



Lehigh Valley International Airport

Allentown, Pennsylvania

Airport Master Plan Update Section 8 – Financial Plan

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Section 8 — Financial Plan

8.1 Introduction

This section presents a financial analysis of the capital projects proposed in the Master Plan prepared for LVIA. This section describes the financial framework of the LNAA including the airline rates and charges methodology pursuant to the Airline Rates and Charges Resolution (the Resolution). It also includes an analysis of the LNAA’s historical revenues and expenses for calendar years (CY) 2014 through 2018, and projections of revenues and expenses for CYs 2019 through 2040.

The financial projections reflect the anticipated effects of funding the Master Plan projects, to the extent of the availability of the identified funding sources during the forecast period. The funding plan anticipates the use of Federal Aviation Administration (FAA) Airport Improvement Program (AIP) grants; Passenger Facility Charges (PFCs); state grant funds; private or third-party funding; local funds; and the issuance of General Airport Revenue Bonds (GARBs). The financial analysis uses the approved air traffic forecast growth rates contained in the Master Plan as a basis for estimating certain revenues and expenses over the planning period.

8.2 LNAA’s Organizational and Financial Framework

The LNAA is governed by 15 members who are appointed by Lehigh and Northampton County Executives. The LNAA owns and operates LVIA, Queen City Airport, and Braden Airpark. The LNAA’s financial statements are prepared based on the accrual basis of accounting in accordance with generally accepted accounting principles disseminated by the Governmental Accounting Standards Board (GASB). Revenues are recognized when earned and expenses when incurred.

The LNAA’s 2017 audited financial statements (the most recent year for which audited financial statements are available) show that as of December 31, 2017, the LNAA had Total Assets of \$260.2 million, Total Liabilities of \$59.6 million, and Net Assets of \$200.6 million.

8.3 Proposed Capital Program

Table 8.3.1 presents the estimated project costs and funding sources for the recommended list of projects as noted in Section 7. The projects are grouped into three phases covering CY’s 2018–2040. LNAA management will implement the proposed capital projects as warranted by demand and available funding sources. In recent years, the LNAA management postponed certain expenditures for maintenance projects allowing additional funding to be directed to higher-priority projects. Therefore, projects defined as Phase 1 represent those projects with the highest priority for completion, including projects that can no longer be deferred. The Phase 2 projects focus on runway and taxiway rehabilitation, increasing hangar capacity, expanding cargo facilities, and terminal improvements. Phase 3 includes planned airfield improvements, including two runway extensions. Overall, the LNAA staff will monitor and refine, as appropriate, the Master Plan projects based on the Airport and the FAA’s funding criteria and the availability of funding.

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Table 8.3.1: Estimated Capital Costs and Funding Sources – Phase 1

Project #	Project Name	Years	Total	AIP		PFC		PennDOT Grants	3rd Party Financing	Local Funds	GARBs
				Entitlements	Discretionary	Paygo	Bonds				
Phase 1 - 2018 - 2023											
1-1	Runway 6-24 Rehabilitation & Related Projects *	2018 - 2021	\$ 80,000,000	\$ 9,400,000	\$ 62,600,000	\$ -	\$ -	\$ 4,000,000	\$ -	\$ 4,000,000	\$ -
1-2	Terminal Circulation Improvements	2019	10,000,000	-	-	-	5,500,000	3,500,000	-	1,000,000	-
1-3	Expand Cargo Existing Area	2019 - 2021	53,540,000	-	-	-	-	-	53,540,000	-	-
1-4	Landside Circulation Improvements	2019 - 2020	1,900,000	-	-	-	-	-	-	1,900,000	-
1-5	Land Use Development **	2018 - 2019	-	-	-	-	-	-	-	-	-
1-6	Taxiway Stub Projects	2018 - 2019	5,120,000	2,350,000	2,258,000	-	256,000	256,000	-	-	-
1-7	Hangar 11	2018	16,500,000	-	-	-	-	6,500,000	-	-	10,000,000
1-8	Parking and Ticket Booth Improvements	2018 - 2020	4,500,000	-	-	-	-	-	-	4,500,000	-
1-9	FBO Building and Improvements	2022 - 2023	27,900,000	-	-	-	-	-	23,950,000	3,950,000	-
1-10	Terminal Security Checkpoint Improvements	2022 - 2023	10,200,000	-	-	-	-	-	-	10,200,000	-
	Existing RW 6 RPZ	2019 - 2023	1,600,000	288,000	1,152,000	-	80,000	80,000	-	-	-
	Existing RW 24 RPZ	2019 - 2023	1,500,000	270,000	1,080,000	-	75,000	75,000	-	-	-
	Existing RW 13 RPZ	2019 - 2023	3,200,000	576,000	2,304,000	-	160,000	160,000	-	-	-
	Existing RW 31 RPZ	2019 - 2023	3,300,000	594,000	2,376,000	-	165,000	165,000	-	-	-
	Reconstruct 995 Postal Rd west parking lot & loading dock, Hangar 7 & 9 parking lots, 997 Postal Rd driveway	2017 - 2018	870,000	-	-	-	-	-	-	870,000	-
	Mill & overlay long-term overflow parking and long-term east parking	2018 - 2019	880,000	-	-	-	-	-	-	880,000	-
	Rehabilitate northwestern portion of TW E and portion of main terminal apron	2018 - 2019	1,500,000	-	1,350,000	50,000	25,000	75,000	-	-	-
	Rehabilitate southeast portion of main terminal apron	2019 - 2020	2,000,000	-	1,800,000	-	100,000	100,000	-	-	-
	Reconstruct Hangar 3 parking lot and Gate 8 access road	2019 - 2020	1,280,000	-	-	-	-	-	-	1,280,000	-
	Mill & overlay 997 Postal Rd front parking lot & driveway	2020 - 2021	190,000	-	-	-	-	-	-	190,000	-
	Reconstruct employee parking lot and Hertz QTA	2020 - 2021	450,000	-	-	-	-	-	-	450,000	-
	Rehabilitate northwest portion of main terminal apron	2020 - 2021	2,000,000	-	1,800,000	-	100,000	100,000	-	-	-
	Rehabilitate southwest portion of main terminal apron and Apron 3 near Hangars 2 & 3	2021 - 2022	1,900,000	-	1,710,000	-	95,000	95,000	-	-	-
	Mill & overlay terminal roadways	2021 - 2022	1,000,000	-	-	-	-	-	-	1,000,000	-
	Rehabilitate southeast portion of Apron 1 near Hangar 9	2022 - 2023	1,900,000	622,000	1,088,000	-	95,000	95,000	-	-	-
	Mill & Overlay Maintenance Lot	2022 - 2023	1,200,000	-	-	-	-	-	-	1,200,000	-
Total Phase 1 - 2018 - 2023			\$ 234,430,000	\$ 14,100,000	\$ 79,518,000	\$ 50,000	\$ 6,651,000	\$ 15,201,000	\$ 77,490,000	\$ 31,420,000	\$ 10,000,000

Note: Project costs shown in 2018 dollars.

