)</i>, and 3.4 <i>The Selected Alternative</i> of the Record of Decision.</p>
<p><b>16.7</b></p>	<p><b>Dania Beach October 6 2008 Comment Letter, II. C. 3. BCAD's criticisms of the cost estimates relating to the C1 Alternative should be disregarded as unfounded and flawed.</b> We urge the FAA to confirm that all tenants on Airport property are in fact airport-related.</p> <p>There is no reason why the FAA must consider costs to third parties impacted by the alternatives.</p> <p>Even assuming that any costs associated with these new leases/extension would be factored into the FAA's decision making analysis, these costs would not be considered because of BCAD's inflation of the costs for the C1 Alternative.</p> <p>Because BCAD is not responsible for rebuilding facilities if the C1 Alternative is implemented, BCAD's statement about the cost and rebuilding such facilities overinflates the actual costs associated with implementing the C1 Alternative. If BCAD is voluntarily assuming the costs to relocate facilities, despite these costs not being BCAD's responsibility, these costs should not be factored into any determination of the cost to implement the C1 Alternative.</p>	<p>See Section 3 <i>Summary of Alternatives Considered</i> in this ROD for a discussion of the potential impacts to tenants and airport property, and a discussion of the comparative cost analysis used in the EIS.</p> <p>While the north airfield alternatives would result in greater in-kind replacement costs for tenant relocations as compared to the south airfield alternatives, the south airfield alternatives would result in greater costs for airfield construction than the north alternatives due to the elevation of the runway. The EIS comparative analysis of projected costs takes these various factors into consideration. For example, the FAA's Preferred Alternative (B1b) would result in an estimated \$25.6 million for facility relocations and \$604.8 million in construction costs, as compared to Alternative C1 which would result in \$361.5 million for facility relocations and \$129.9 million in construction costs. See the Final EIS, Chapter Four, Section 4.4 Projected Costs.</p> <p>The comment regarding BCAD's responsibility for rebuilding facilities if the C1 Alternative is implemented was not a factor in FAA's Selected Alternative. See Section 3.3 <i>FAA's Preferred Alternative (B1b)</i>, and 3.4 <i>The Selected Alternative</i> of the Record of Decision.</p>
<p><b>16.8</b></p>	<p><b>Dania Beach October 6 2008 Comment Letter, II. C. 4. Even assuming that BCAD's criticism that the FEIS does not include all the costs associated with relocating facilities on the North Airfield is correct, the FEIS indicated that the C1 Alternative is still less expensive.</b> The C1 Alternative is practical, feasible, and prudent because it is buildable, and is considerably less expensive.</p>	<p>See Section 3.3 <i>FAA's Preferred Alternative (B1b)</i>, and 3.4 <i>The Selected Alternative</i> of the Record of Decision. The FAA has considered not only environmental impacts, but also the practicability and prudence of the available alternatives in its selection.</p> <p>See Response to 16.5.</p>

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**17.0 I-595**

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<b>17.0</b> Interstate-595	No Comments were submitted to the FAA on I-595 in the Final EIS.
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**18.0 Mitigation (General)**

<b>18.0</b> Mitigation (General)	No comments were received on general mitigation.
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**19.0 For Development**

<p><b>19.0</b> General comments and/or statements supportive of the development of the FAA's Preferred Alternative.</p>	<p>The FAA has reviewed your comment.</p>
<p><b>19.1</b> City of Fort Lauderdale—Although the City supports the Airport Sponsor's Proposed Project, Alternative B1c, if the FAA's Preferred Alternative, B1b, becomes the selected project, the City supports and urges Broward County to pursue a Part 150 Study to reevaluate runway use procedures in the future.</p>	<p>The FAA acknowledges the comments received from the City of Fort Lauderdale.</p>

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**20.0 Against Development**

<p><b>20.0</b> General comments and/or statements against the development of the FAA's Preferred Alternative.</p>	<p>The FAA has reviewed your comment.</p>
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**21.0 Decommission Runway 13/31**

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<p><b>21.0</b> General comments and/or statements regarding the decommissioning of Runway 13/31.</p>	<p>The FAA has reviewed your comment.</p>
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**22.0 General and Editorial Comments**

<p><b>22.0</b></p>	<p>Town of Davie—1. Table 8-11 on Page 8-42 of the FEIS contains an error; the fifth row of the table should be titled “Subtotal – Mitigation Inside 65 DNL” instead of “Subtotal – Mitigation Outside 65 DNL.”</p>	<p>Comment noted. Appropriate changes have been made to the text. See this ROD, Appendix C <i>Final EIS Errata</i>, document, Chapter Eight Table 8-11.</p>
<p><b>22.1</b></p>	<p>Town of Davie—2. Rows 22, 34, and 46 of Table 8-11 are also mislabeled; they should be titled “Subtotal – Mitigation Outside 65 DNL.”</p>	<p>Comment noted. Appropriate changes have been made to the text. See this ROD, Appendix C <i>Final EIS Errata</i>, document, Chapter Eight Table 8-11.</p>
<p><b>22.2</b></p>	<p>Town of Davie—3. Comment Response 3.25 in Appendix P does not address the second part of the original comment, “The Draft EIS co-mingles passenger capacity with aircraft capacity to support the expansion project.”</p>	<p>The purpose and need for the proposed federal action includes the need for both additional terminal gate facilities and runway capacity.</p>
<p><b>22.3</b></p>	<p>Town of Davie—4. Page 6 of the Town’s May 21, 2007 Comments (MC 003 in Appendix P) stated the following: “Further on Page 5.C.1-4, Paragraph 3 [of the DEIS] states that ‘30 percent of the population could be aroused or awakened if indoor levels reached 80 to 95 dB...’ This clearly must be an error and the word ‘indoor’ should be replaced with ‘outdoor.’”</p> <p>Appendix P, Response 22.1 indicates that this error has been corrected; however, the correction was not made in the FEIS (see Page 5.C-6 of the FEIS).</p>	<p>Comment noted. Appropriate changes have been made to the text. See this ROD, Appendix C <i>Final EIS Errata</i>, document, Chapter Five, Page 5.C-6.</p>
<p><b>22.4</b></p>	<p>Town of Davie—The response to Specific Question 1 on Page 28 of our 21 May 2007 DEIS comment letter (MC 003 in Appendix P) references Comment Response 22.6. This reference is incorrect and does not answer the question.</p> <p>LC 112.25 – 112.27 are relative to Chapters 5 and 6 of the DEIS and should be responded to for public disclosure.</p>	<p>Comment noted. The response to Specific Question 1 on Page 28 of the Town of Davie’s 21 May 2007 DEIS comment letter (MC 003 in Appendix P) is incorrect. The correct response is provided below:</p> <p><i>See the Final EIS Chapter Seven Cumulative Impacts, Section 7.1.1.2.5 Proposed Use Of Runways 9R/27L And 13/31 When The Preferred Runway Cannot Efficiently Accommodate Existing Operations At The Fort Lauderdale-Hollywood International Airport.</i></p> <p>The FAA prepared an environmental assessment to document the potential environmental impacts of the proposed use of Runways 9R/27L and 13/31 when the preferred runway cannot efficiently accommodate</p>

**22.0 General and Editorial Comments**

		<p>existing operations at FLL. The purpose for the proposed action was to improve the operational efficiency of the airfield at FLL during times when demand warrants. The existing operations require an operationally flexible runway system that can more efficiently accommodate the number of aircraft operations.</p> <p>Currently, Runway 9L/27R is used by the majority of aircraft operations at FLL, but the FAA also needs to use Runway 9R/27L or Runway 13/31 to reduce congestion on the preferred runway (Runway 9L/27R). FAA Air Traffic Control (ATC) could use Runway 9R/27L and Runway 13/31 when Runway 9L/27R cannot handle operations, particularly during the peak period. This runway flexibility would ease congestion on the preferred runway.</p> <p>The FAA conducted a public hearing on May 1, 2008. All comments received on the environmental assessment were considered by the FAA. Based on the environmental analysis, which determined there were no significant environmental impacts, the FAA has issued, in June 2008, a Finding of No Significant Impact and Record of Decision for this proposed action.</p> <p>Comment noted. The issues raised in these comments are outside the scope of the EIS analysis, and therefore FAA's previous responses are correct. (LC 112.25 – 112.27)</p>
<p><b>22.5</b></p>	<p>Town of Davie—6. Paragraph ES.6.2, states "the exceptions are Alternatives B1c and B4, which would cause virtually no change in the contour."</p> <p>How can the FAA make such a statement when there will be an addition of jet usage on runways 09R/27L, Table S-1, which is non-existent today?</p>	<p>Comment noted. The text in Paragraph ES.6.2 has been revised to clarify that the areas of the 2012 noise contours for the build alternatives ranges from 4.7 to 5.6 square miles as compared to the No Action Alternative which is 5.0 square miles. See this ROD, Appendix C <i>Final EIS Errata</i>, document, <i>Executive Summary</i>, Page ES.22.</p>
<p><b>22.6</b></p>	<p>Town of Davie—7. The FEIS was devoid of any internal FAA circulation (i.e. comments from relative services such as Office of Runway Safety, Systems Operations, Flight Standards</p>	<p>Internal FAA comments and coordination are considered deliberative and are not disclosed to the public.</p>

**22.0 General and Editorial Comments**

	Service, Office of Airport Safety and Standards and Office of Environment and Energy).	
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**23.0 Procedural and Legal Issues**

<b>23.0</b>	Town of Davie—The FEIS fails to follow substantive procedural and legal requirements, including those required by the National Environmental Policy Act of 1969 (NEPA), Council on Environmental Quality (CEQ), and the FAA’s own regulations.	The Commenter does not reference any specific issues. The FAA prepared this EIS in compliance with the requirements of the <i>National Environmental Policy Act (NEPA), of 1969</i> (P.L. 91-190); the Council on Environmental Quality’s (CEQ) regulations implementing NEPA (40 CFR Parts 1500 through 1508); FAA Order 1050.1E, <i>Environmental Impacts: Policies and Procedures</i> ; and FAA Order 5050.4B, <i>NEPA Implementing Instructions for Airport Actions</i> .
<b>23.1</b>	Town of Davie—Davie is of the opinion that the FEIS fails to consider many important aspects of the problems associated with the development and extension of Runway 9R/27L and other associated projects at FLL	See the Response to Comment 23.0.
<b>23.2</b>	Town of Davie—The FAA is not complying with CEQ requirements in that the analysis of the “no action” alternative continues to be deficient.	The Commenter identifies a defect in the approach taken to describe the “no action” alternative but fails to describe the defect with enough specificity to allow a reasonable response.
<b>23.3</b>	No comments were summarized and coded as 23.3.	No response was needed.
<b>23.4</b>	Town of Davie—The FAA has still failed to correct the format of the FEIS as it is not compliant with FAA Order 5050.4.  The FAA has also failed to correct the issues contained in the comments to the DEIS as mandated in FAA Order 5050.4.	Although the Commenter is not specific as to the “defect”, the CEQ regulation cited clearly indicated that the format is recommended. CEQ explicitly approved the form and content of Order 5050.4B in April 2006.  The Commenter misquotes the relevant section of FAA Order 5050.4B. The only requirement included in the cited section is that analysis of cumulative impacts must be in the same EIS.
<b>3.5</b>	Town of Davie—The Town maintains that the FEIS should either be based on the existing Airport Master Plan, or the FEIS should wait until the proposed amended Airport Master Plan is accepted by the FAA.	There is no Federal requirement that a Master Plan be completed in order to carry out an airport development project.
<b>23.6</b>	Town of Davie—Davie does not understand how a FEIS can be issued for expansion of the Airport without a final FAA acceptance of the Airport Master Plan or a final FAA approved Part 150 Noise Study.	There is no Federal requirement that all ongoing studies be complete in order to make a NEPA finding on proposed development. Airport Master Plans are the responsibility of the airport sponsor and FAA does not approve Master Plans.
<b>23.7</b>	Town of Davie—These comments are by no means exhaustive and Town relies on the Town’s May 21, 2007 Comments, the Town’s	Comment noted. The FAA believes that it has previously and sufficiently responded to the Town of Davie’s comments.

