

**Ann Arbor Municipal Airport (ARB), Ann Arbor Michigan - Draft Environmental Assessment FAA Combined Comment Matrix**  
**--May 2016--**

<b>Comment Number</b>	<b>Page Number</b>	<b>Section Number</b>	<b>Paragraph</b>	<b>FAA Comment</b>	<b>MDOT Comment Resolution</b>
1	1	title page	n/a	Need statement that "This Environmental Assessment becomes a <i>Federal</i> document..." before the FAA signature block, per FAA Order 1050.1F paragraph 6-2.1(a).	
2	1	title page	n/a	Federal signature block should read "Responsible FAA Official"	
3	9, 10 & 12	1.3 & 1.4	all	The Intro and background sections are discussing the State Standards. What are the Federal Requirements, in addition to the State reqmts? Critical Aircraft (1.5.1) & use of runway, Aircraft Activity (1.5.2) and Characteristics /Recommendations (1.5.3) all need to be in the background section before purpose and need section. Info in P & N needs to be in the background section.	
4	10	1.3	6	Need a discussion of the SBGP so that the reader is better able to understand the division of proposed actions between state and Federal	
5	10	1.3	6	The paragraph is implying that the ALP is "fully approved".. If this were the case, it would have been unconditionally approved rather than conditionally approved. - Remove, "...it is in fact a fully approved ALP" - Add "conditional" to the last sentence, "...prior to AERO signing the conditional approval letter."	
6	12	1.3	2	Please explain why the comments from the ADO were not addressed.	
7	12	1.4	3	Is the purpose to meet the "FAA design objectives" or to accommodate the runway length needed by critical aircraft? This is implying that FAA is forcing the runway extension. Recommend changing the wording to clarify that aircraft are currently impacted by the shorter runway length. Is "increasing the line of sight for ATCT personnel" (presumably to improve a hotspot) more of a Need than a purpose?	
8	12	1.4	4	States that the Need is to allow aircraft to operate at "Optimum Capabilities", should this include why there's a need to operate at "optimum capabilities"? Where are aircraft going, how often is the runway length affecting users?	

9	12	1.4	3	Another sentence should be added after the first sentence of the paragraph to explain that the Purpose includes lengthening and shifting the runway. The second sentence is a Need and should be placed in the following paragraph.	
10	12	1.4	all	Use of the term "Safely" implies the airport is not safe currently.	
11	12	1.4	all	The purpose and needs statement should be complete and concise. This would include stating the problem that is looking to be addressed. A statement of overall safe and efficient and usable is a general statement and should be tightened up to reflect the discussion that follows. It is confusing on why the line of sight issue is singled out in the statement. Consider revising this statement.	
12	12	1.4	4	Clarify why the statement regarding aircraft says majority and not "all" aircraft?	
13	13	1.5.1	2	Clarify whether the critical aircraft is properly grouped; is it okay to use the category B-II Small Aircraft? Cross reference B-II Large in the document.	
14	13	1.5.1	5	This paragraph is general in nature. A runway of 4,300 feet would allow without load restrictions... why 4,300's, why not 4,500, 5,000, or 10,000. The paragraph should instead define the runway length needs of the aircraft regularly using the runway, including haul lengths and loads rather than suddenly put out that 4,300 ft. would satisfy it.	
15	13	1.5.1	6	The example seems to be an extreme case, how often does this user use the airport and what type of B-II aircraft is it? Why do they base at ARB instead of another close airport if they cannot use the aircraft to it's max capability above 40 degree F?	
16	14	1.5.1	1	"Part 135 operators must reduce the useable length of the runway by anywhere from 20-35% based on runway conditions" has this quote been verified through citation to the actual Part 135?	
17	14	1.5.2	2	"Also, approximately 67% of the IFR flight plan records examined were between ARB and out-of-state locations." It's not clear how far of a distance these itinerant operations are going.. Are they all to surrounding States or are the haul length further?	
18	14	1.5.2	2	Second half of paragraph: Why are NetJets and AvFuel further called out in the two final sentences? What about the other six companies?	
19	16	1.5.3	FAA	Clarify why 4,200' (AC 150/5325-4B) would not support the Purpose and Need (P&N) as opposed to the requested 4,300.'	
20	16	1.5.3	FAA	Why isn't 4,200' listed as an alternative?	