Note: It is assumed that AIP eligible projects will be funded with 90% AIP funds (entitlements or discretionary), 5% state funding, and 5% local funds or GARBs unless otherwise noted.

Note: Includes 2019 state allocated capital budget money.

* The Runway 6-24 Rehabilitation & Related Projects (Project 1-1) is shown as 90% AIP eligible. The required amounts of discretionary funds assumed is high. If the Authority does not receive AIP funding at this level, the Authority will need to find alternative funding or postpone portions of the project.

** LNAA will only pursue this project if there is a demand for the land development.

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Table 8.3.1: Estimated Capital Costs and Funding Sources – Phases 2 & 3

Project #	Project Name	Years	Total	AIP		PFC		PennDOT Grants	3rd Party Financing	Local Funds	GARBs
				Entitlements	Discretionary	Paygo	Bonds				
Phase 2 - 2024 - 2028											
2-1	Terminal International Arrivals Facility *	2027 - 2028	\$ 9,000,000	\$ 3,623,041	\$ -	\$ 2,276,959	\$ -	\$ 500,000	\$ -	\$ 2,600,000	\$ -
2-2	Northside Parallel Taxiway for Runway 6-24	2025 - 2026	22,450,000	6,199,721	14,005,279	1,122,500	-	1,122,500	-	-	-
2-3	New Northside Cargo Facility	2026 - 2027	74,090,000	-	-	-	-	-	74,090,000	-	-
2-4	Northside Compatible Development	2025 - 2026	20,500,000	-	-	-	-	1,400,000	19,100,000	-	-
2-5	Runway 13-31 West Side Parallel Taxiway (Northern Phase)	2027 - 2028	6,320,000	1,422,835	4,265,165	316,000	-	316,000	-	-	-
2-6	Bulk Hangars (2)	2028 - 2029	24,270,000	-	-	-	-	3,400,000	-	1,500,000	19,370,000
	Mill & overlay Hangar 7/10 parking lots & driveways, Hangar 2/QTA access road, and Avis QTA & parking lot	2023 - 2024	1,670,000	-	-	-	-	-	-	1,670,000	-
	Reconstruct Hangar 2 parking lot and mill & overlay Fedex parking lot & driveway	2024 - 2025	220,000	-	-	-	-	-	-	220,000	-
	Rehabilitate Taxiway A from the cargo apron to Runway 13-31 and the portion of Apron 9 in front of Hangar 8	2024	1,200,000	1,080,000	-	60,000	-	60,000	-	-	-
	Rehabilitate Runway 13-31	2025	2,800,000	-	2,520,000	140,000	-	140,000	-	-	-
	Mill & overlay economy & other parking lots	2025 - 2026	2,800,000	-	-	-	-	-	-	2,800,000	-
	Mill & overlay contractor staging area, Enterprise parking lot, and Hertz parking lot	2026 - 2027	340,000	-	-	-	-	-	-	340,000	-
	Seal coat Enterprise QTA, 995 Postal Rd south parking lot, 997 Postal Rd loading dock area, and Hangar 9 driveway	2026 - 2027	73,000	-	-	-	-	-	-	73,000	-
	Rehabilitate Taxiway A from Runway 13-31 to Runway 24 end	2026	1,400,000	-	1,260,000	70,000	-	70,000	-	-	-
	Rehabilitate Taxiway B from Runway 6-24 to Runway 13 end and the southeast portions of Taxiway E	2027	800,000	-	720,000	40,000	-	40,000	-	-	-
	Various areas of localized preventative maintenance	2028	1,000,000	-	-	-	-	-	-	1,000,000	-
Total Phase 2 - 2024 - 2028			\$ 168,933,000	\$ 12,325,597	\$ 22,770,445	\$ 4,025,459	\$ -	\$ 7,048,500	\$ 93,190,000	\$ 10,203,000	\$ 19,370,000
Phase 3 - 2029 - 2040											
3-1	Runway 6-24 Extension (2,400 FT)	2029 - 2032	\$ 41,950,000	\$ 10,584,031	\$ 16,670,969	\$ 2,097,500	\$ -	\$ 12,597,500	\$ -	\$ -	\$ -
3-2	Remain Overnight Apron or Compatible Aeronautical Development	2032 - 2033	9,950,000	2,734,802	6,220,198	497,500	-	497,500	-	-	-
3-2	Deicing Pad or Compatible Aeronautical Development	2039 - 2040	8,000,000	1,767,112	5,432,888	400,000	-	400,000	-	-	-
3-3	Fuel Farm Expansion	2033 - 2034	8,380,000	-	-	-	-	-	-	8,380,000	-
3-4	Runway 13-31 Extension (1,002 FT)	2035 - 2038	64,600,000	14,174,979	43,965,021	3,230,000	-	3,230,000	-	-	-
3-5	Runway 13-31 West Side Parallel Taxiway	2038 - 2039	12,120,000	2,901,346	8,006,654	606,000	-	606,000	-	-	-
3-6	ARFF Building Expansion**	2039 - 2040	1,000,000	-	810,000	140,000	-	50,000	-	-	-
3-7	Realign Portion of Taxiway B	2039 - 2040	7,010,000	1,150,000	5,159,000	350,500	-	350,500	-	-	-
Total Phase 3 - 2029 - 2040			\$ 153,010,000	\$ 33,312,270	\$ 86,264,730	\$ 7,321,500	\$ -	\$ 17,731,500	\$ -	\$ 8,380,000	\$ -
Total Preferred Project List			\$ 556,373,000	\$ 59,737,867	\$ 188,553,174	\$ 11,396,959	\$ 6,651,000	\$ 39,981,000	\$ 170,680,000	\$ 50,003,000	\$ 29,370,000

Note: Project costs shown in 2018 dollars.