**23.0 Procedural and Legal Issues**

	February 29, 2008 Comments, and other comments to the DEIS and FEIS in support of the contention that the FEIS is deficient.	
<b>23.8</b>	Town of Davie—Many of the responses to comments indicate that the FEIS has been revised, but there is no specific indication of what revisions were made. i.e., no revision marking, marginal notes, or explicit statement of revisions in the responses. Therefore, explicit understanding of the nature of the revisions is difficult.	See the Final EIS Appendix P <i>Response to Comments</i> , Response to Comments 22.1 and 22.2. Also, see this ROD, Appendix C <i>Final EIS Errata Documents</i> and Appendix D <i>Final EIS Addendum Documents</i> for errata and addendums to the Final EIS.
<b>23.9</b>	The Kent George letter is not substantiated by factual data. Can FAA claim that they have done their own due diligence on the EIS (meeting the letter, spirit and intent of NEPA) when they summarily and blindly accepted a letter as fact by a staffer of the Local Sponsor (not the decision making body, the Board of County Commissioners).	See this ROD, Section 3 <i>Summary of Alternatives Considered</i> for a discussion of the Letter from Kent G. George, A.A.E., Director of Aviation, Broward County Aviation Department, Fort Lauderdale-Hollywood International Airport, to Dean Stringer, Manager, FAA Orlando Airports District Office, dated December 7, 2007.
<b>23.10</b>	<p>Broward County has been taking actions to clearly box the FAA in to not choosing D2. Can the FAA really claim that they have done their own due diligence on the EIS (meeting the letter, spirit, and intent of NEPA) when summarily and blindly accepting all these moves made by Broward County.</p> <p>Granted, the Board of County Commissioners approved these changes in leases; however, they did so with the advice and counsel of staff, who said none of this would affect the analysis, review, and/or selection of any Alternative (including D2). However, according to the FEIS, the FAA stopped looking at Alternative D2, for example, given costs of relocation, shortages of acreage, etc.</p>	<p>The FAA conducted a detailed analysis of all alternatives in the Final EIS. All alternatives, including D2, were carried forward in the analysis of environmental consequences and were analyzed equally. The FAA identified the screening criteria used in the alternatives evaluation to establish the basis of comparison and subsequently identified those alternatives that met the screening criteria, which included meeting the stated purpose and need. FAA, under NEPA has independently assessed and disclosed potential environmental impacts that could result from the implementation of the FAA's Preferred Alternative including an assessment of airport property and facility impacts.</p> <p>At the time the EIS analysis was being developed an analysis of existing tenant leaseholds was developed in order to determine impacts of the Proposed Project and alternatives on existing airport properties and tenant leaseholds.</p> <p>The tenant relocation analysis was based on information provided to the FAA by Broward County in November 2004 (FLL Leasehold</p>

**23.0 Procedural and Legal Issues**

		<p>Identification Map, Broward County Aviation Department, November, 2004.) See the Final EIS, Appendix E <i>Airfield Planning, Engineering and Constructability Review</i>, Section E.1.6 <i>Facility Impacts</i>, Table E.1-7 <i>FLL Tenant Leasehold Impact Summary (Non Terminal Impacts)</i> and Exhibit E.1-11 <i>Existing Tenant Leasehold Summary</i>.</p> <p>The EIS analysis focused on the availability of existing on-airport property and tenant leaseholds depicted by the 2004 FLL Leasehold Identification Map and the assumption that in-kind replacements (in terms of gross leasehold displacements) would be offered by Broward County to tenants that would be displaced with each alternative. While some changes have occurred to on airport tenant leasehold areas since the EIS analysis was prepared, the FAA's tenant relocation analysis was conducted based on the information contained in the 2004 FLL Leasehold Identification Map and does not include any additional changes resulting from lease renewals or new leaseholds that may have been approved by Broward County since that time.</p>
<p><b>23.11</b></p>	<p>Not allowing the public to submit comments via email does not meet the spirit and intent of NEPA.</p>	<p>The FAA is in compliance with NEPA with regard to the receipt of public comments. There is no specific requirement in NEPA that dictates the method of receipt. The FAA determined that the most efficient manner to receive public comments for this Final EIS was via U.S. mail and facsimile.</p>
<p><b>23.12</b></p>	<p><b>Dania Beach October 6 2008 Comment Letter, II. C. 2. To the extent that BCAD has made the cost to implement the C1 Alternative more expensive in an attempt to eliminate reasonable alternatives from consideration, these costs should not be considered.</b> BCAD has deliberately made the C1 Alternative to be more expensive in an attempt to dictate the FAA's selection of a runway expansion alternative, starting with the 1994 Master Plan, and the formal EIS process what began as of February 2001. Broward County entered into several leases,</p>	<p>See the Response to Comments 16.6, 16.7, and 16.8 in this ROD regarding the comparative cost analysis for the EIS alternatives and FAA's considerations for the selected alternative. Regarding the tenant leaseholds, see Response to Comment 23.10 in this ROD.</p>

**23.0 Procedural and Legal Issues**

	<p>and extended other leases in the north airfield after the expansion process had started..</p> <p>Despite the rules (FAA Order 5050.4B Paragraph 1004 (a), 40 C.F.R. Section 1506.1), in July 2002, the County entered into a 20-year lease with Aero Lauderdale on the north side for 1,068,081 sq. ft; entered into a 30-year lease in 2005 with SheltAir Aviation Center for 624,000 sq. ft on the north side; In 2007, Embraer Aircraft Corporation was given an extension on its lease and agreement to add 40,0000 sq. ft. on the north side, despite a July 19, 2007 letter from the FAA.</p> <p>In entering and extending these leases, Broward County has directly violated FAA Orders and Federal NEPA regulations. The FAA should therefore not consider any costs associated with relocating/moving any of the tenants whose leases were entered into or extended after the commencement of the EIS process, as the sponsor appears to be deliberately placing impediments in the way of any north runway alternative.</p>	
<p><b>23.13</b></p>	<p><b>Dania Beach October 10 2008 Comment Letter</b> - My firm has submitted numerous letters and documents to the FAA for the agency's review in relation to this project. It is our hope that the FAA gave these materials serious consideration, and we presume that the agency has maintained copies in its files.</p>	<p>FAA acknowledges the receipt of these materials.</p>
<p><b>23.14</b></p>	<p><b>Dania Beach October 10 2008 Comment Letter</b> –In addition to a list of materials previously submitted, attached is a color copy of a "White Paper" on aviation forecasting we submitted in response to final SEIS in July of</p>	<p>FAA acknowledges the receipt of these materials.</p>

**23.0 Procedural and Legal Issues**

	<p>this year, which we are submitting again in case we previously sent a black and white copy.</p>	
<p><b>23.15</b></p>	<p><b>Dania Beach October 10 2008 Comment Letter</b> -FAA's position that, in making a final decision on this project, it will only rely on the environmental analyses contained in the EIS drafts issued since 2005. However the materials we previously submitted remain part of the administrative record. <i>See, e.g., Citizens to Preserve Overton Park v. Volpe</i>, 401 U.S. 401, 420 (1971) (APA "review is to be based on the full administrative record that was before the Secretary at the time he made his decision").</p>	<p>40 CFR 1503.4 requires that a Federal agency accept and respond to comments on a Draft EIS. The Commentor contends that the requirement includes previously submitted comments and materials not related to the existing environmental analysis for the Proposed Project. The Commentor has not specifically identified what relevance those materials have to the existing environmental analysis.</p> <p>Although the FAA has considered capacity projects at FLL in the past, those prior proposals and related environmental analysis were terminated in 2003. Upon Broward County's submittal to the FAA on the existing Proposed Project the FAA initiated this environmental analysis independently of all prior analysis.</p> <p>The FAA disagrees with the position that all previously submitted comments and materials on earlier expansion proposals would be part of the Administrative Record.</p>

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**24.0 Construction Impacts**