21	16	1.5.3	3	"The AERO recommendation of 4,300 feet is a statewide standard..." Recommend including how AERO developed their standard. What is this length based on, is it a random length they chose or does it meet the requirements identified in the P&N (optimum capabilities of the critical aircraft at ARB)?	
22	16	1.5.3	4	Clarify whether the category B-II Small Aircraft requires a runway length of up to 4,300, or do the larger B-II airplanes require this length? The Small B-II may be on the lower end of the spectrum?	
23	16/17	1.5.4	8 (last)/ several	Clarify why User-Survey Reports were heavily relied upon? Why not TAF and Tower Counts? TAF was very close to accurate, however it is not logical to conclude (quantitative to qualitative) that ops will increase, because TAF may not always support constant increase. (Justify, e.g. is there a new coach that may boost attendance for Michigan games which will increase probability of increased attendance/travel?)	
24	17	1.5.4	4	The paragraph indicates that the TAF is used to project forecasted operations to 2040. Does the airport have a locally developed forecast to compare this to? Does the airport understand how the TAF was developed and if it's really a good indicator of B-II itinerant ops?	
25	17	1.5.4	5	"...it is logical to conclude that operations by B-II category aircraft and larger will also increase beyond the 551 that were documented in 2014." Table 1-1 indicates that the 5-year trend from 2010 to 2014 is a steady or downward trend in B-II ops. Why is it logical to believe B-II ops will increase given the history of ops at the airport? - does the 551 include just B-II aircraft or B-II and larger as indicated in the paragraph? - How many of the 551 ops by B-II aircraft are by the representative King Air 200 or aircraft with 10 or more passenger seats?	
26	17	1.5.4	6	"These numbers have been calculated based on the percentage of actual B-II operations to actual Total Operations..." Why wasn't flight aware and FAA data used to determine actual usage by B-II aircraft over more years? Was FAA or Flight Aware data compared to the Airport User Survey data used for 2007, 2009, and 2014?	
27	20	1.6	first	First sentence should read: "The City of Ann Arbor proposes to extend and shift 160' the existing..."	
28	20	1.6	2	"...as it does not currently meet the FAA design objectives" Recommend that all references to "FAA design objectives" be removed... the purpose should not be to meet FAA design objectives or put the onus on the FAA causing the runway length, but their user need for the longer runway	

29	20	1.6	3	First sentence should read: "The existing runway approach light system pilots use to identify..."	
30	20	1.6	3	After the second sentence, the remainder of the paragraph should read: "Due to difficulty in maintaining the system, the ODALS are currently temporarily out of service. Due to the fact that the Runway 24 end is proposed to be relocated, the FAA is proposing to permanently decommission and remove the ODALS according to an FAA airspace letter signed on May 13, 2015, Airspace Case Number 15-AGL-14NR (Appendix H). A new runway approach lighting system will not be constructed as part of the proposed action."	
31	20	1.6	4	Clarify throughout the document the direction of rw/taxi shifting and extension - either west or southwest	
32	20	1.6	4	The Shift and Extension of the existing runway should be clarified, is the physical pavement going to be shifted and extended or is the pavement just going to be extended and the Runway 24 threshold moved 150 ft. If the remaining 150 ft pavement remains, is it usable? How will the existing taxiway across the threshold be handled (to the southeast)?	
33	20	1.6	5	delete entire paragraph, as this is not the appropriate section for this discussion.	
34	20	1.6	6	Paragraph should read: "Implementation of the Preferred Alternative would meet the Purpose and Need by adequately addressing the needs of the..."	
35	21	1.6	first bullet	To clarify the meaning, please reword this bullet	
36	21	1.6	second bullet	specify that the parallel taxiway is designated Alpha	
37	21	1.6	bullets 1, 2, 3	Clarify that 150' is being removed from the northeast end of the runway and added to the southwest end. Runway is being extended by 795'; please label the taxiway and rw; delineate why it is being extended by 945' if the new runway portion will be 795' once the 150' is newly constructed.	
38	21	1.6	bullets 1, 2, 3 & 4	Clarify whether entire runway is being reconstructed, or just portions to determine impacts.	
39	21	1.6	bullet 5	Reiterate throughout the document direction of the shift/extension	
40	21	1.6	seventh bullet	Should read: "Relocate airport-owned Precision Approach..."	
41	21	1.6	tenth bullet	Should read: "Relocate/reconstruct FAA-owned Runway 6 Runway End Identifier..."	
42	22	1.7.1	after first bullet	add new second bullet: "FAA acceptance of relocated NAVAIDs (REIL)"	
43	22	1.7.1	third bullet	I was unaware that this project would use AIP funds. If this is not the case, reword with the correct funding source or delete	
44	22	1.7.1	3	This bullet needs to be removed. There are no AIP funds being sought or provided for this proposed action.	

