

Adam,

I have attached a draft of the airport five year CIP for your review/comment, along with a copy of last year's version, in case you want to compare the two.

In addition, I thought I would provide you with the following explanation of why I did what I did, to help you make sense of the revisions.

1. **Update Master Plan (ALP) – FFY 2016.** This stayed in the same slot as in last year's version. I re-analyzed the cost opinion and thought that I could lower it a bit (as shown) to stay within the \$150,000 per year federal entitlement. The last time the ALP was updated was 2001, and the IDOT recommends updating it every 8 years, so we are overdue on this one. And the funding for an ALP update typically comes from the FAA rather than the IDOT.
2. **Joint Sealing – Runway 12/30 and Taxiway B – FY 2016.** After we totaled up the length of all of the joints, the price on this one was not as high as I originally guessed it would be. Previously, I had roughly been comparing it to an estimate we had done for joint sealing on the main runway (and connecting taxiways). But in addition to the crosswind runway being shorter and less wide than the main runway, the joint spacing is larger, which cuts down quite a bit on the overall length of the joints. Anyway, I would recommend completing this project as a state funded project. The state share I came-up with was about \$162,000. In reviewing the FY 2015 State Aviation Program list of projects, I found the state share range to be \$8,500 to \$225,000, with an average of \$94,311. This project would fit within that range but would definitely be on the high end. The past state funded projects for Muscatine have been:

Fiscal Year	Project Name	Grant Amount
2010	Hangar Access Road	\$121,712
2011	Renovate Municipal Hangar and T-Hangar Roofs	\$53,210
2012	Improve T-Hangar Apron Drainage*	\$143,200
2012	Security Improvements	\$49,189
2013	Update Zoning Ordinance	\$25,000
2015	Connector Rd Hangar Access Rd to T-hangars	\$139,944
	TOTAL	\$1,485,949

*included original grant amount, since greater than final grant amount.

This project would be slightly above the previous project range, but not by a great amount. Every year that Muscatine has applied for a state grant, they have been awarded a grant. If you are concerned the City won't get this grant, based on the higher dollar amount, we could potentially leave out the parallel taxiway, since it was constructed in 2008 and is probably less

likely to need the joint resealing than the runway and connecting taxiway (constructed in 1999). But from a logistical and economic standpoint, it would make the most sense to leave it in.

The other reason I showed this project for state funding: I believe the FAA planner is pretty set on the Update Master Plan project for FFY 2016 (which will likely use 100% of entitlement funds for that year) and the Taxiway Reconstruction project for FFY 2017 (using 100% of entitlement funds for that year, along with discretionary funding for the remainder). If the joint sealing project were added for next year (FFY 2016) as federally funded project, it would have to compete for discretionary funding with other airports. It is my belief that the FAA planner feels Muscatine is getting its fair share of discretionary funding for the next few years: specifically in FFY 2015 (runway reconstruction) combined with FFY 2017 (taxiway reconstruction). The FAA is who decided to place these two projects with a year in between and to therefore have a year off from using any discretionary funding. We originally proposed to build both of these projects all at once, and the FAA said no. In addition, the FAA typically likes at least 2 to 3 years notice of plans to use discretionary funding.

In completing this cost opinion, I looked into whether any other pavement maintenance should be planned for during this project. In the pavement maintenance project that was completed in 2012, there were partial depth concrete patches, cleaning/sealing of expansion joints, and routing and sealing of cracks included for the crosswind runway and its connecting and parallel taxiways. Therefore, I assumed no work such as this for the new project. However, we can easily include the routing/sealing of the cracks in the final project scope that you recently identified, without affecting the overall cost, since these are very small in length compared to the overall joint length.

3. **Taxiway A Design & Reconstruction – FFY 2017** – This one stayed in the same slot as last year's 5 year C.I.P. I did not change the cost opinion; I checked it against recent unit prices I have been gathering from bid tabulations, and I feel comfortable with it.
4. **Storm Sewer/Culvert Inlet Protection-FY 2017** – This is a new potential state funded project I added for your consideration. I reviewed my notes from last year's November airport advisory commission meeting. One note talked about the culverts being silted in, which results in a decrease of the capacity of the pipes. And I can attest to that situation based on recent field checks and from the culvert videos provided by Hydroview. At the meeting, Bill Bogert mentioned the possibility of placing some device on the end of the culverts to block the silt. I did some brief research on culvert inlet and storm sewer intake protection and used that information to come-up with the cost opinion included on the draft 5 year C.I.P. You can let me know if you think this would be a good project to include.
5. **Runway 12/30 PAPI & REIL Replacement (with FAA takeover of maintenance/ownership) – FFY 2018**. PAPIs and REILs are specifically listed as eligible projects under the AIP preapplication instructions. And in fact, state funding can also be used for navigational aids. The key will be the approval of the FAA takeover of maintenance/ownership and the price of this. The e-mail

that you forwarded me mentioned establishing a reimbursable agreement between the City and the FAA, which would likely have an astronomical price tag, per the e-mail. I assume this would be an agreement for the City to pay the FAA for the maintenance services the FAA would provide. I suggest getting Scott Tener's comments on this project, and then if his comments are favorable, we could follow-up with the other branches of the FAA that handle such items.