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<p><b>24.0 Dania Beach October 6 2008 Comment Letter, I.B. The C1 Alternative minimizes construction delays compared to the B1 Alternative.</b></p> <p>Therefore, the Airport will remain at least a 2-runway airport throughout the implementation of the C1 Alternative. Because the Airport is a major airport, relying on a single runway for any period of time would be a logistical and costly endeavor for all involved.</p>	<p>Comment noted. Appendix E, Section E.3.1.2 presents construction phasing for Alternative B1b and Section E.3.2.1 presents a conceptual implementation schedule. Prior to implementation of construction activities, the Program Manager and Broward County would prepare a detailed construction sequencing plan, maintenance of traffic plan, and construction schedule associated with the Proposed Action. With Alternative B1b the airport would operate with only Runway 9L/27R for approximately 9 months. This temporary condition would be coordinated between Broward County, the FAA, and the aviation users. Alternative C1 would operate with only two runways 9R/27L and 9L/27L for approximately 15 months.</p>
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<p><b>2.6</b> Any resolution that involves the extension of 9R should contain use restrictions that would cause less of an impact to the residential community.</p>	<p>The EIS evaluated the Airport Sponsor's Proposed Project, other on-site runway development alternatives, and the No Action alternative. At the request of Broward County, the Airport Sponsor's Proposed Project (Alternative B1c) included a runway end utilization program that limited the use of, and operations on the south parallel runway (9R/27L) in 2012. This is the only runway development alternative in the EIS that would limit the use of, and operations on the south parallel runway (9R/27L) in 2012.</p> <p>Typically, the FAA would not approve a runway extension with the type of runway use restrictions that are proposed by the Interlocal Agreements. The runway use restrictions contained in the Interlocal Agreements reduce airfield capacity in the short-term as compared to the unrestricted runway use with Alternative B1b.</p> <p>Runway use procedures that specifically address the reduction of noise impacts are the purview of a Part 150 Study that would be conducted by an airport sponsor.</p>
<p><b>3.0</b> The Draft EIS does not demonstrate the need for the expansion plan proposed by Broward County.</p>	<p>The need for the County's proposed expansion plan was documented in the Draft EIS in Chapter Three, Section 3.3, <i>Need for the Project</i>, and Section 3.4, <i>Purpose of the Proposal</i>.</p>
<p><b>3.2</b> The Draft EIS should be based on the existing Airport Master Plan or wait until the proposed amended Airport Master Plan is accepted by the FAA.</p>	<p>The FAA prepared this EIS in response to the Airport Sponsor's (Broward County's) request to construct the Sponsor's proposed action. The EIS is not based on any information contained in the 1994 Master Plan Update. Broward County is currently preparing a new Master Plan Update. Information and data contained in the new Master Plan Update and the FAA's EIS for the proposed expansion of the south runway are being coordinated to the extent necessary. Any questions or concerns regarding the timing of the request by the Airport Sponsor with respect to the Airport Master Plan should be addressed to Broward County officials. However, a Master Plan Update prepared by an airport sponsor is not required prior to the conduct of an FAA EIS.</p>
<p><b>3.10</b> The Draft EIS contains no evidence regarding past delays at the Airport.</p>	<p>A discussion of recent past delay at FLL, as reported by the FAA's database of Aviation System Performance metrics (ASPM), is provided in Chapter Three, Section 3.3.1.3, <i>Level of Delay</i>.</p>

**3.16** The presumed need for additional runway capacity in the Draft EIS is based upon a flawed evaluation of the projected demand for aircraft operations at the airport. Did the TAF double count operations and what was Landrum's & Brown's involvement with the TAF analysis?

The FAA disagrees with the characterization that the "presumed need for additional runway capacity is based upon a flawed evaluation." Chapter Three, Section 3.3.1.1, *Projected Operational Demand*, discusses the projected operational demand at FLL in depth.

The FAA assumes that the commenter's reference to a "flawed evaluation of the projected demand" is referencing the potential that the TAF double counted operations at FLL due to regional influences existing between FLL, Miami International (MIA) and Palm Beach International (PBI) airports. The FAA resolved these regional issues in the FLL forecasts in the 2006 TAF, which was used in the EIS.

During the scoping process for the EIS, a comment was submitted that questioned looking only at the forecast demand for FLL without considering the possibility that forecast demand was double counted at the Southeast Florida airports collectively (FLL plus PBI and MIA airports). Given the close proximity of the three airports, a prospective visitor could choose his/her flight to South Florida based upon factors such as price, flight times, and convenience, rather than the particular destination airport. MIA is served by most of the major U.S. passenger carriers, only four recognized low cost carriers (LCC), and dozens of foreign flag airlines. PBI is also served by most of the major U.S. carriers and several LCCs, including the three largest: AirTran Airways, jetBlue Airways, and Southwest Airlines.

In response to this scoping comment, the FAA instructed its consultant team to assess whether the TAFs for FLL, MIA, and PBI collectively provide a reasonable forecast of aviation activity for the Southeast Florida region, and whether the projected market share of South Florida traffic assigned to FLL is reasonable.

A regression model projected the domestic originations for South Florida to be lower than the sum of the domestic portion of the three TAFs. The regression model and results were shared with the FAA APO (FAA Office of Aviation Policy, Planning, and Environment). The FAA APO independently reviewed the regression analysis and, based on this review,

	<p>the FAA APO used a more regional approach in developing the 2006 TAF, which was released in January 2007. The 2006 TAF for FLL projected lower enplanements and aircraft operations than the 2004 TAF. This lower forecast reflects the maturing of jetBlue service at FLL, the reintegration of Song into Delta's mainline fleet, and recognition that the high growth rates experienced in 2003 through 2005 are not sustain-able long term. This adjustment results in about a six-year shift in demand volumes and associated delays.</p> <p>See Appendix D.1, <i>Aviation Activity Forecasts and Derivative Design Day Forecasts</i>, Section 1, <i>Purpose and Context</i>.</p>
<p><b>3.25</b> FLL is being expanded to accommodate passengers going to bordering counties in spite of these counties having adequate airports. The Draft EIS co-mingles passenger capacity with aircraft capacity to support the expansion project.</p>	<p>The proposed expansion at FLL is needed in order to address air travel demand at FLL, not at other airports located in the region. The proposed expansion at FLL is based on existing and projected aviation demand.</p> <p>Whether passengers have other available airports is not a factor in the demand analysis. For various reasons, these passengers are opting to travel from the FLL airport. Neither the FAA, nor the airport sponsor has the authority to deny passenger access to FLL based on the individual's residency. However, because FLL exists in close proximity to Miami and Palm Beach International Airports, the 2006 Terminal Area Forecast (utilized in the EIS) reflects these regional influences to prevent the potential for artificially inflated forecasts, given the overlap of population serviced by each of these airports. See the Response to Comment 3.16.</p>
<p><b>3.37</b> Why is the worst case scenario for airport expansion being pushed? So you can later build a third east/west runway?</p>	<p>The Airport Sponsor presented a proposal to the FAA for consideration and the FAA developed alternatives to that proposal which are presented in the EIS. The FAA's Preferred Alternative is presented in Chapter Eight of this EIS. The FAA is unsure as to how the commenter is defining the 'worst case scenario' for airport expansion.</p>
<p><b>3.47</b> The straight line TAF projection has not considered the factor that price of fuel oil is increasingly steadily and that most economists believe that the price of oil will increase well beyond \$70 a barrel. The FAA has based its forecast on</p>	<p>The Terminal Area Forecast is updated annually and is based in part on economic forecasts developed by the Office of Management and Budget (OMB). The FAA is required to use reasonably available information in environmental analysis. The most recent TAF, 2007, validated forecast</p>

<p>the current price of oil (gas). How much additional cost per ticket due to oil can the market bear until air travel to FLL stabilizes or shifts to a straight line downward trend - assuming we are not already at that point?</p>	<p>predictions in the Draft EIS.</p>
<p><b>3.49</b> Aviation demand: the assumption that we must meet all the calculated theoretical demand is faulty – not only do we not have the terminal space here, but the originating airports such as New York and PHL do not have the capacity to increase their flights to FLL. Further, the analysis assumes that the Ft Lauderdale area continues to draw more travelers for residency or tourism, despite competition from other destination. Further, as a country, we can enforce limits on airports that reduce the scheduling peaks and valleys – overall tight budgets for airport construction and management dictate such a logical approach.</p>	<p><i>See Chapter Three, Purpose and Need.</i> The EIS analysis shows that both runway capacity and terminal gate capacity need to be increased to accommodate existing demand as well as projected demand. Given current operational delay at FLL, a need exists currently for the Proposed Project.</p> <p>With regard to forecast demand and capacity in originating airports, the projected growth at FLL is a conservative 2.46 percent per year. While the FAA agrees with the commenter’s statement that both New York and Philadelphia are operating near capacity, each airport is currently undergoing planning studies to increase capacity. There are also other airports in the northeast that have capacity available for airlines who wish to provide customers with additional options for travel to South Florida. The assumption that traffic to FLL will continue to grow is based on many factors including economic and demographic trends. There is no evidence that these trends are going to stop or reverse.</p> <p>While there is increasing pressure on the airlines to address the increasing delays and operational problems, the laws of supply and demand will continue to drive the airlines to provide flights at the peak times preferred by customers.</p> <p>The FAA cannot dictate airline schedules, which are a function of market strategies and customer demand. Therefore, such actions are outside the purview of the FAA’s regulatory authority.</p>
<p><b>3.52</b> The Draft EIS states that the small aircraft category is expected to increase by 3% by the year 2020. With the number of commercial fields available in South Florida, most notably Ft. Lauderdale Executive Airport, it seems that it should be possible</p>	<p>The EIS analysis shows that the existing airfield cannot accommodate the existing and projected forecast in air carrier demand. The existing runway infrastructure condition creates a deficiency in airfield capacity for the large air carrier aircraft operating at FLL.</p>

<p>to route these small aircraft elsewhere. The EIS does not address how keeping the number of small aircraft down would impact the overall traffic flow.</p>	<p>See Chapter Three, Section 3.2.1, <i>Insufficient Airfield Capacity to Accommodate Projected Aviation Demand with the EIS-Established Threshold of Aircraft Delay</i>, and Section 3.3.1.2, <i>Existing Airfield Capacity</i>.</p> <p>The shifting of general aviation from FLL to surrounding reliever airports was considered in the EIS. The FAA does not have the authority to shift general aviation operations to other airports and even if this were to occur, this action would not reduce air carrier demand. See Chapter Four, Section 4.2.1.1, <i>Use of Other Airports, Shift General Aviation to Surrounding Reliever Airports</i>.</p>
<p><b>4.0</b> A sloped runway may be problematic for normal operations and also limit payload capacity for takeoffs toward the east.</p>	<p>All runway alternatives evaluated in this EIS comply with FAA design standards; including runway longitudinal and transitional slope requirements. The runway length analysis contained in Appendix D.3, <i>Airfield Geometric Requirements</i>, provides consideration for the operational affect of effective runway gradient.</p>
<p><b>4.4</b> The Draft EIS should more clearly explain the criteria and process used to identify fatal flaws and what makes these flaws qualitatively different than other potential flaws.</p>	<p>Potential <i>fatal flaws</i> were identified that would automatically eliminate an alternative from further consideration. These fatal flaws are associated with direct impacts on existing facilities that would result in <i>substantial</i> redevelopment or <i>inhibit development or maintenance</i> of existing infrastructure. (See Chapter Four, Section 4.2.2.5, <i>Runway Development Alternatives</i>.)</p> <p>Based on this definition, the FAA determined that a fatal flaw for any alternative would involve the encroachment of the existing terminal core area, the Dania Cut-Off Canal, the Interstate-95, the Florida Power and Light LaDania Substation, and/or the Seaboard Coast (CSX) Railroad</p>
<p><b>4.16</b> Building a major runway over an active highway (U.S. 1), Florida East Coast Railroad, and a natural gas pipeline creates an inherent security risk that would result in impacts to traffic and safety.</p>	<p>The FAA has coordinated with the Federal Highway Administration, the Florida East Coast Railway, the Federal Energy Regulatory Commission, and the Florida Department of Transportation regarding any inherent safety issues or potential risks associated with any of the runway development alternatives. Coordination with these agencies did not identify any critical safety or security issues associated with the runway development alternatives.</p>
<p><b>4.36</b> Some of the areas for relocated tenant facilities are covered by existing long term leases, or are</p>	<p>It would be the responsibility of Broward County to provide adequate reparations for breaking existing leases if necessary. The</p>