45	22	1.8	all	The section labeled, "Other considerations" should be included in the purpose and needs section. These issues kept separate from the statement objectives makes it difficult to have a clear purpose and need statement and to recognize these as part of the project.	
46	22	1.8.1	1	"The proposed shift would enhance operational safety, and possibly prevent a runway incursion, by expanding the view of the hold area and parallel taxiway to ATCT personnel." Therefore, please clarify, does this shift cause other operational issues with the existing Northeasternmost hangar apron view still blocked from ATCT line of sight? How will aircraft taxi to the Southeast hangar section? - Is 150 ft enough of a shift to remove the hot spot?	
47	23	1.8.1	second on page	In response to the first sentence, clarify what type of "more negative impacts" would there be?	
48	23	1.8.1	2	"...than with the runway threshold shift alternative"... is the preferred alternative to shift the threshold only and leave the pavement, or to shift and remove the 150 ft of pavement?	
49	23	1.8.1	3	"...raising the tower in its existing location would very likely result in the tower penetrating the 7:1 transitional surfaces..." Has an airspace study been completed to determine if this is a hazard?	
50	23	1.8.1	4	How old is the ATCT? Is it due for a modernization or rehab that might cause it to be beneficial to move it?	
51	23	1.8.1	4	Delete "disruption of Airport Traffic Control operations"	
52	23	1.8.2	1	"The proposed shift of the Runway 24 threshold would also allow for a clear 34:1 approach slope..." Why are they protecting for a 34:1 approach slope when the minimums for existing approaches are 1 mile? 34:1 is typically required for minimums below 3/4 mile. If the 34:1 doesn't apply, why would this be a "concern"?	
53	23	1.8.2	5	Justify the slope gradient based on page 2 of the AC 150/5325 (10) Effective Runway Gradient	
54	24	1.8.3	1	Regarding 150/5235 4-B, Figures AC 2-1 and 2-2, an engineer from ARPs stated that the charts support the runway being extended to 4,150 when the temperature is higher than 82.5°. But if the sponsor believes the longer runway is necessary please justify.	
55	24	1.8.3	3	Please explain what is meant by a "local objective"	
56	24	1.8.3	3	several comments. How many overruns occurred? This objective should not be labeled as a local. The runway design criteria accounts for RSAs and RPZ for the critical aircraft.	
57	24	1.8.4	1	This section is being viewed as part of the justification for the statement. Commerce can not be of the P/N. Otherwise, other commerce alternatives will have to be included. Suggest that this section be removed.	