As I was researching this project, I noted that the FAA approved ALP shows a future PAPI for Runway 6, where a VASI is currently installed. And my records indicate the VASI is greater than 20 years old, along with the REIL for that runway. (VASIs and PAPIs perform essentially the same function; although, PAPIs are more precise than VASIs.) And my records indicate the FAA owns and maintains the VASI and REIL for Runway 6. My thinking is this: maybe the FAA would want to replace the runway 6 VASI (with a PAPI) and REIL sometime in the not too distant future due to the age of this equipment. And at that time, they could also replace the PAPIs and REILs on runway 12/30. This is probably a long shot, but an avenue I thought the City might want to try to pursue.

6. **Joint Sealing – Apron FY 2019.** I'm showing this as a state funded project that lines-up with the next time that an IDOT pavement management inspection and report will be completed (they are currently completing one now). The apron was constructed in 1992 and has held up well, but I'm sure it will be in need of an overall joint seal by then. Some spot joint sealing was completed on the apron both in 2006 and in 2012.

I added a note on the draft 5 year CIP that the City currently plans to accrue federal entitlement funding for 2019 & 2020 for future T-hangar construction. As you probably recall, T-hangars can only be funded with federal entitlement funding and not discretionary funding. They can also be funded through the state, but that funding is quite limited. Last year we showed this accrual happening in 2018 & 2019. This got pushed back by one year by the PAPI & REIL project I added.

Lastly, I removed the Upgrade Fuel Facility Project. Many years ago, Mike Woerly mentioned an issue with the above ground pump (air elimination issue, I believe), so we added a project to our list to replace this with a submersible pump to solve this problem. And at some point in time, either the IDOT or FAA started funding the self-serve pumps, so we had that improvement shown, too. At this point in time, the FAA will fund a self-service pump and/or a capacity upgrade to the system (if it can be justified), while the IDOT will fund a rehab project to the fueling system. On last year's 5 year CIP, we had a state funded project shown for a fuel facility rehab, but no self-service, since self-service is not eligible for state funding and since it is estimated to cost less than \$25,000 and the federal grant minimum is \$25,000. So to use a federal grant for the self service, it would need to be combined with another eligible development project (not planning). And at last November's airport advisory commission meeting, Mike Woerly said that if self-service is not planned as a part of the project, then delete the project. It sounded like he may have found a relatively inexpensive fix to the air elimination problem. In addition, I've never gotten a strong sense from the City or the airport manager that self-service is something that they want to pursue. Therefore, for the various reasons listed above, I have removed this project from this list. If you think it should be added back in, just let me know.

FIVE-YEAR AIRPORT CAPITAL IMPROVEMENT PROGRAM (CIP)

Airport Name: Muscatine Municipal Airport

Telephone: 319.377.4629

Prepared By: Jayne DeCoste, Anderson Bogert

Date Approved: _____

Date Prepared: 1/23/14

Project Description	Funding Source	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
Connector Road between Hangar Access Road and T-Hangars	Federal	\$ 0	\$	\$	\$	\$
	State	\$ 99,450	\$	\$	\$	\$
	Local	\$ 17,550	\$	\$	\$	\$
	Total	\$ 117,000	\$	\$	\$	\$
Reconstruct Runway 6/24	Federal	\$ 3,796,940	\$	\$	\$	\$
	State	\$ 0	\$	\$	\$	\$
	Local	\$ 421,882	\$	\$	\$	\$
	Total	\$ 4,218,822	\$	\$	\$	\$
Pavement Maintenance - Apron, Runway 12/30, and Taxiway B	Federal	\$	\$ 0	\$	\$	\$
	State	\$	\$ 85,000	\$	\$	\$
	Local	\$	\$ 15,000	\$	\$	\$
	Total	\$	\$ 100,000	\$	\$	\$
Update Master Plan (ALP)	Federal	\$	\$ 166,500	\$	\$	\$
	State	\$	\$ 0	\$	\$	\$
	Local	\$	\$ 18,500	\$	\$	\$
	Total	\$	\$ 185,000	\$	\$	\$
Taxiway A Design & Reconstruction	Federal	\$	\$	\$ 1,910,479	\$	\$
	State	\$	\$	\$ 0	\$	\$
	Local	\$	\$	\$ 212,275	\$	\$
	Total	\$	\$	\$ 2,122,754	\$	\$
Upgrade Fuel Facility (with submersible pump) - no self service included	Federal	\$	\$	\$	\$ 0	\$
	State	\$	\$	\$	\$ 157,250	\$
	Local	\$	\$	\$	\$ 27,750	\$
	Total	\$	\$	\$	\$ 185,000	\$