<p>designed for drainage. A statement of the conditions under which leases can be terminated early and the cost of doing so would assist the reader in validating cost comparisons.</p>	<p>County's leasehold documents for each tenant would describe the buy-out parameters.</p> <p>The FAA is not a party to lease agreements between on-airport tenants and Broward County, and therefore, the FAA cannot alter or influence the terms of the lease.</p> <p>However, in the event that tenant relocations would be required to implement an alternative, tenants would be relocated in accordance with the <i>Uniform Relocation Assistance and Real Property Acquisition Policies Act</i> (49 CFR Part 24).</p> <p>The costs assumed the replacement of facilities in-kind for tenants impacted by alternative development. All other cost variables for lease buy-out and relocation expenses are speculative at this time. The cost estimates are sufficient for comparison purposes in this EIS.</p>
<p><b>4.43</b> Holding bay, Page 4-36 Paragraph 5 Section 4.3.2.2. Explain the need for the holding bay.</p>	<p>See Chapter Four, Section 4.3.2.2, <i>Taxiway/Taxilane and Holding Bay Geometry – Alternatives B1/B1b/B1c</i>, which explains that the holding pad was requested by FAA FLL Air Traffic Control.</p> <p>See the Response to Comment 4.25.</p>
<p><b>4.58</b> Relocations, page 4-49 Section 4.3.5.4, states majority of facilities can be relocated. How and where are these facilities proposed to be located? Identify the real estate that is proposed to be used for relocations and confirm that the sequence of relocations can be accomplished while maintaining full operations at the airport. The assumption that a majority of the facilities could be relocated to the west side of the airfield and maintain functionality does not appear correct.</p>	<p>In response to this comment, additional analysis was performed by the FAA. This analysis determined that tenant facilities could be relocated on-airport immediately north of Runway 8/26, south of existing Runway 9R/27L, and in areas west of the terminal complex under Alternative C1.</p> <p>Other potential relocation areas designated as airport property, and owned by Broward County, are located east of U.S. Highway 1, west of Interstate-95, and the property formerly known as the Trails End Mobile Home Park.</p> <p>These areas could accommodate tenant facilities that do not require direct airfield access.</p> <p>The FAA prepared conceptual tenant relocation plans and presented them to airport tenants on October 5, 2007. The analyses determined there should be adequate property available</p>

	<p>for the potential relocation of existing tenant facilities under Alternative C1, while maintaining the functionality of these facilities.</p> <p>During construction of the relocated tenant facilities, it is anticipated that Runway 13/31 would have to be decommissioned prior to completing the relocation of tenant facilities. As a result, it is expected that there would be a period of approximately 15 months between the closure of Runway 13/31 and the opening of Runway 8/26.</p> <p>Both the tenant relocation analysis and preliminary construction schedules are presented in Appendix E, <i>Airfield Planning, Design, &amp; Constructability Review</i>.</p>
<p><b>4.73</b> Appendix E, page 62. Decommission Runway 13/31. Clarify the sequence of events and the available runways at each stage of construction.</p> <p>The Draft EIS can be read to result in some period during which only one air carrier runway is available at FLL.</p>	<p>Graphics detailing runway availability throughout construction were added to Appendix E, <i>Airfield Planning, Design, &amp; Constructability Review</i>, in the Final EIS.</p>
<p><b>4.96</b> The Draft EIS does not address the option of widening Runway 9R/27L to 150 feet, which would allow newer generation aircraft to utilize this shorter runway (Appendix D.3. Runway Length Analysis). In conjunction with RNAV and SOIA procedures, it may well be sufficient to alleviate excessive delay times for the foreseeable future at a minimal cost.</p>	<p>A runway width of 150 feet would be adequate to serve aircraft with a wingspan of up to, but not including 214 feet. This additional width would allow for additional aircraft such as large turboprops to utilize the runway; however, the lack of sufficient length remains the critical limitation to the efficient use of Runway 9R/27L. The majority of the existing and forecast fleet mix at FLL consists of aircraft that require runway lengths in excess of the 5,276 feet available. Area Navigation (RNAV) and Simultaneous Offset Instrument Approach (SOIA) procedures could be developed for runway 9R/27L but the lack of suitable runway length would result in minimal increase in utilization of Runway 9R/27 and a continued imbalance between the north and south runways. To meet the need for additional runway length and runway safety area requirements, Runway 9R/27L would need to be widened <u>and</u> lengthened.</p>
<p><b>4.110</b> I am sorry to say that the comment I made to you on the evening of June 5th remains. This is undoubtedly the worst DEIS I have seen. I am also taken aback at the posture of FAA</p>	<p>This statement is the commenter's opinion for which the FAA cannot provide a meaningful response. The FAA received a satisfactory rating from the U.S. Environmental Protection Agency regarding the content and analysis contained in the Draft EIS.</p>

<p><b>6.0</b> The latest Draft EIS continues to use a completely inadequate time horizon (2012 to 2020). The Draft EIS projected operations and benefit cost ratios out to 2030. Environmental impacts should be shown to 2030.</p>	<p>The FAA uses 2012 and 2020 as a basis for analysis because: 1) 2012 is the projected earliest implementation year of the Airport Sponsor's Proposed Project; and 2) 2020 represents a future condition after full implementation of the Airport Sponsor's Proposed Project. Further, 2020 was requested by the U.S. Environmental Protection Agency and the Airport Sponsor.</p> <p>Benefit-cost ratios represent the benefits that would occur over the life of a project. The benefit-cost ratios are presented for two evaluation periods: 2006 to 2020 and 2006 to 2030. The 2020 benefit-cost ratio indicates the project's ability to provide a positive return on the monetary investment over a shorter period of time (from the end of construction to 2020) while the 2030 benefit-cost ratio represents the benefits accrued over the entire life of the project (from the end of construction to 2030).</p>
<p><b>6.1</b> The Draft EIS fails to adequately address impacts to the quality of life of the surrounding communities.</p>	<p>The EIS was prepared in accordance with all applicable regulations. There is no impact category or significant threshold for "quality of life." However, the EIS does present analysis for many different environmental categories such as noise, air quality, and water quality.</p>
<p><b>6.4</b> The proposed project will cause more impacts to local parks and wetlands than other alternatives.</p>	<p>Based on the EIS analysis summarized in the EIS <i>Executive Summary</i>, Table ES-1, <i>Summary of Analysis</i>, none of the runway development alternatives would significantly impact local parks. See Chapter Six, Section 6.D.2, <i>Section 4(f) Properties [Recodified as 49 U.S.C. 303(c)] and Section 6(f) Land and Water Conservation Fund Act</i>. All of the runway development alternatives impact wetlands to varying degrees. See Chapter Six, Table 6.E.2.1, <i>Comparative Summary of Impacts to Wetlands Caused by the Project Alternatives</i>.</p>
<p><b>6.5</b> Any extension of 9R will generate more of a noise and environmental impact than any of the other alternatives.</p>	<p>In 2020, the Alternative B1c (Airport Sponsor's Proposed Project) and Alternative B1b have greater adverse noise and compatible land use impacts than all of the alternatives (A, B1, B4, C1, D1, D2), except</p>

	<p>for Alternative B5. The FAA's Preferred Alternative (Alternative B1b) has the same noise and land use impacts in 2020 as Alternative B1c, the Airport Sponsor's Proposed Project. The 2020 noise impacts will be mitigated for the FAA's Preferred Alternative. (See Chapter Eight, Section 8.6.2, <i>Mitigation of Noise Impacts to Incompatible Land Use</i>, for a discussion of the recommended noise mitigation of incompatible land use impacts.) Also see the Response to Comment 6.3 and Comment 6.4.</p>
<p><b>6.6</b> Why would you not choose the cost effective north runway alternative where less people are affected?</p>	<p>The FAA's airports program statutory mission is to provide leadership in planning and developing a safe, efficient, national airport system to satisfy the needs of the aviation interests of the U.S.</p> <p>The FAA considers economics, environmental impacts, compatibility, local propriety rights, safeguards, and the public investment in any final decisions regarding a proposed action. When the FAA selects an alternative presented in this EIS all of these factors will be considered in the FAA Record of Decision.</p>
<p><b>7.0</b> The air quality analysis does not show any change in baseline conditions between now and 2020. The study area may be in nonattainment for PM 2.5 within five years. This affects the air quality baseline conditions.</p>	<p>See U.S. Environmental Protection Agency (USEPA) and FAA "General Conformity Guidance for Airports – Questions and Answers," USEPA Research Triangle Park, North Carolina 27711, dated September 25, 2002, Question 37 on page 25.</p> <p>An air quality analysis for an EIS considers the attainment status of the project area that existed at the time of the preparation of the EIS prior to approval. Once the EIS is approved, no further analysis is required even though the attainment status may change. If emissions of fine particulate matter (PM<sub>2.5</sub>) increase at any time in the future in Broward County, and even if the county is redesignated nonattainment for any criteria pollutant, the General Conformity evaluation given in the EIS would remain valid.</p> <p>See EIS Chapter Six, Section 6.B.2.4, <i>Criteria Pollutant Dispersion Analysis</i>, Table 6.B-12, <i>Maximum Criteria Pollutant Design Concentrations</i>; and Appendix Q.3, Section Q.3.7, <i>NEPA (National Environmental Policy Act) and Clean Air Act, including the 1990 Amendments (CAA) Compliance</i>.</p>