58	25	1.9	third bullet	How would the project "enhance operational safety in low-visibility conditions" without installing an ILS? Would providing a 34:1 approach really be enough to make this claim?
59	25	1.9	last bullet	explain "local objective"
60	25	1.9	all	The summary should be moved up and be made part of the P/N statement and renamed objectives. The document to this point uses safely through out. Either remove the language or change to enhanced safety.
61	26	2	1	include the number of alternatives at the beginning of the sentence. Drop the rest of the sentence after "project"
62	26	2.1.1	3	In regards to the second and third sentences of the paragraph: Does the fact that B-II aircraft still land at ARB instead of nearby YIP demonstrate that the restrictions put on those aircraft by the short runway are not significant, otherwise these users would land at YIP instead? For clarity, this should be rebutted in order to strengthen the Purpose and Need
63	26-28	2.1	all	What were the criteria used to dismiss these alternatives. For example, there is no mention of environmental impacts etc. in the purpose and needs statement
64	28	2.2	1	how were these alternatives deemed feasible?
65	29	2.2	3	Build Alt 3 - label the parallel taxiway that will be extended; will a portion of the taxiway or all be demolished and reconstructed? Or new construction to southwest?
66	33	Figure 3.4	map	For clarity please label the taxiway and runway and the lengths, on the same map
67	34	2.3.1	2	The airport is currently safe. This section implies the airport is unsafe.
68	35	2.3.3	1	Line of sight is not listed as an objective. Need to make sure the P/N statement is concise, clearly stated, focus, with justification and objectives. Please provide better clarity/flow when tracking the P/N section.
69	35	2.4	1	Clarify that the preferred ALT 3 is to remove 150' from the east end of the runway, (adding back 150' on the west end) plus the adding the 795' and shifting to the southwest
70	35	2.4	2	Add on to end of first sentence: "except for the ODALS."
71	35	2.4	2	Third sentence should read: "FAA approval for the relocation of the REILS will be required as part of the proposed action."
72	35	2.4	2	Fifth sentence should read: "If the decommissioning proposal is finalized, the approach lighting system will be removed and no relocation will occur."
73	36-68	3	all	This section needs to use the environmental impact categories specified in FAA Order 1050.1F, paragraph 4-1

74	36	3.1	1	What about the other noise impacts, such as from construction activities?	
75	36	3.1	all	What about evaluation of the no action alternative for noise impacts?	
76	36	3.1.1	1	The title of the methodologies need to be included in the paragraph	
77	37	3.1.1	last four bullets on page	Update these sources with more recent versions	
78	39	3.1.3	all	Why not just redo the noise analysis with 2015 data?	
79	41	4.1	map	Noise Contour - Existing Conditions, please clarify the year.	
80	42	4.2	map	No build - are the existing conditions still the same? Reasonable representation?	
81	43	4.3	map	Preferred Alternative - Please delineate the projection out for the next five years	
82	46	Figure 4.4		Is a newer source available than June 2011?	
83	49	Figure 4.7		Is a newer source available than June 2011?	
84	50	3.3.2	4	Update U.S. Census data with more recent source	
85	51	3.3.2	1	Update U.S. Census data with more recent source	
86	51	3.3.2	2	Update U.S. Census data with more recent source	
87	52	3.3.4	4	Update U.S. Census data with more recent source	
88	53	Table 3-2		Update U.S. Census data with more recent source	
89	55	3.4	1	According to the Federal Register EPA 40 CFR Part 81 which was published in January of 2015, using the latest information from 2012 Annual Fine Particulate Matter NAAQS, Washtenaw (Livingston, Macomb etc.) County; PM 2.5 is Unclassified attainment. Clarify that the data submitted is correct.	
90	55	3.4	3	In regard to air quality, please provide the data from MDEQ (Do not see in Appendix D - there is a Land and Water Management and Wetlands letter)	
91	55	3.4	4 thru 7	The discussion does not quite fit affected environment. In terms of air quality what is the baseline conditions.	
92	56	3.4	3	Is there are more recent study than the L&B study from 1996?	
93	56	3.4	3	Fourth sentence: which standards is this referring to?	
94	56	3.4	3	Last sentence: The reference to "proposed projects at general aviation airports" is very broad. How could the report know the extent of future projects at all GA airports in MI, especially if the report in 20 years old?	
95	56	3.4	4	Please reword paragraph, as it is very confusing	