Note: It is assumed that AIP eligible projects will be funded with 90% AIP funds (entitlements or discretionary), 5% state funding, and 5% local funds or GARBs unless otherwise noted.

Note: Includes 2019 state allocated capital budget money.

* The Terminal International Arrivals Facility project (Project 2-1) is assumed to have a portion of ineligible space.

** The ARFF Building Expansion project (Project 3-6) is assumed to have a portion of ineligible space.



8.4 Recommended Funding Plan

The recommended funding plan includes the following sources:

- FAA AIP Grants (Entitlement and Discretionary funds)
- PFC
- State Grants
- 3rd Party Financing
- Local Funds
- GARBs

In developing the funding plan, the eligibility of each project was established to fully utilize all of the Airport's federal and state funding resources. These sources were evaluated against project eligibility to determine the best use of each funding source. The Airport's AIP entitlement grants throughout the forecast period were projected based on the enplanement forecast and matched against the anticipated AIP-eligible project costs. AIP-eligible costs in excess of projected AIP entitlement funds were considered for AIP discretionary funding, based on the nature of each project. PFC funding was identified for all projects meeting the FAA's eligibility and were subject to the projected availability of PFC revenues. State grant funding was assumed for appropriate project costs with 3rd Party financing assumed for selected projects. Project costs not anticipated to be funded with PFCs, AIP, State funds and 3rd party financing may be funded with GARBs or local funds. The financial analysis includes a projection of the Airport's cash flow generated from ongoing operations, which was used as a basis for determining the availability of local funds during the forecast period.

Table 8.3.1 provides a summary of the three phases of the Master Plan. Phase 1 of the Master Plan program includes projects that are expected during CYs 2018 through 2023, which totals \$234.4 million. Phase 2 has \$168.9 million in capital costs for projects planned for CYs 2024 through 2028. Finally, Phase 3 includes projects anticipated during CYs 2029 through 2040 with estimated capital costs of \$153.0 million.

Table 8.4.1 summarizes the Master plan projects sources and uses by project type for Phases 1 through 3. The largest funding source is AIP grants (entitlements and discretionary), which is estimated to fund 44.6 percent of the total Master plan project costs. 3rd party financing is projected to fund 30.7 percent of the project costs followed by 9.0 percent from local funds, 5.3 percent of GARBs, 3.2 percent of PFCs (PAYGO and bonds), and the remainder for State grants. The largest uses of Master Plan funding are estimated for runway/taxiway projects, cargo projects, and hangar/T-hangar projects totaling approximately 44.6 percent, 22.9 percent, and 7.3 percent, respectively, of total costs.



Table 8.4.1 Sources and Uses of Master Plan Project Funds

Sources of Masterplan Funding	Phase 1	Phase 2	Phase 3	Total
AIP Entitlements	\$ 14,100,000	\$ 12,325,597	\$ 33,312,270	\$ 59,737,867
AIP Discretionary	79,518,000	22,770,445	86,264,730	188,553,174
PFC Paygo	50,000	4,025,459	7,321,500	11,396,959
PFC Bonds	6,651,000	-	-	6,651,000
PennDOT Grants	15,201,000	7,048,500	17,731,500	39,981,000
3rd Party Financing	77,490,000	93,190,000	-	170,680,000
Local Funds	31,420,000	10,203,000	8,380,000	50,003,000
GARBs	10,000,000	19,370,000	-	29,370,000
Total Sources	\$ 234,430,000	\$ 168,933,000	\$ 153,010,000	\$ 556,373,000

Uses of Masterplan Funding	Phase 1	Phase 2	Phase 3	Total
Runway/Taxiway Projects	\$ 94,720,000	\$ 34,660,000	\$ 118,670,000	\$ 248,050,000
Cargo Projects	53,540,000	74,090,000	-	127,630,000
Hangar/T Hangar Projects	16,500,000	24,270,000	-	40,770,000
Terminal Improvements	20,200,000	9,000,000	-	29,200,000
FBO Improvements	27,900,000	-	-	27,900,000
Parking	9,040,000	1,813,000	-	10,853,000
Fuel Farm	-	-	8,380,000	8,380,000
Apron Rehabilitation	6,530,000	-	9,950,000	16,480,000
Other Projects	6,000,000	25,100,000	16,010,000	47,110,000
Total Uses	\$ 234,430,000	\$ 168,933,000	\$ 153,010,000	\$ 556,373,000

FAA AIP Grants

AIP grants are administered to construct and maintain infrastructure projects that increase the capacity, safety and security at airports across the United States. The FAA issues either AIP entitlement or discretionary grants for projects. AIP entitlement grants are awarded based on a formula that considers the number of passengers using the Airport. **Table 8.4.2** presents the projections for AIP entitlement grants for the three phases covered in the forecast period. The funding plan assumes that a total of \$59.7 million will be funded with entitlement grants.

The FAA awards discretionary grants based on established funding priorities and FAA management’s discretion. AIP eligible projects historically at LNAA were typically funded with 90 percent FAA funds. LNAA is responsible for funding the 10 percent match with state grants, PFCs, or local funds. Unless noted on **Table 8.3.1**, it is assumed that the Authority will receive the maximum amount possible for all AIP eligible projects. The funding plan assumes that a total of \$188.5 million will be funded with discretionary grants.