	<p>The dispersion analysis of future conditions demonstrates that the runway development alternatives would not be expected to equal or exceed the National Ambient Air Quality Standards (NAAQS) and the project would comply with CAA Section 176(c)(1).</p>
<p><b>7.3</b> Supplemental HAPs information is needed to complement the provided inventory of air toxics sources. The Concentrations across the airport and surrounding community should be assessed and toxicity information be incorporated in the Final EIS to assess the potential risks associated with HAPS emissions from airport-related activities under the various alternatives.</p>	<p><i>See</i> EIS Appendix G, Attachment G.1, Appendix G.1.B, <i>Hazardous Air Pollutant (HAP) Evaluation</i>.</p> <p>The air quality analysis includes an inventory of HAPs associated with sources of emissions identified at the Airport. Further analysis, such as dispersion analysis or a toxicity weighting analysis was not conducted for HAPS due to the many scientific uncertainties and lack of established standards and methodologies. The level of analysis provided in the EIS is consistent with current FAA guidance.</p> <p>The FAA and U.S. Environmental Protection Agency (USEPA) are involved in national policy discussions and research efforts to improve HAPS analysis for the future.</p>
<p><b>7.5</b> Section 5.B.1.4, page 5.B-9 -- the last sentence of this section needs to be revised to more clearly discuss how and where the process used in this statement has been used in the past to identify compliance problems or concerns. (The sentence indicates that EPA considers the rates of increase of NO<sub>x</sub> and VOC emissions in determining the likelihood of ozone formation of a project level.)</p>	<p><i>See</i> EIS Chapter Five, Section 5.B.1.4, <i>Clean Air Act General Conformity Rule</i>.</p> <p>Section 5.B.1.4 has been revised in the EIS to more clearly discuss the U.S. Environmental Protection Agency (USEPA) methodology to determine compliance to the General Conformity regulations with regard to ozone emissions, and the ozone precursor pollutants nitrogen oxides (NO<sub>x</sub>) and volatile organic compounds (VOC).</p>
<p><b>7.9</b> Provide the names and identification number for the air quality monitors used to develop the background concentrations data in Tables 5.B-7 and 5.B-8. The analysis based on projected future conditions is not a standard approach used in dispersion modeling. Provide the rationale for this approach and methodology in the Final EIS.</p>	<p><i>See</i> EIS Appendix G, Attachment G.1, Section 1.3, <i>Florida State Implementation Plan</i>, Table G-4, <i>Southeast Florida Airshed Air Quality Monitoring Sites</i>, and Exhibit G.1-1, <i>Southeast Florida Airshed Air Quality Monitoring Sites</i>.</p> <p>The list of air quality monitors in southeast Florida that were used for the projection of background concentrations for the EIS air quality dispersion analysis is discussed in this EIS in Table G-4. The AirData "Site Identification Number (ID)," address, county, and city location of each receptor is given in the table. The table is associated with Exhibit G.1-1.</p>

	<p>See EIS Appendix G, Attachment G.1, Section 3.3.4, <i>Background Concentrations</i>, Table G-18, <i>Background Concentrations for 2005</i>.</p> <p>FAA and U.S. Environmental Protection Agency (USEPA) Region 4 engaged in further coordination to review the comments presented in this section. At that time, the Air Planning Department advised FAA to use 2005 data obtained from Florida's air quality monitoring network as the background concentrations for existing conditions and also for all future years. The background concentrations for 2005 were retrieved from the U.S. Environmental Protection Agency (USEPA) AirData website and the data has been changed in the EIS.</p> <p>See EIS Chapter Five, Section 5.B.2.2.1, <i>Criteria Pollutant Dispersion Analysis</i>, Table 5.B-5, <i>Criteria Pollutant Design Concentrations 2005 Existing Conditions</i> and Section 5.B.2.2.2, <i>Roadway Intersection Carbon Monoxide (CO) Dispersion Analysis</i>, Table 5.B-6, <i>Roadway Intersection Carbon Monoxide Design Concentrations 2005 Existing Conditions</i>.</p> <p>The Tables 5.B-7 and 5.B-8 mentioned in the comment were revised and are presented in the EIS as Tables 5.B-5 and 5.B-6.</p>
<p><b>7.13</b> How were the inputs for each of the AERMOD processors developed? List the options chosen to run those processors. Also discuss the meteorological data, surface characteristics, land use, topography, etc. Provide this revised information in the Final EIS.</p>	<p>See EIS Appendix G, Attachment G.1, Section 3.0, <i>Methodology and Procedure</i>; and Appendix G.1.C (to Attachment G.1), <i>Technical Data</i>.</p> <p>Section 3.0 includes an explanation of the methodology and procedure used to run the dispersion modeling using the FAA Emissions and Dispersion Modeling System (EDMS) Version 4.5. The EDMS program functions as an interface with the American Meteorological Society and U.S. Environmental Protection Agency (USEPA) Regulatory Model (AERMOD). All computer data inputs are provided electronically in the EIS Administrative File as referenced in Appendix G.1.C.</p>
<p><b>8.1</b> Concern about the addition of aircraft noise exposure to existing and new populations.</p>	<p>As described in Chapter Six, Section 6.C.1, <i>Airport Noise</i>, new noise exposure would result with any of the potential runway development alternatives due to the forecast increase in aircraft operations.</p>

	<p>Even with the future 2012 No Action Alternative, noise exposure would increase due to the forecast increase in operations. In 2005 Baseline 65+ Day-Night Average Sound Level (DNL) noise contour there are approximately seven residential units. With the 2012 No Action Alternative, there would be approximately 13 housing units located within the 65+ Day-Night Average Sound Level (DNL) noise contour.</p> <p>Mitigation is proposed for all incompatible land use impacts within the 65+ DNL noise contour of the FAA's Preferred Alternative, which is discussed in Chapter Eight of this EIS (Section 8.6, <i>FAA's Preferred Alternative: Mitigation of Environmental Impacts</i>).</p>
<p><b>8.3</b> The implementation of mitigation should be discussed in the final EIS and prioritized as follows: voluntary acquisition of homes in the 70+ noise contour; voluntary acquisition of homes in the 65+ DNL contour using the +1.5 criterion; voluntary acquisition of homes in the +65 DNL contour or sound insulate homes (this would be at the resident's option); consider sound insulation of homes in the 60 DNL contour using the +3.0 DNL criterion.</p>	<p>The noise mitigation for the FAA's Preferred Alternative is provided in the final EIS Chapter Eight, <i>FAA's Preferred Alternative</i>.</p> <p>In summary, the FAA will identify properties that may be eligible for participation in a land use mitigation program. Broward County's responsibility is to decide how to apply the mitigation program to the eligible properties. The mitigation areas and the mitigation programs identified in the EIS will be part of the FAA Record of Decision. The Record of Decision will include conditions requiring the Airport Sponsor to implement the noise mitigation programs addressing the impacts resulting from the FAA's Preferred Alternative. The participation of the individual home owner and/or property owner in one of the recommended mitigation programs, however, will be voluntary.</p> <p>The above mitigation programs are based on the Broward County Proposed Noise Mitigation Principles. The FAA has determined that the following measures are appropriate to address the incompatible land uses within the 65 Day-Night Average Sound Level (DNL) of the 2020 Composite Mitigation Noise Exposure Contour for the FAA's Preferred Alternative. Broward County will determine how any one or a combination of these programs would be implemented.</p> <ul style="list-style-type: none"><li>• the development of mitigation programs will be based on the 65 DNL of the long-term/ultimate noise contour – the 2020</li></ul>

	<p>Composite Mitigation Noise Exposure Contour</p> <ul style="list-style-type: none"> <li>• each mitigation program will address a neighborhood/ subdivision area as a whole to ensure, to the extent practicable, that community cohesion will be maintained when the mitigation strategies are applied; thus program areas may extend beyond the 65 DNL noise contour to follow natural geographic boundaries, street patterns, and contiguous neighborhood boundaries</li> <li>• acquisition of mobile home units and the relocation of residents in accordance with the <i>Uniform Relocation Assistance and Real Property Acquisition Policies Act (49 CFR Part 24)</i> with the FAA's recommendation that the future use of the acquired property be controlled by recorded restrictive covenants</li> <li>• sound insulation of eligible single-family and multi-family units with the FAA's recommendation that an aviation easement be acquired</li> <li>• purchase guarantee/sales assistance (with sound insulation) for eligible single-family and multi-family units with the FAA's recommendation that an aviation easement be acquired</li> </ul>
<p><b>8.7</b> The final EIS should fully address mitigation of project impacts and not leave mitigation to the voluntary Part 150 Program. The Part 150 Program should mitigate any leftover homes that may still be exposed to noise within the 65+ DNL contours from other FLL projects.</p>	<p>The mitigation for all of the potential noise impacts is discussed in the final EIS Chapter Eight, <i>FAA's Preferred Alternative</i>. See the Response to Comment 8.3 for a summary of the recommended mitigation of noise impacts.</p> <p>Broward County provided the FAA with proposed noise mitigation principals that the County intends to use in updating its 14 CFR Part 150 Noise Compatibility Study for FLL. These noise mitigation principles, which the FAA considered in the development of the EIS mitigation, are similar to the mitigation measures contained in the current 1995 FAA Record of Approval for the County's 1994 14 CFR <i>Part 150 Program Update</i>. As of the publication of this EIS (mid-2008), the analysis and preparation of the airport's 14CFR Part 150 Study Update continues.</p> <p>The Broward County FAR Part 150 program could address the residual mitigation issues of noise impacts that are not a direct result of the FAA's Preferred Alternative. This would be a decision of Broward County.</p>

<p><b>8.16</b> The noise modeling in the Draft EIS does not take into account any of the PBN (Performance-Based Navigation) procedures.</p>	<p>The noise modeling includes an analysis of radar data (FLL Airport Noise and Operations Monitoring System (ANOMS)) to determine track locations and flight profiles. The track locations and profiles used in the Integrated Noise Model accurately assess all procedures currently in use at the airport, including Performance-Based Navigation (PBN) procedures.</p>
<p><b>8.20</b> It is recommended that FAA show noise contours with 'total noise levels' not just the noise generated by aircraft.</p>	<p>The EIS follows the methodologies and significance criteria included in FAA Order 1050.1E for the assessment of aircraft noise impacts (see Appendix H, <i>Noise</i>, for a summary of the requirements of FAA Order 1050.1E).</p> <p>The noise contours are provided in Day-Night Average Sound Level (DNL), which is a metric that reports annual average aircraft noise only.</p>
<p><b>8.24</b> The 2005 baseline noise contour is based exclusively on modeling and does not include actual noise data from the airport monitoring stations. The noise monitoring results shown in the Draft EIS are only for 1 hour on a single day in October 2004.</p>	<p>The EIS follows the methodologies and significance criteria included in FAA Order 1050.1E for the assessment of aircraft noise impacts (see Appendix H, <i>Noise</i>, for a summary of the requirements of FAA Order 1050.1E). Order 1050.1E requires the use of the Integrated Noise Model (INM) to create noise exposure contours. A noise measurement program was conducted the week of October 4, 2004 and included measurements from 33 sites. Data from the noise measurements was used to verify the INM input data.</p>
<p><b>8.29</b> A Part 161 Study would be necessary to approve the runway use restrictions on 9R/27L (see pages 6.C.1-24 and 25 of the Draft EIS).</p>	<p>A 14 CFR Part 161 Study would not be necessary to implement the runway use procedures referred to in this comment. However, the Airport Sponsor would have to conduct a 14 CFR Part 150 Study, which the FAA would need to review and approve.</p>
<p><b>8.35</b> The Draft EIS fails to assess the impacts, including secondary and induced impacts, of the airport expansion on the Town of Davie as a whole, not just isolated mapped areas.</p>	<p>Per FAA Order 1050.1E, <i>Environmental Impacts: Policies and Procedures</i>, major development proposals often involve the potential for induced or secondary impacts on surrounding communities. When such potential exists, the analysis shall describe, in general terms, such factors. Examples include: shifts in patterns of population movement and growth; public service demands; and changes in business and economic activity to the extent influenced by the airport development. Induced impacts will normally not be significant except where there</p>