96	56	3.4	4	It is not clear if this area is in a nonattainment area or maintenance area. Also not how this estimate was achieved. What calculations, models and sources were used. The citing of the court case should be removed and CAA regulations should be cited.
97	56	3.4	5	First sentence referenes NOX - what about the other NAAQS?
98	56	3.4	5	Last sentence: replace "should" with "would"
99	57	3.5	1	How was it determined that the water quality is degraded. Was MDEQ contacted? With out some reliable way of establishing this the baseline for environmental conditions is not met.
100	57	3.5.1	4	Please clarify the status of the NPDES permit, as mentioned in secton 4.2.2? The reason for the permit should also be stated.
101	57	3.5.2	2	Did not find a map that shows the 14 soil units and how their location to the proposed action site
102	58	3.5.2	1	Did not find a map that shows the wellhead area in relationship to the proposed action site.
103	58	3.5.2	4	What about soils? The paragraph also mentions a new water line. Please provide more info on the water line.
104	61	3.7	1	What were the results of the survey?
105	61	3.7	3	Did SHPO/THPO provide concurrence? If so, please state so.
106	61	3.8	2	Fourth sentence: be more location-specific, as the way the sentence is worded makes it sound the grassy meadows are within the RSA.
107	61	3.8	2	Last sentence: This discussion should be expanded. What does the agreement call for? Why does it exist?
108	62	3.8	4	Third sentence: What does the Audubon society think of this? Were they contacted as part of the EA public outreach process?
109	63	3.9	1	Update June 2009 survey, as this is already seven years old.
110	63	3.9	3	Last sentence: Did Audubon agree with this as well?
111	63	3.9	3	Update letters from 2009 for preferred alternative (Department of Natural Resources have instructions that may have changed)
112	63	3.10	1	Update June 2009 survey. As part of the wetlands analysis, was USACE contacted? If so, did they make a jurisdictional determination? Are there any wetlands on the Rwy 06 approach, as the USFWS map depicts a wetland area. What about the removal of the ODALS - will this action impact the wetlands?
113	64	3.11	3 and 4	Was the floodplain analysis and conclusion confirmed with the local Floodplain Administrator?
114	64	3.11	3	Agencies should be changed to Agency. A flood plain map that shows the flood plain and the floodway with the proposed action should be included to support the discussion.



<b>115</b>	64	3.12	1	See US Department of Agriculture NRSC letter, dated September 3, 2009, signed by Steve Olds. Update needed since this Agency requested follow up. See Appendix D-7
<b>116</b>	66	3.14	1	Last sentence: delete "within the light lane"
<b>117</b>	66	3.14	2	Second sentence: Wouldn't these impacts be noted here? Where else would they be noted?
<b>118</b>	67	3.17		Why is this a separate section, as it is not an impact category?
<b>119</b>	67	3.18	1	Change to ASTM International Standard 1527-13
<b>120</b>	68	3.18	2	Last sentence: Add that any contamination encountered would be characterized and handled in accordance with state regulations
<b>121</b>	69	4		The title of this section sounds like Section 3. What is the purpose of this section? Recommend changing the title to mitigation.
<b>122</b>	69	4	-	Title should be changed to Mitigation. EC was included in the previous section
<b>123</b>	-	-	-	In regard to the comment concerning Wildlife Hazards. The existence of the various nature features and species of concern should be assessed and part of the EA. FAA does not agree with the position that changing the profile of the airport will not change the relationship to the wildlife and their use of attractants. Only a certified Airport Wildlife Biologist is qualified to make that determination. The response to previous comment did not cite the participation of a certified Airport Wildlife Biologist.
<b>124</b>	69	4.2.1	1	Last sentence: Does Audubon agree with this?
<b>125</b>	70	4.2.2	1	What about BMPs for air and water quality?
<b>126</b>	71	5	1	The last public meeting was held six years ago; a new meeting will be needed.
<b>127</b>	71	5.1	1	What were the agencies' comments, at least in summary? What was MDOT's response?
<b>128</b>	71	5.1	3	What did the local tribes say? Provide a summary.
<b>129</b>	72	5.2.2	4	Add that another public meeting will be held.