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Table 8.4.2 Projected Airport Improvement Program (AIP) Entitlements

AIP Entitlement Cash Flow	2018	2019	2020	2021	2022	2023	Total Phase 1	Total Phase 2 ³	Total Phase 3 ⁴	Total 2019 - 2040
Enplanements ¹	343,790	342,864	398,926	408,123	417,104	426,014	2,336,821	2,250,284	6,272,641	10,859,746
\$7.80 for first 50,000 Passengers	\$ 390,000	\$ 390,000	\$ 390,000	\$ 390,000	\$ 390,000	\$ 390,000	\$ 2,340,000	\$ 1,950,000	\$ 4,680,000	\$ 8,970,000
\$5.20 for next 50,000 Passengers	260,000	260,000	260,000	260,000	260,000	260,000	1,560,000	1,300,000	3,120,000	5,980,000
\$2.60 for next 400,000 Passengers	633,854	631,446	777,208	801,121	824,470	847,636	4,515,735	4,550,738	12,347,558	21,414,031
\$0.65 for next 500,000 Passengers	-	-	-	-	-	-	-	-	210,327	210,327
Part A AIP Entitlements	\$ 1,283,854	\$ 1,281,446	\$ 1,427,208	\$ 1,451,121	\$ 1,474,470	\$ 1,497,636	\$ 8,415,735	\$ 7,800,738	\$ 20,357,885	\$ 36,574,358
Part B AIP Entitlements ²	1,066,146	1,068,554	922,792	898,879	875,530	852,364	5,684,265	4,524,451	12,874,268	23,082,984
Total AIP Entitlements	\$ 2,350,000	\$ 2,350,000	\$ 2,350,000	\$ 2,350,000	\$ 2,350,000	\$ 2,350,000	\$ 14,100,000	\$ 12,325,189	\$ 33,232,153	\$ 59,657,342
Capital Expenditures	\$ 2,350,000	\$ 2,350,000	\$ 2,350,000	\$ 2,350,000	\$ 2,350,000	\$ 2,350,000	\$ 14,100,000	\$ 12,325,597	\$ 33,312,270	\$ 59,737,867

1.) Enplanements used for AIP calculation have a 2 year delay. For example, 2016 enplanements are used for the 2018 AIP Entitlement calculation.

2.) Part B AIP Entitlements are distributed to nonhub primary airports from the AIP Entitlement Turnback at large and medium hub airports. This amount is grown by 2% beginning in 2024.

3.) Entitlement expenditures in FY 2025 are assumed to include carryover entitlements from FY 2024.

4.) Entitlement expenditures in FY 2037 and FY 2038 are assumed to include carryover entitlements from FY 2034 and FY 2035. In addition, FY 2038 Entitlement expenditures are assumed to include multi-year Entitlements from FY 2039 and FY 2040.



PFCs

PFCs are fees imposed by an airport based on enplaned passengers and are used for specific projects approved by the FAA. According to federal regulations, PFC projects must (1) preserve or enhance safety, security or capacity of the national air transportation system; (2) reduce noise or mitigate noise impacts resulting from an airport; or (3) furnish opportunities for enhanced competition between or among air carriers. The LNAA is currently authorized by the FAA to collect a PFC of \$4.50 per enplaned passenger at the Airport; the currently mandated maximum allowable rate.

Since the inception of the PFC program, the LNAA has received cumulative approval to collect and use approximately \$44.9 million in PFCs. The LNAA's most recent application, approved in 2005, extends the LNAA's right to collect until August 2020. The LNAA's new PFC application will likely be in place by summer 2019, and was assumed the maximum allowable \$4.50 per enplaned passenger was utilized throughout the planning period. It is assumed the Authority will continue to submit and receive approval for new PFC applications throughout the forecast period.

Table 8.4.3 shows the projected PFC collections for the three phases. The funding plan assumes that the LNAA will submit multiple future PFC applications for PFC-eligible project costs as needed during the forecast period. In addition to funding new projects, the LNAA will use PFC funds to reimburse itself for PFC-eligible projects that were funded with LNAA cash. The current plan assumes the LNAA will be paid back \$7.4 million by 2023. In addition, LNAA does not have the PFC capacity to fund all of the PFC eligible project costs in Phase 1. Therefore, LNAA will use local funds for a portion of the initial funding of Project 1-1 – Runway 6-24 Rehabilitation & Related Projects, Project 1-2 – Terminal Circulation Improvements and Project 1-10 – Terminal Security Checkpoint Improvements. LNAA will be paid back \$15.2 million beginning in Phase 2 for those projects. The funding plan assumes that the LNAA will apply approximately \$18.0 million in PFCs Master Plan projects. Projects will be funded with approximately \$11.4 million in PFC Paygo money and \$6.7 million in GARB bonds with debt service payments paid from PFCs. This bond structure will allow the Authority to receive the most favorable financing. The bonds are projected to be sold in 2020. The portion of the projects expected to be funded with these bonds are Terminal Circulation Improvements (\$5.5 million), Taxiway Stub Projects (\$256,000), a portion of each of the apron rehabilitation projects (totaling \$415,000) and a portion of the existing runway RPZ projects (totaling \$480,000). The estimated debt associated with this bond issue is approximately \$452,000 per year. The current funding plan requires LNAA to fund portions of PFC eligible projects with alternative funding sources because of the PFC capacity. If the current PFC level is increased during the forecast period, LNAA will be able to fund additional projects with PFCs. It is assumed the additional PFCs collected will be used for other PFC-eligible projects that are not included in the Master Plan projects.