	<p>are also significant impacts in other categories, especially noise, land use, or direct social impacts.</p> <p>See Chapter Six, Section 6.H.2, <i>Secondary (Induced) Impacts</i>, which discusses these impacts. The EIS analysis determined that no significant impacts would occur to the surface transportation system or public services with any of the runway alternatives. Because no acquisition is required for the development of any alternatives, no shift in patterns of population movement and growth would occur.</p>
<p><b>8.52</b> If the runway use assumptions were to reverse the approaches from the west versus the east, the exposure patterns would dramatically change, and those homes to the west of the airport would be substantially more impacted than the report depicts.</p>	<p>The use of a runway is based largely on wind direction and velocity. The primary flow at FLL is east flow due to the prevailing east winds (depart to the east and arrive from the west to the east). The primary wind direction is not expected to change in the future therefore, the future runway alternatives were modeled with that assumption.</p>
<p><b>8.53</b> What is FAA going to do for the community of Forest Ridge who is categorized in the 55 DNL?</p>	<p>FAA Order 1050.1E defines a residential housing unit to be significantly impacted by noise if the home is located in the 65+ Day-Night Average Sound Level (DNL) noise contour or if there would be an increase of 1.5 decibels (dB) or more in the 65 DNL when compared to the No Action alternative for the same timeframe. Below 65 DNL, residential units are not considered significantly impacted and therefore, no mitigation would be required.</p> <p>See the Response to Comment 8.50.</p> <p>Mitigation for those significantly impacted by noise is provided in the final EIS Chapter Eight, <i>FAA's Preferred Alternative</i>.</p>
<p><b>8.54</b> Mitigation in the FLL Part 150 Study is only addressing mitigation for 65 DNL and up. What about the 40-60 DNL, which is also greatly affected, but is not being considered for noise abatement and mitigation?</p>	<p>See the Response to Comment 8.53. The FAA is not able to comment on any proposed measures in the FLL Part 150 Study because it has not been submitted to FAA for review.</p>
<p><b>8.55</b> A north or south parallel runway will not decrease the amount of homes affected by the runway expansion because the studies only consider 65 DNL and up. Many homes west of the airport,</p>	<p>See the Response to Comment 8.53. As discussed in Chapter Six, Section 6.B.4, <i>Conclusion</i>, implementation of any of the alternatives would satisfy all Federal and state air quality regulations and guidelines, and would not cause significant adverse air quality impacts in Broward County.</p>

<p>in Davie, would have an increase in noise and air pollution if a third runway were added.</p>	
<p><b>8.58</b> John U. Lloyd State Park has not been taken into consideration and the effects the expansion will have on it.</p>	<p>John U. Lloyd State Park was included in the affected environment in Chapter Five, Section 5.D.2, <i>Section 4(f) Properties [Recodified as 49 U.S.C 303(c)]</i> and <i>Section 6(f) Land and Water Conservation Fund Act</i>.</p> <p>For a discussion of the potential impacts to public resources, including parks, see Chapter Six, Section 6.C.1, <i>Airport Noise</i>, and Section 6.D.2, <i>Section 4(f) Properties [Recodified as 49 U.S.C 303(c)]</i> and <i>Section 6(f) Land and Water Conservation Fund Act</i>.</p> <p>Parks and outdoor sports facilities are considered compatible with noise levels of up to 75 Day-Night Average Sound Level (DNL). John U. Lloyd State Park is not located within a 75 DNL noise contour for any of the alternatives and is therefore considered to be compatible with FAA land use compatibility guidelines.</p> <p>In accordance with FAA Order 1050.1E paragraph 14.5g, the FAA will consider the use of appropriate supplemental noise analysis regarding national parks, national wildlife refuges, and historic sites where a quiet setting is a generally recognized purpose and attribute. A quiet setting is not a generally recognized purpose or attribute of John U. Lloyd Park.</p> <p>See the Draft EIS, Appendix H, <i>Noise</i>, Table H-1, <i>Land Use Compatibility Guidelines—FAR Part 150 Yearly Day-Night Average Sound Level (DNL) in Decibels</i>.</p>
<p><b>8.80</b> The Draft EIS states that there will be no impacts to parks, while Exhibit 6.C charts show otherwise. We believe that the 60 and 65 decibel noise contours in Westlake Park will significantly impact the quality of life of Broward families who use the park for recreation and relaxation.</p>	<p>Westlake Park was included in the affected environment in Chapter Five, Section 5.D.2, <i>Section 4(f) Properties [Recodified as 49 U.S.C 303(c)]</i> and <i>Section 6(f) Land and Water Conservation Fund</i>. For a discussion of the potential impacts to public resources including parks, see Chapter Six, Section 6.C.1, <i>Airport Noise</i>, and Section 6.D.2, <i>Section 4(f) Properties [Recodified as 49 U.S.C 303(c)]</i> and <i>Section 6(f) Land and Water Conservation Fund</i>.</p> <p>Parks and outdoor sports facilities are considered compatible with noise levels of up to 75 Day-Night Average Sound Level (DNL).</p>

	<p>Westlake Park is not located within a 75 DNL noise contour for any of the alternatives and is therefore considered to be compatible with the FAA land use compatibility guidelines. See Appendix H, <i>Noise</i>, Table H-1, <i>Land Use Compatibility Guidelines—FAR Part 150 Yearly Day-Night Average Sound Level (DNL) in Decibels</i>.</p> <p>In accordance with FAA Order 1050.1E, Appendix A, Section 14.5, <i>Noise</i>, paragraph 14.5g, the FAA will consider the use of appropriate supplemental noise analysis regarding national parks, national wildlife refuges, and historic sites where a quiet setting is a generally recognized purpose and attribute. A quiet setting is not a generally recognized purpose or attribute of West Lake Park.</p> <p>While there are impacts to the West Lake Park, they are not considered to be significant for purposes of the National Environmental Policy Act (NEPA).</p>
<p><b>9.0</b> The Draft EIS contains an inadequate analysis of impacts to local parks, because it applies the wrong criteria for assessing constructive use and does not properly apply the land use compatibility guidelines.</p>	<p>See Chapter Six, Section 6.D.2, <i>Section 4(f) Properties [Recodified as 49 U.S.C 303(c)] and Section 6(f) Land and Water Conservation Fund Act</i>, which explains that a constructive use of 4(f) property occurs when adverse indirect impacts would substantially impair the use of the property. The FAA relies upon the 14 CFR Part 150 land use compatibility guidelines in determining whether project-related noise impacts would substantially impair a Section 4(f) resource, and therefore constitute a constructive use. A detailed analysis of each park within the Study Area was conducted in relationship to the 60+ Day-Night Average Sound Level (DNL) noise contours for each alternative. It was determined that no significant (direct or constructive use) impacts to any Section 4(f) resources would result from any of the alternatives.</p>
<p><b>10.1</b> A detailed wetland mitigation plan, addressing mitigation alternatives, should be included in the Final EIS. (EPA believes the mitigation plan should be reviewed using the Joint State/Federal Mitigation Bank Review Team (MBRT) process. To date, the MBRT has not been requested to review the West</p>	<p>In accordance with FAA Order 1050.1E, Section 18, <i>Wetlands</i>, the EIS must contain a description of proposed mitigation. Conceptual mitigation is developed in consultation with permitting agencies having an interest in the affected wetland. A detailed mitigation plan will be prepared during the permitting process.</p>

<p>Lake Park Mitigation Plan. In addition, the West Lake Park Mitigation Site contains numerous land holdings that are in private ownership which may make this site unacceptable for mitigation purposes. The Final EIS should therefore address mitigation alternatives in addition to what was proposed in the Draft EIS.)</p>	<p>A Conceptual Wetland Mitigation Plan for the FAA's Preferred Alternative is provided in Appendix M.3, <i>Conceptual Wetland Mitigation Plan</i>, and discussed in Chapter Eight, <i>FAA's Preferred Alternative</i>. The Airport Sponsor has proposed to mitigate for wetland impacts by using mitigation credits established at West Lake Park in U.S. Army Corps of Engineers Permit Number SAJ -2002-00072 (IP-ALO) and the Southwest Florida Water Management District Individual Resource Permit Number 06-04016-P, or through a combination of wetland mitigation credits available at existing Broward County mitigation sites.</p> <p>The U.S. Environmental Protection Agency should contact Broward County for any requested review of the West Lake Park Mitigation Plan by the Joint State/Federal Mitigation Bank Review Team (MBRT).</p>
<p><b>10.21</b> Are there any quantifiable data on how much more water a larger FLL airport will consume? South Florida is currently under water restrictions - is there enough water resources for the airport expansion? How can we promote development when we cannot even sustain the present population's water requirements?</p>	<p>See EIS Chapter Five, Section 5.E.1.4.3, <i>Water Supply</i>, which provides a summary of the water resources available to supply potable water to FLL under existing conditions.</p> <p>Chapter Six, Section 6.E.1.4.3, <i>Water Supply</i>, has been revised to provide a brief description of the water resources expected to be available to meet the forecast potable water demand at FLL for 2012. As noted in this section, Broward County's future water supply requirements have been addressed by the Florida State legislature through the development of the <i>10-Year Water Supply Facilities Work Plan</i>, as mandated by Chapter 163, Florida Statutes. This plan was devised to increase coordination for future land use and water supply planning in Florida.</p>
<p><b>11.0</b> The Draft EIS does not support its conclusions with sufficient information to warrant there will be no adverse effects on listed threatened and endangered species.</p>	<p>See Chapter Six, Section 6.F.1, <i>Fish, Wildlife, and Plants</i>.</p> <p>Field observations and literature searches were conducted to assess the potential occurrence of Federal and state-listed species as well as Critical Habitat within the Detailed Study Area and the lists that were generated received concurrence from all state and Federal wildlife agencies. Potential impacts to listed species were assessed for all of the alternatives. This information was disclosed in the Draft EIS.</p> <p>Based on the EIS assessment, FAA determined there will be no adverse effects to listed</p>