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Project Description	Funding Source	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
Airfield Pavement Maintenance	Federal	\$	\$	\$	\$	\$ 0
	State	\$	\$	\$	\$	\$ 85,000
	Local	\$	\$	\$	\$	\$ 15,000
	Total	\$	\$	\$	\$	\$ 100,000
2018 & 2019 - Accrue Federal Funding for T-hangars (see LRNA FY 2021)	Federal	\$	\$	\$	\$	\$
	State	\$	\$	\$	\$	\$
	Local	\$	\$	\$	\$	\$
	Total	\$	\$	\$	\$	\$
	Federal	\$	\$	\$	\$	\$
	State	\$	\$	\$	\$	\$
	Local	\$	\$	\$	\$	\$
	Total	\$	\$	\$	\$	\$
	Federal	\$	\$	\$	\$	\$
	State	\$	\$	\$	\$	\$
	Local	\$	\$	\$	\$	\$
	Total	\$	\$	\$	\$	\$
	Federal	\$	\$	\$	\$	\$
	State	\$	\$	\$	\$	\$
	Local	\$	\$	\$	\$	\$
	Total	\$	\$	\$	\$	\$

**FIVE-YEAR AIRPORT
CAPITAL IMPROVEMENT PROGRAM
(CIP)**

Airport Name: Muscatine Municipal Airport

Telephone: 319.377.4629

Prepared By: Jayne DeCoste, Anderson Bogert

Date Approved: _____

Date Prepared: 10/27/14

Project Description	Funding Source	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Update Master Plan (ALP)	Federal	\$ 148,500	\$	\$	\$	\$
	State	\$ 0	\$	\$	\$	\$
	Local	\$ 16,500	\$	\$	\$	\$
	Total	\$ 165,000	\$	\$	\$	\$
Joint Sealing - Runway 12/30 and Taxiway B	Federal	\$ 0	\$	\$	\$	\$
	State	\$ 162,212	\$	\$	\$	\$
	Local	\$ 28,626	\$	\$	\$	\$
	Total	\$ 190,838	\$	\$	\$	\$
Taxiway A Design & Reconstruction	Federal	\$	\$ 1,910,479	\$	\$	\$
	State	\$	\$ 0	\$	\$	\$
	Local	\$	\$ 212,275	\$	\$	\$
	Total	\$	\$ 2,122,754	\$	\$	\$
Storm Sewer/Culvert Inlet Protection	Federal	\$	\$ 0	\$	\$	\$
	State	\$	\$ 38,250	\$	\$	\$
	Local	\$	\$ 6,750	\$	\$	\$
	Total	\$	\$ 45,000	\$	\$	\$
Runway 12/30 PAPI & REIL Replacement (with FAA takeover of maintenance/ownership)	Federal	\$	\$	\$ 146,700	\$	\$
	State	\$	\$	\$ 0	\$	\$
	Local	\$	\$	\$ 16,300	\$	\$
	Total	\$	\$	\$ 163,000	\$	\$
Upgrade Fuel Facility (with submersible pump) - no self service included	Federal	\$	\$	\$ 0	\$	\$
	State	\$	\$	\$ 157,250	\$	\$
	Local	\$	\$	\$ 27,750	\$	\$
	Total	\$	\$	\$ 185,000	\$	\$

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Telephone: 319.377.4629

Prepared By: Jayne DeCoste, Anderson Bogert

Date Approved: _____

Date Prepared: 10/27/14

Project Description	Funding Source	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Joint Sealing - Apron (2019 & 2020 - Accrue Federal Funding for future T-hangars)	Federal	\$	\$	\$	\$ 0	\$
	State	\$	\$	\$	\$ 68,000	\$
	Local	\$	\$	\$	\$ 12,000	\$
	Total	\$	\$	\$	\$ 80,000	\$
	Federal	\$	\$	\$	\$	\$
	State	\$	\$	\$	\$	\$
	Local	\$	\$	\$	\$	\$
	Total	\$	\$	\$	\$	\$
	Federal	\$	\$	\$	\$	\$
	State	\$	\$	\$	\$	\$
	Local	\$	\$	\$	\$	\$
	Total	\$	\$	\$	\$	\$
	Federal	\$	\$	\$	\$	\$
	State	\$	\$	\$	\$	\$
	Local	\$	\$	\$	\$	\$
	Total	\$	\$	\$	\$	\$
	Federal	\$	\$	\$	\$	\$
	State	\$	\$	\$	\$	\$
	Local	\$	\$	\$	\$	\$
	Total	\$	\$	\$	\$	\$