Table 8.4.3 Projected Passenger Facility Charge (PFC) Revenue

PFC Fund Cash Flow	2018	2019	2020	2021	2022	2023	Total Phase 1	Total Phase 2	Total Phase 3	Total 2018 - 2040
Enplanements	398,926	408,123	417,104	426,014	434,227	442,219	2,526,614	2,331,314	6,489,134	11,347,062
Passenger Facility Charge	\$ 4.50	\$ 4.50	\$ 4.50	\$ 4.50	\$ 4.50	\$ 4.50	\$ 4.50	\$ 4.50	\$ 4.50	\$ 4.50
Administration Fee	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
PFCs Available	\$ 4.39	\$ 4.39	\$ 4.39	\$ 4.39	\$ 4.39	\$ 4.39	\$ 4.39	\$ 4.39	\$ 4.39	\$ 4.39
PFC Fund Beginning Balance ¹	\$ 3,547	\$ 1,468	\$ 313,130	\$ 212,459	\$ 150,903	\$ 125,404	\$ 3,547	\$ 134,990	\$ 1,085,216	\$ 3,547
Annual PFC Collections ²	1,646,376	1,791,662	1,831,086	1,870,201	1,906,258	1,941,343	10,986,925	10,234,470	28,487,297	49,708,693
PFC Payback ^{3,4}	(1,598,455)	(1,480,000)	(1,480,000)	(1,480,000)	(1,480,000)	(1,480,000)	(8,998,455)	(3,000,000)	(12,200,000)	(24,198,455)
Annual PFC Expenditures	(50,000)	-	-	-	-	-	(50,000)	(4,025,459)	(7,321,500)	(11,396,959)
PFC Debt Service	-	-	(451,757)	(451,757)	(451,757)	(451,757)	(1,807,028)	(2,258,786)	(5,421,085)	(13,552,713)
PFC Fund Balance	\$ 1,468	\$ 313,130	\$ 212,459	\$ 150,903	\$ 125,404	\$ 134,990	\$ 134,990	\$ 1,085,216	\$ 4,629,928	\$ 4,629,928

1.) The 2018 beginning balance was obtained from the December 2017 PFC Quarterly Report. The 2019 beginning balance was obtained from the December 2018 PFC quarterly report.

2.) The 2018 Annual PFC Collection was obtained from the December 2018 PFC Quarterly Report.

3.) LNAA plans to pay themselves back for projects beginning in 2019. Unison made an assumption on the annual amount of the pay back.

4.) Beginning in Phase 2, LNAA plans to pay themselves back for PFC eligible Master Plan projects that LNAA did not have PFC capacity to fund.



PennDOT Bureau of Aviation Grants

Airport management anticipates the use of PennDOT Bureau of Aviation grants (PennDOT grants) as part of the Master Plan funding. PennDOT grants are funds administered by the state of Pennsylvania through the Department of Transportation for the purpose of assisting airports in funding various capital improvement projects. All projects that are eligible to receive FAA funding are also eligible to receive PennDOT grants. PennDOT grants can be used to fund 50 percent of the required match for any project that receives FAA funds. Therefore, LNAA would receive 90 percent of an eligible project's cost from the FAA and LNAA would be responsible for the remaining 10 percent of the project costs. PennDOT grants can be used for 50 percent of the 10 percent or a total of 5 percent of the project's cost. In addition, PennDOT grants are promised to LNAA for specific projects and that funding is reflected in the estimated funding. It is assumed that approximately \$40.0 million in PennDOT funding will be secured for the Master Plan projects.

3rd Party Financing

Airport management anticipates the use of 3rd Party financing as a source of funding for the Master Plan projects. The current estimate assumes approximately \$170.7 million will be available to fund a portion of the Master Plan projects. Airport management intends to aggressively pursue this type of financing and will delay the start of projects until funding is secured. For purposes of this financing plan, with the exception of ground rents, no operating revenues are anticipated to be generated by this effort.

Local Funds

After the LNAA satisfies all of its financial obligations from operations, the remaining funds flow to the General Fund, i.e. local funds. The LNAA's operating revenue pays for operating expenses, annual debt service, and other funding requirements. **Table 8.4.4** shows the projected available local funds for the three phases of the Master Plan projects. Based on the projected General Fund balance, the LNAA can fund a significant portion of the Master Plan, totaling \$50.0 million. As mentioned above, because of LNAA's PFC capacity, LNAA plans to fund a portion of the PFC eligible cost with local funds. As the PFC balance grows, LNAA will use the PFC funds to pay itself back for the eligible portion of those projects. The pay back associated with the Master Plan projects is projected to begin in Phase 2.

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Table 8.4.4 Projected General Fund Deposit and Available Local Funds

General Fund Cash Flow	Estimate	Budget	Projected				Total Phase 1	Projected	Projected	Total 2018 - 2040
	2018	2019	2020	2021	2022	2023		Total Phase 2	Total Phase 3	
Beginning Balance in General Fund ¹	\$ 4,987,379	\$ 9,168,549	\$ 6,476,905	\$ 5,292,447	\$ 7,481,795	\$ 5,811,284	\$ 9,168,549	\$ 65,416	\$ 11,821,620	\$ 4,987,379
Operating Revenue	29,071,711	29,070,519	30,420,289	31,278,940	32,198,689	32,900,927	155,869,364	179,059,576	551,008,331	915,008,981
O&M Expenses	20,085,190	23,169,741	23,805,285	24,461,598	25,139,480	25,839,766	122,415,870	140,550,514	432,473,504	715,525,078
Net Operating Income	8,986,521	5,900,778	6,615,004	6,817,342	7,059,209	7,061,161	33,453,493	38,509,062	118,534,827	199,483,903
LESS:										
Debt Service	3,571,763	3,828,330	4,445,295	4,450,365	4,448,497	4,202,071	21,374,558	23,333,744	43,130,159	91,410,225
O&M Reserve Requirement	211,049	514,092	105,924	109,385	112,980	116,714	959,096	644,899	2,079,987	3,895,031
Renewal and Replacement Requirement	-	-	-	-	-	-	-	-	-	-
Subordinated Indebtedness	-	-	-	-	-	-	-	-	-	-
Capital Expenditures	2,660,000	5,730,000	5,180,000	2,000,000	6,100,000	10,420,000	29,430,000	8,033,000	9,880,000	50,003,000
Add: PFCs Applied to Debt Service	-	-	451,757	451,757	451,757	451,757	1,807,028	2,258,786	5,421,085	9,486,899
General Fund Deposit/Withdrawal	\$ 2,543,709	\$ (4,171,644)	\$ (2,664,458)	\$ 709,348	\$ (3,150,511)	\$ (7,225,868)	\$ (16,503,133)	\$ 8,756,204	\$ 68,865,766	\$ 63,662,546
PFC Pay Back	\$ 1,541,369	\$ 1,480,000	\$ 1,480,000	\$ 1,480,000	\$ 1,480,000	\$ 1,480,000	\$ 7,400,000	\$ 3,000,000	\$ 12,200,000	\$ 24,141,369
Ending Balance in General Fund	\$ 9,072,457	\$ 6,476,905	\$ 5,292,447	\$ 7,481,795	\$ 5,811,284	\$ 65,416	\$ 65,416	\$ 11,821,620	\$ 92,887,386	\$ 92,887,386

¹ The 2019 beginning balance as of 12/31/2018 was received from Airport Management.