	<p>threatened and endangered species. The U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Services (NMFS) have concurred with this determination. (See Appendix M, <i>Biological Resources</i>, to review a copy of agency letters.)</p>
<p><b>11.4</b> The U.S. Fish &amp; Wildlife Service (USFWS) believes “the project sites are located within the core foraging area (CFA) (within 18.6 miles) of an active breeding colonies of the endangered wood stork (<i>Mycteria Americana</i>) (located approximately 14 miles northeast of the project site). The Service believes the loss of wetlands within a CFA may reduce foraging opportunities for wood storks. To minimize adverse effects to the wood stork, the Service’s Draft Supplemental Habitat Management Guidelines for the Wood Stork in the South Florida Ecological Services Consultation Area (Service 2002) recommends the applicant replace wetlands lost due to the action. The compensation plan should include a temporal lag factor, if necessary, to ensure wetlands approved as compensation adequately replace the wetland functions lost due to the project. Moreover wetlands offered as compensation should be of the same hydroperiod, and located within the CFA of the affected wood stork colony. In some cases, the Service accepts wetlands compensation located outside the CFA of the affected woodstork nesting colony. Specifically, wetland credits purchased from a “Service Approved” mitigation bank located outside the CFA would be acceptable to the Service, provided the impacted wetlands occur within the permitted service area of the bank.”</p>	<p>See Chapter Six, Section 6.F.1.1.3, <i>Birds</i>. Also see the Response to Comment 11.3.</p> <p>The closest wood stork nesting area, as determined by the U.S Fish and Wildlife Service (USFWS), is located approximately 14 miles northwest of FLL. The limits of disturbance for the runway development alternatives lie within the Core Foraging Area (CFA) of this wood stork nesting colony, and therefore, could potentially reduce foraging opportunities for the wood stork.</p> <p>The FAA has reviewed the USFWS’ <i>Draft Supplemental Habitat Management Guidelines for the Wood Stork in the South Florida Ecological Service’s Consultation Area</i> and would ensure that the applicable components of this plan are considered during project permitting. The USFWS’ approved wood stork methodology would be considered during the permitting phase of the project to ensure adequate mitigation is achieved for any potential unavoidable impacts to wood stork foraging habitat that could result from the FAA’s Preferred Alternative.</p> <p>A conceptual mitigation plan for the FAA’s Preferred Alternative is discussed in Chapter Eight, <i>FAA’s Preferred Alternative</i>.</p>
<p><b>11.6</b> The Airport expansion project will have significant noise and sight impacts to areas where wildlife values are important, notably</p>	<p>Impacts to wildlife including listed threatened and endangered species are disclosed in the Final EIS in Chapter 6, Section 6.F.1, <i>Fish, Wildlife, and Plants</i>. The FAA determined that</p>

	<p>directly east of the Airport, and a full analysis of those impacts is imperative to determining whether any of the action alternatives are acceptable.</p>	<p>there was no significant affect to any protected animal or plant species. The U.S Fish and Wildlife Service and the National Marine Fisheries Service have concurred with this determination.</p>
<p><b>11.8</b> The Draft EIS states that none of the alternatives are likely to adversely affect endangered species. However, there is a petition to list the Smooth-billed Ani as an endangered species. The Final EIS needs to take this into account and provide information regarding proposed impacts upon this species.</p>	<p><i>See Chapter Six, Section F.1, Fish, Wildlife, and Plants.</i></p> <p>Both field observations and literature searches were conducted to assess the potential occurrence of Federal and state-listed species as well as Critical Habitat within the Detailed Study Area and the lists that were generated received concurrence from all state and Federal wildlife agencies. The Smooth-Billed Ani (<i>Crotophaga ani</i>) has not been formally listed by the U.S Fish and Wildlife Service or the Florida Fish and Wildlife Conservation Commission (FFWCC) as an endangered species.</p>	
<p><b>13.0</b> The socioeconomic impact analysis needs to assess the economic effects from the operation of an expanded airport other than the value of passenger time due to delay and the effects of spending during runway construction.</p>	<p>The socioeconomic impact analysis was prepared in accordance with FAA regulations. <i>See Chapter Six, Section 6.H.1, Socioeconomic Impacts; Environmental Justice; and Children &amp; Environmental Health and Safety Risks, and Chapter Six, Section 6.H.2, Secondary (Induced) Impacts, which includes a regional economic impact analysis of construction activities associated with the runway development alternatives.</i></p> <p>The FAA has analyzed those economic impacts that will directly or indirectly result from the expansion of the airport to the extent practicable. The determination of broader overall regional economic impacts that could result from the expansion of the airport is beyond the scope of this EIS.</p> <p>As discussed in Chapter Six, Section 6.H.2.2, <i>Economic Impacts</i>, the analysis of economic impacts includes a determination of changes in business and economic activity to the extent influenced by the proposed airport development. None of the proposed alternatives induce demand at FLL as compared to the No Action. Therefore, for this EIS, the impact analysis was limited to construction activities and expenditures.</p>	
<p><b>13.1</b> To place the Environmental Justice demographics data into perspective, the overall percentages for counties adjacent to Broward as well as the state of</p>	<p>FAA Order 1050.1E, <i>Environmental Impacts: Policies and Procedures</i>, provides guidance on the geographical area for analysis.</p>	

<p>Florida should be provided in the Final EIS.</p>	<p>Chapter Five, Section 5.H.1.2, <i>Environmental Justice</i>, provides the methodology on how this analysis was conducted. The appropriate unit of geographic analysis may be a governmental jurisdiction, a neighborhood, a census tract, or other similar unit.</p> <p>The proposed airport expansion construction areas and areas that could be subject to mitigation are located in the EIS Study Area which is located in Broward County. The FAA has determined that Broward County is the appropriate unit of geographic area for this analysis.</p>
<p><b>13.19</b> - What impact will the extension have on the land and home evaluation surrounding the airport? - How much will the land and home evaluation surrounding the airport devalue due to the expansion? - If the land and homes are devalued will our assessment and taxes be lowered?</p>	<p>The noise impacts and proposed mitigation for surrounding residential land use for the Preferred Alternative are discussed in Chapter Eight, <i>FAA's Preferred Alternative</i>. Property assessment and local taxes are the responsibility of Broward County.</p>
<p><b>13.25</b> There is no plan for protection property taxes via portability should homes be taken or residents displaced.</p>	<p>The noise impacts and proposed mitigation for surrounding residential land use for the Preferred Alternative are discussed in Chapter Eight, <i>FAA's Preferred Alternative</i>. Property assessment and local taxes are the responsibility of Broward County.</p>
<p><b>14.1</b> A cumulative impacts section should attempt to demonstrate how the proposed project, together with other local existing and reasonably foreseeable projects, would cumulative affect common resources. In the Final EIS prepare a tabular summary of the common impacts/resources from the proposed FLL expansion and qualitatively or quantitatively show the cumulative affect.</p>	<p>See Chapter Seven, <i>Cumulative Impacts</i> and Table 7.2, <i>Summary of Environmental Cumulative Impacts</i>. The information provided in Chapter Seven has been revised since publication of the Draft EIS in March 2007.</p>
<p><b>14.4</b> The cumulative impacts analysis is deficient for wetland, water quality, threatened and endangered species, and marine ecosystem impacts in eastern Broward County. The Airport expansion calls for filling some of the few wetlands that remain, dredging additional estuarine areas, and impacting local parks.</p>	<p>See Chapter Seven, <i>Cumulative Impacts</i>, and Table 7.2, <i>Summary of Environmental Cumulative Impacts</i>.</p> <p><u>Wetlands</u>: Table 7.1, <i>Summary Analysis of Cumulative Impacts to Wetlands and EFH</i>, in Chapter Seven summarizes the cumulative impact analyses to wetlands and Essential Fish Habitat (EFH) from past, present, and reasonably foreseeable future projects in the area around FLL. The cumulative wetland</p>

impacts would not be considered significant because the extent of wetland impacts that would result from implementation of the proposed action, combined with planned and/or other proposed projects in the area of FLL, would be mitigated in accordance with all applicable Federal, state, and local regulations.

The avoidance and minimization of wetlands and conceptual mitigation proposed to offset unavoidable wetland impacts for all of the runway development alternatives is discussed in Section 6.J, *Conceptual Mitigation Measures Considered in the Draft EIS*. Potential further avoidance and minimization opportunities related to wetland impacts would be identified during permitting for the FAA's Preferred Alternative. See Appendix M, *Biological Resources*, to review the proposed conceptual wetland mitigation plan for potential wetland impacts that would result from implementation of the Proposed Action.

Water Quality: The EIS water quality analysis (see Section 6.E.1, *Water Quality*) estimated increases in annual surface water quality pollutant loads discharged to receiving waterbodies under each of the runway development alternatives. The cumulative impact analysis indicates that direct or cumulative impacts to surface water or groundwater quality resulting from the runway development alternatives would be negligible. It would be mandatory for all projects to comply with existing and future water quality permit requirements. Also, the FLL Best Management Practices (BMPs) would ensure that concentrations of pollutants of concern would not exceed regulatory criteria. Based on the low background concentrations of the pollutants of concern, coupled with the relatively small volume of runoff to be

generated by an improved airfield, impacts to the quality surrounding waterbodies would be considered unlikely.

Threatened and Endangered Species and Marine Ecosystems: The FAA has determined there would be no significant impacts to threatened and endangered species or Essential Fish Habitat (EFH) resulting from the implementation of any of the runway

	<p>development alternatives, based on project design; the minimal short-term and permanent impacts associated with the installation of light tower foundations, utility cables, and access roads required for the proposed runway approach light configurations; and the mitigation proposed for unavoidable wetland impacts. (See Section 6.F.1, <i>Fish, Wildlife, and Plants.</i>)</p> <p>Past and current development in Broward County has resulted in fragmentation of natural habitats, and have limited the amount and locations of suitable habitat available to support plant and animal species. These impacts are not the result of any one project, yet cumulatively they have been significant to natural ecosystems. As the population of Broward County has grown in the last 20 years, the construction of major transportation thoroughfares and the extensive urbanization of the County have all contributed to these cumulative impacts. However, based on the anticipated impacts that would be associated with any of the proposed runway development alternatives, and mitigation for unavoidable impacts, the implementation of any of the runway development alternatives would make only a negligible contribution to these cumulative impacts.</p> <p><u>Parks:</u> The environmental categories where no significant environmental impacts would occur due to the proposed runway development alternatives are not included in this discussion of cumulative impacts nor are these categories listed in Table 7.2, <i>Summary of Cumulative Environmental Impacts</i>. These environmental categories include Section 4(f) Properties [Recodified as 49 U.S.C. 303(c)] and Section 6(f) Properties, which includes local parks. See Chapter Six, Section 6.D.2, <i>Section 4(f) Properties [recodified as 49 U.S.C. 303(c)] and Section 6(f) Land and Water Conservation Fund Act.</i></p>
<p><b>16.1</b> The EIS eliminated the analysis of alternatives that would reduce delay without expanding the airport. The benefit-cost analysis then did not consider the most cost-beneficial alternatives.</p>	<p>A full range of alternatives, including no action, off-site alternatives, and on-site alternatives have been fully considered in Chapter Four, <i>Alternatives</i>, of the EIS. Only those alternatives that satisfied the purpose and need were carried forward for additional analysis, including a net benefits analysis.</p>

<p><b>16.2</b> The EIS should state how much money the contractors and airlines will gain as a result of the action alternatives. Such analysis would likely show that Broward County taxpayers are being asked to subsidize for-profit businesses through this project.</p>	<p>The EIS indicates the net benefit of each alternative in terms of its operational benefit. The costs represent the estimated amount of money required to construct each alternative following a competitive bid process. The benefits represent estimated delay savings resulting from action alternatives and are presented as the dollar amount equivalent value of savings experienced by airport users.</p> <p>The EIS makes no assumption of any subsidy dollars provided to any for-profit business, including airline operators.</p>
<p><b>16.3</b> Appendix F, Page F-3, Table F-2, Small aircraft. Explain the assumption that the number of small aircraft will increase with static airfield capacity and increasing overall passenger demand. Up gauging would be expected.</p>	<p>The following describes the forecast aircraft fleet mix classifications:</p> <ul style="list-style-type: none"> <li>• "Heavy" aircraft are above 255,000 pounds and include aircraft such as the Boeing 767 and Airbus 300</li> <li>• The Boeing 757 is a "Heavy" aircraft according to weight but is listed separately given its predominance.</li> <li>• "Large" aircraft are between 41,000 and 255,000 pounds and include the Boeing 737, Airbus 319/320, MD-80/90. Large aircraft are mostly jet aircraft, but they also include some propeller aircraft.</li> <li>• "Small" aircraft are less than 41,000 pounds and include most small turboprops and small general aviation aircraft.</li> </ul> <p>According to the EIS Appendix F, <i>Net Benefits Analysis</i>, Table F-2, <i>Operations by Aircraft Classifications</i>, most of the growth at FLL will be in large aircraft. Small aircraft will slightly decrease by 1.0 percent annually and its share of total operations will drop significantly through 2020.</p> <p>The 757 category of aircraft will progressively be replaced by newer large equipment and heavy aircraft; it is forecast to grow from 31 operations in 2004 to 52 operations in 2020, a 3.3 percent average compound annual growth rate over the 14-year period.</p>
<p><b>18.16</b> How do you mitigate the impacts on outdoor living?</p>	<p>The FAA has no regulations or guidelines to mitigate outdoor residential living areas.</p>
<p><b>22.0</b> General Draft EIS Comments</p>	<p>General statements made regarding the contents of the Draft EIS.</p>
<p><b>22.1</b> Text has typographical error(s).</p>	<p>Typographical error(s) corrected.</p>
<p><b>22.4</b> The prior comments and submissions made to the FAA regarding the expansion of the</p>	<p>The FAA has responded to all comments received on the March 2007 Draft EIS as required by 40 CFR 1503.4. The responses</p>

<p>Airport are 'incorporated by reference' with this comment form.</p>	<p>are contained in Appendix P, <i>Response to Comments</i>, of this EIS.</p> <p>If the commenter is referring to comments submitted on prior analysis of proposed expansion at FLL, this EIS document is the result of FAA <u>restarting</u> the EIS process in 2005.</p> <p>This EIS is not an update or a continuation of prior analysis.</p>
<p><b>22.6</b> I am concerned about the proposed airport expansion. How will it affect our Dania Beach neighborhood, noise, pollution, traffic, etc. way of life?</p>	<p>Potential impacts due to the proposed airport expansion are found in Chapter Six, <i>Environmental Consequences</i>.</p> <p>Conceptual mitigation was discussed in the Draft EIS per FAA Order 1050.1E, <i>Environmental Impacts: Policies and Procedures</i>, Paragraph 506 h., <i>Mitigation</i>. The conceptual mitigation plan has been refined for FAA's Preferred Alternative. See the EIS Chapter Eight, <i>FAA's Preferred Alternative</i>.</p>
<p><b>22.7</b> How does the Sponsor plan to pay for the treatment [mitigation], given that the FAA will not provide funding for treatment [mitigation] within the DNL 60 dB noise contour?</p>	<p>Section 189 of the Vision 100 — Century of Aviation Reauthorization Act amended the Aviation Safety and Noise Abatement Act by adding a new subsection b(4). This subsection prohibits FAA from approving noise compatibility program measures that require the expenditure of Airport Improvement Program (AIP) funds to mitigate noise of less than 65 Day-Night Average Sound Level (DNL). 49 USC 47504b(4).</p> <p>In general, mitigation funding for noise impacts consists of a combination of Federal, state, and local funds. Should Broward County decide to provided mitigation for areas outside of the FAA-identified mitigation areas, then Broward County would be responsible for funding such programs.</p>
<p><b>22.15</b> I request that your agency scrutinize the FLL airport expansion and exercise your authority to insure that the tax payers are receiving the best expansion design at the lowest total cost.</p>	<p>The FAA, as a Federal agency, is responsible for complying with the National Environmental Policy Act (NEPA). The potential environmental impacts that could result with the implementation of a proposed Federal action and all of the alternatives have been disclosed in this EIS.</p> <p>The FAA does not initiate runway development alternatives. However, the FAA may consider the Airport Sponsor's preferences in evaluating alternatives that would meet the need for the National Airspace System and the FAA's environmental responsibilities.</p>

	<p>Broward County has the responsibility to develop a plan to fund airport development. The Airport Sponsor intends to apply for Airport Improvement Program (AIP) funding. The FAA Record of Decision will include the environmental determination necessary to establish eligibility for approval for grants of Federal funding.</p>
<p><b>23.0</b> The Draft EIS fails to follow substantive procedural and legal requirements, including those required by NEPA, CEQ and the FAA's own regulations</p>	<p>This comment is a legal conclusion to which the FAA believes a response is not necessary. The commenter does not provide specific information about how/why the analysis in the Draft EIS is insufficient. <i>See the EIS Executive Summary, Section ES.1.2, The Role of the Federal Aviation Administration.</i></p>
<p><b>23.20</b> The burden of proof should be on the FAA to substantially prove that runway expansion is absolutely necessary - and that benefits outweigh the costs. We believe the FAA has failed that test.</p>	<p>The FAA disagrees with the commenter's statement that the FAA has failed to adequately document the purpose and need for the proposed runway expansion. <i>See the EIS Chapter Three, Section 3.3.1.2, Existing Airfield Capacity, and Appendix F, Net Benefits Analysis.</i></p>
<p><b>23.21</b> Why does the FAA not select Alternative C1 as the Preferred Alternative because it meets purpose and need, has the least impact, and is the most cost effective?</p>	<p>The FAA's Preferred Alternative is identified in Chapter Eight of the EIS including the agency's reasons for selection. According to FAA Order 5050.4B Paragraph 1007e.(7), the approving FAA official selects the preferred alternative after reviewing each alternative's ability to fulfill the agency's mission while considering their economic and environmental impacts, and technical factors.</p> <p>The FAA's selection of a preferred alternative may, where appropriate, take account of and accord substantial deference to, the Airport Sponsor's preferences. The FAA has considered the degree to which the alternatives satisfy the purpose and need for the project and environmental considerations, as well as the Airport Sponsor's goals and objectives in selecting a preferred alternative. <i>See Chapter Three, Section 3.1, Sponsor's Identified Goals and Objectives.</i></p> <p>The Airport Sponsor expressed significant concern with regard to alternatives that include the development of a north runway. Alternative C1 is the development of a new runway north and parallel to existing Runway 9L/27R. The development of a new runway on the north airfield would result in substantial on-airport tenant relocations, could limit future tenant expansion capabilities, and could limit the potential for future on-airport development within the existing airport envelope.</p>

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	<p>The FAA considered the Airport Sponsor's concerns in selecting the FAA's Preferred Alternative identified in the Final EIS as Alternative B1b.</p>
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**Responses from the Final EIS Appendix R**

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**LC109.3** Emergency operations are limited in their approach due to the embankment.

Closure of the crosswind runway, several times this summer I've witnessed aircraft take radical maneuvers due to severe weather in the normal approach west of the airport. I'm not a pilot but I do know options are a good thing.

All runway development alternatives conform to FAA regulations and safety standards. Emergency vehicles are maintained at the airport to respond to any on-airport emergency situation and would be able to access all areas of the airfield.

The FLL FAA Air Traffic Control Tower is responsible for the safe management of air traffic during severe weather.

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**LC110.1** The City is concerned about deficiencies in Appendix F to the March 2007 DEIS titled Net Benefits Analysis. Presumably, Appendix F of the DEIS was the airport sponsor's attempt to meet its burden of proving that the proposed project's benefits exceed its costs. The analysis in Appendix F is inadequate and incomplete according to FAA Airport Benefit Cost Analysis Guidance published by the FAA December 15, 1999.

The net benefit analysis in Appendix F is not a Benefit Cost Analysis (BCA) as defined in FAA policy guidance. The net benefit analysis is intended to demonstrate whether an airfield alternative meets established industry standards for financial feasibility, thus providing a financial indication that an alternative is reasonable and prudent.

In general, the benefits accrued from improving runway capacity at FLL can be measured in terms of reduced arrival and departure flight delays. Because the alternatives differ in terms of the number, location, and length of runway improvements, the benefit of each alternative is not equal. The Net Benefits Analysis calculated the operational benefit of each alternative. (See Appendix F, Section F.1, *Introduction*.)

The Airport Sponsor will be required to complete a BCA in accordance with *FAA Policy and Final Guidance Regarding Benefit Cost Analysis (BCA) on Airport Capacity Projects for FAA Decisions on Airport Improvement Programs (AIP) Discretionary Grants and Letters of Intent (LOI)*, published by the FAA December 15, 1999, in order to submit an application for Federal funding.

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