GARBs

GARBs are a debt instrument secured by the LNAA’s annual revenues. The LNAA recently secured \$10 million in bonds (Series 2018 Bond) to fund a portion of Hangar 11. In addition, the funding plan assumes a future GARB issue in 2028. This analysis assumes there will be demand for the additional hangar space, however, if there is no demand for the additional hangar space, LNAA will reduce the scale of the project or postpone the project. The financing assumptions anticipated for the 2028 GARB issue will include a 25-year term with semi-annual payments based on 5 percent annual interest rate, 1.5 percent cost of issuance and capitalized interest for 2 years. The issue is scheduled for 2028, totaling \$19.4 million, to fund the two bulk hangars. **Table 8.4.5** shows the total debt service by issue and the debt service allocations for each phase of the Master Plan.

Total debt service is projected to increase from \$3.8 million in 2019 to \$4.4 million in 2020 because of the issuance of the Series 2020 PFC Bonds. In Phase 2, debt service is projected to increase to approximately \$5.5 million resulting from issuance of the Series 2028 GARBs. The maximum debt service requirement during the forecast period is \$6.0 million which is projected during Phase 3. Beginning in 2030, debt service decreases due to the Series 2015 Bonds debt service requirement, which declines from \$6.0 million to approximately \$4.2 million. In 2035, debt service decreases due to the maturity of the Series 2015 GARBs. Annual debt service is approximately \$2.7 million from 2035 through 2040.

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Table 8.4.5 Projected Debt Service

Debt Service	2019	2020	2021	2022	2023	Total Phase 1	Total Phase 2	Total Phase 3	Total 2019 - 2040
Series 2015 Bonds									
Principal	\$ 2,355,000	\$ 2,410,000	\$ 2,470,000	\$ 2,525,000	\$ 2,590,000	\$ 12,350,000	\$ 13,940,000	\$ 10,040,000	\$ 36,330,000
Interest	949,330	894,538	838,254	780,556	721,576	4,184,254	2,628,098	1,070,620	7,882,972
Total Series 2015 Debt Service	\$ 3,304,330	\$ 3,304,538	\$ 3,308,254	\$ 3,305,556	\$ 3,311,576	\$ 16,534,254	\$ 16,568,098	\$ 11,110,620	\$ 44,212,972
Series 2018 Bonds									
Principal	\$ -	\$ 165,000	\$ 175,000	\$ 185,000	\$ 190,000	\$ 715,000	\$ 1,125,000	\$ 4,215,000	\$ 6,055,000
Interest	524,000	524,000	515,354	506,184	248,738	2,318,276	2,321,058	4,049,734	8,689,068
Total Future Debt Service	\$ 524,000	\$ 689,000	\$ 690,354	\$ 691,184	\$ 438,738	\$ 3,033,276	\$ 3,446,058	\$ 8,264,734	\$ 14,744,068
Future Series 2020 GARBs (PFC)									
Principal	\$ -	\$ 109,223	\$ 114,753	\$ 120,562	\$ 126,666	\$ 471,204	\$ 736,259	\$ 2,721,333	\$ 3,928,797
Interest	-	342,534	337,004	331,195	325,091	1,335,824	1,522,526	2,699,752	5,558,102
Total Future Debt Service	\$ -	\$ 451,757	\$ 451,757	\$ 451,757	\$ 451,757	\$ 1,807,028	\$ 2,258,786	\$ 5,421,085	\$ 9,486,899
Future Series 2028 GARBs									
Principal	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,553,621	\$ 7,553,621
Interest	-	-	-	-	-	-	1,060,803	10,780,099	11,840,902
Total Future Debt Service	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,060,803	\$ 18,333,720	\$ 19,394,522
Total Debt Service									
Principal	\$ 2,355,000	\$ 2,684,223	\$ 2,759,753	\$ 2,830,562	\$ 2,906,666	\$ 13,536,204	\$ 15,801,259	\$ 24,529,954	\$ 53,867,418
Interest	1,473,330	1,761,072	1,690,612	1,617,935	1,295,405	7,838,354	7,532,485	18,600,205	33,971,044
Total Debt Service	\$ 3,828,330	\$ 4,445,295	\$ 4,450,365	\$ 4,448,497	\$ 4,202,071	\$ 21,374,558	\$ 23,333,744	\$ 43,130,159	\$ 87,838,462
Allocated Debt Service									
Airfield	\$ 16,990	\$ 16,605	\$ 16,192	\$ 15,721	\$ 15,299	\$ 80,807	\$ 76,544	\$ 51,331	\$ 208,683
Terminal	840,405	847,567	848,430	845,426	850,929	4,232,757	4,257,268	2,854,938	11,344,963
Other Cost Centers	2,970,935	3,129,366	3,133,986	3,135,593	2,884,086	15,253,966	16,741,146	34,802,805	66,797,917
PFCs	-	451,757	451,757	451,757	451,757	1,807,028	2,258,786	5,421,085	9,486,899
Total Debt Service	\$ 3,828,330	\$ 4,445,295	\$ 4,450,365	\$ 4,448,497	\$ 4,202,071	\$ 21,374,558	\$ 23,333,744	\$ 43,130,159	\$ 87,838,462



8.5 Airline Rates and Charges

The LNAA currently establishes its airline rates and charges annually through ordinance. The LNAA reviews and annually updates the underlying costs that are necessary for the operation of the airport. Using the methodology described in Article 3 and Exhibit C of the rates and charges resolution, the airlines are required to pay fees which include Landing Fees, Terminal Rental Fees, Per Turn Fees, and Apron Fees. The financial projections assume the LNAA will continue to set rates by ordinance using the same compensatory rate-making methodology.

The budgeted Airline rates for 2019 are: Landing Fee at \$4.72 per thousand pounds of landed weight, Blended Terminal Rental Rate at \$78.46 per square foot, Per Turn Fee at \$715.38 per airline operation, the Passenger Apron Fee at \$0.53 per thousand pounds of landed weight, and the Cargo Apron Fee at \$0.77 per thousand pounds of landed weight. The airlines also pay \$0.50 per passenger for security fees. The budgeted Cost per Enplanement (CPE) in 2019 is \$15.35.

The LNAA manages the operations of the Airport through the use of cost centers as listed below:

- Airfield
- Terminal
- Parking and Roadways
- Aviation Leased Areas
- Non-Aviation Leased Areas
- Aviation Services
- Ground Handling
- GA Airports
- Advertising

Landing Fees

The Landing Fee takes the sum of allocated Airfield Operating and Maintenance (O&M) Expenses, Debt Service Requirement, and Amortization of Capital Expenditures, minus 10 percent of O&M Expenses allocated to the Apron, 35 percent of security surcharges, and any other revenues attributed to the Airfield equals the Net Airfield Requirement. The Landing Fee calculates the rate (per thousand pounds of landed weight) by dividing the Net Airfield Requirement by the total airline landed weight.

Airline Terminal Rentals

The Terminal Rate takes the sum of allocated Terminal O&M Expenses, Debt Service Requirement, and Amortization of Capital Expenditures, minus Passenger Support Service revenues and 65 percent of security surcharges equals the Net Terminal Requirement. The Net Terminal Requirement is divided by the sum of the rentable space plus the administrative space to determine the Blended Terminal Rental Rate per square foot.

In addition to the Terminal Rental Rate, passenger airlines have the option to pay a Per Turn fee. The Per Turn Fee uses an annual Average Rental Fee per Gate calculated from the terminal requirement. The annual Average Rental Fee per Gate is then divided by the total turns (operations) per gate per day.

Apron Fee

The Apron requirement is determined by taking 10 percent of the Airfield O&M Expenses, Debt Service Requirement allocated to the Apron, and Amortization of Capital Expenditures allocated to the Apron minus



any Apron diversion revenues equals the Apron Net Requirement. The Apron Fee (per thousand pounds of landed weight) is determined by dividing the Apron Net Requirement by the total airline landed weight.

8.6 Operating and Maintenance Expenses

The major categories of O&M expenses are Salaries, Fringe Benefits, Contractual Services, Utilities, Maintenance Expenses, Office Expenses, Insurance, and Other. The largest expense category is Salaries, which represented 43.3 percent of expenses in 2018. Fringe Benefits, Equipment Rental, and Contractual Services are the next largest expense categories (13.5 percent, 10.3 percent and 9.4 percent of 2018 expenses, respectively).

O&M expenses increased from approximately \$13.9 million in 2014 to \$20.1 million in 2018 or an average of 7.5 percent per year. The majority of the change resulted from an increase in cargo activity that required LNAA to hire additional personnel and purchase equipment necessary to meet the needs of the expanded cargo activity.

With the exception of the additional expenses described, the growth in O&M at the Airport was normal for the industry. O&M expenses are projected to increase by an average annual rate of 2.9 percent during the forecast period.



Table 8.6.1 Historical Operating and Maintenance Expenses

Operating Expenses	Actual	Actual	Actual	Actual	Unaudited	CAGR 2014 - 2018
	2014	2015	2016	2017	Actual 2018	
Salaries	\$ 6,718,295	\$ 5,965,864	\$ 7,258,346	\$ 8,185,625	\$ 8,689,997	5.3%
Fringe Benefits	2,083,841	1,558,252	2,519,029	3,116,344	2,714,339	5.4%
Contractual Services	1,275,153	1,732,250	1,591,056	1,723,634	1,896,505	8.3%
Utilities	1,391,568	1,173,428	1,083,644	1,096,470	1,117,131	-4.3%
Maintenance Expenses	966,203	1,265,124	1,302,806	1,456,276	1,609,714	10.7%
Equipment Rental	68,371	422,251	1,133,872	1,469,685	2,062,181	97.6%
Office Expenses	284,081	242,461	256,928	343,510	387,857	6.4%
Insurance	358,147	386,495	385,747	386,237	438,851	4.1%
Other Expenses	812,789	1,157,373	848,118	1,041,116	1,168,615	7.5%
Total	\$ 13,958,448	\$ 13,903,498	\$ 16,379,546	\$ 18,818,897	\$ 20,085,190	7.5%



Table 8.6.2 Projected Operating and Maintenance Expenses

Operating Expenses	Budget		Projected				Projected	Projected	Total 2019 - 2040	CAGR 2019 - 2040
	2019	2020	2021	2022	2023	Total Phase 1	Total Phase 2	Total Phase 3		
Salaries	\$ 9,862,453	\$ 10,079,427	\$ 10,301,174	\$ 10,527,800	\$ 10,759,412	\$ 51,530,266	\$ 57,453,550	\$ 166,295,233	\$ 275,279,049	2.2%
Fringe Benefits	3,721,300	3,907,365	4,102,733	4,307,870	4,523,263	20,562,532	26,243,580	96,483,343	143,289,454	5.0%
Contractual Services	2,316,257	2,367,215	2,419,293	2,472,518	2,526,913	12,102,196	13,493,315	39,055,446	64,650,957	2.2%
Utilities	1,248,792	1,266,600	1,284,893	1,303,696	1,323,032	6,427,013	6,925,771	19,193,058	32,545,842	1.7%
Maintenance Expenses	1,501,579	1,557,730	1,616,272	1,677,316	1,740,977	8,093,875	9,760,234	32,803,454	50,657,563	3.9%
Equipment Rental	2,144,523	2,191,703	2,239,920	2,289,198	2,339,561	11,204,904	12,492,882	36,159,762	59,857,548	2.2%
Office Expenses	569,964	582,503	595,318	608,415	621,800	2,978,001	3,320,315	9,610,418	15,908,735	2.2%
Insurance	453,500	471,640	490,506	510,126	530,531	2,456,302	2,988,467	10,086,685	15,531,454	4.0%
Other Expenses	1,351,373	1,381,103	1,411,487	1,442,540	1,474,276	7,060,780	7,872,400	22,786,105	37,719,285	2.2%
Total	\$ 23,169,741	\$ 23,805,285	\$ 24,461,598	\$ 25,139,480	\$ 25,839,766	\$ 122,415,870	\$ 140,550,514	\$ 432,473,504	\$ 695,439,888	2.9%



- Salaries is the largest category of O&M expenses, which increased approximately \$2.0 million over the historical period. Salaries increased in 2016 and 2017 for additional staffing needed to support ground handling of the cargo carriers. In addition, there was a government mandate to increase salaries. Salary expenses increased by an average of 5.3 percent per year from \$6.7 million to \$8.7 million. Salaries are budgeted to continue to grow in 2019 as the LNAA continues to increase staffing to support the ground handling function. Salaries are projected to grow at the rate of inflation (2.2 percent) during the forecast period.
- Fringe Benefit costs increased during the historical period consistent with the salary increase needed to meet the demand for ground handling and other expanded activities at the airport. Fringe Benefits are projected to increase by an average annual rate of 5.0 percent during the forecast period.
- Contractual Services expenses include professional service fees, legal fees, audit and financial services fees, public relations fees, and advertising expenses. Contractual Services expenses increased significantly during the historical period due to outside consulting work necessary for environmental compliance and additional legal services needed for negotiating union contracts. Contractual Services expenses increased from \$1.3 million in 2014 to \$1.9 million in 2018. Contractual services are projected to increase at the rate of inflation during the forecast period.
- Utilities include Heating Gas and Oil, Electricity, Water, and Refuse Collection. Utility expenses decreased from \$1.4 million in 2014 to approximately \$1.1 million in 2018. Based on information provided by the Global Energy Institute (the EIA)¹, Electricity expenses are projected to grow by 1.0 percent per year during the forecast period. The EIA also states that Heating Oil prices are not expected to increase significantly, so those expenses are projected to grow by 1.0 percent per year during the forecast period. Water expenses are projected to grow by 6.0 percent per year based on information provided by the US Department of Energy². Utility expenses are projected to grow, in total, by the average annual rate of 1.7 percent during the forecast period.
- Maintenance expenses include Material, Supplies, and Maintenance Repair expenses. Maintenance expenses fluctuated during the historical period. The fluctuations occurred because of varying snowfall, which required differing levels of snow removal chemicals, and varying maintenance needs. Overall, Maintenance expenses increased by an average of 10.7 percent per year from approximately \$965,000 in 2014 to \$1.6 million in 2018. Total maintenance expenses are projected to increase by 3.9 percent per year from 2019 to 2040. Maintenance Repair expenses are projected to grow by 5.0 percent per year because of the aging terminal. Materials and Supplies are projected to increase at the rate of inflation.
- Equipment Rental expenses increased from \$68,000 in 2014 to approximately \$2.1 million in 2018. The large increases occurred in 2016 and 2018 because LNAA was adding additional equipment to meet the demand for ground handling services. Equipment Rental expenses are estimated to continue to grow in 2019 as the LNAA continues to require more equipment to meet the ground handling demand. Equipment Rental expenses are projected to grow by the rate of inflation during the forecast period.

¹ <https://www.globalenergyinstitute.org/eia%E2%80%99s-annual-energy-outlook-2018%E2%80%94-ups-downs>

² https://www.energy.gov/sites/prod/files/2017/10/f38/water_wastewater_escalation_rate_study.pdf



- Office expenses include telephone, printing, postage, and other office expenses. Office expenses grew by an average of 5.6 percent per year from \$284,000 in 2014 to approximately \$388,000 in 2018. Office expenses are projected to grow by an average annual growth rate of 2.2 percent during the forecast period.
- Insurance expenses increased from approximately \$358,000 in 2014 to \$439,000 in 2018 or by an average of 4.1 percent per year. Insurance Business America projects Insurance expenses to increase by 4.0 percent per year during the forecast period³. Insurance expenses are projected to increase at an average annual rate of 4 percent during the forecast period.
- Other expenses include Training expenses, Business and Travel-related expenses, Uniform expenses, Real Estate Taxes, Credit Card Fees, and Other Miscellaneous expenses. Other expenses increased by an average of 7.5 percent per year to approximately \$1.2 million in 2018. Other expenses are projected to grow at the rate of inflation during the forecast period.

8.7 Operating Revenues

The LNAA receives revenues from landing fees, space rentals in the passenger terminal, apron fees, concession fees, parking fees, and other non-airline revenues such as hangar rentals, building rentals, advertising and other miscellaneous non-airline revenues. The recent five-year historical trend for CYs 2014–2018 for the various revenue sources are discussed below, followed by the projections of revenue sources for 2019 and subsequent years. The 2018 revenues are based on the preliminary actuals prior to settlement. The 2019 revenues are based on LNAA’s approved budget. Because of the timing of the preliminary actuals and the 2019 Budget, the revenues are projected based on the 2018 preliminary actuals.

Table 8.7.1 presents a summary of the historical revenues from CYs 2014 to 2018. Total Operating Revenues increased from approximately \$17.5 million to \$29.1 million or by an average annual rate of 10.6 percent, which was primarily due to increased Ground Handling revenues primarily due to cargo airlines using the Airport for their ground handling operations. Atlas Air and Air Transport International continued to increase their presence at the Airport beginning in 2015. Both airlines use the Airport to deliver consumer goods from increased e-commerce in the region. The LNAA ground-handles all of Atlas Air and Air Transport International’s cargo flights and cargo represented approximately 89 percent of the ground-handled operations in 2018. **Table 8.7.2** presents a summary of the projected revenues from 2019 to 2040. The revenues are projected to increase at an average annual growth rate of 2.8 percent during the forecast period.

³ <https://www.insurancebusinessmag.com/us/news/breaking-news/insurance-industry-to-enjoy-growth-spike-in-2018-report-65640.aspx>



Table 8.7.1 Historical Revenues

Operating Revenues	Actual	Actual	Actual	Actual	Unaudited	CAGR
	2014	2015	2016	2017	Actual 2018	2014 - 2018
Airline Revenues						
Landing Fees	\$ 2,566,578	\$ 2,539,569	\$ 3,720,149	\$ 4,269,728	\$ 4,435,193	11.6%
Airline Terminal Rent	3,190,124	2,992,720	2,264,206	2,672,985	3,189,601	0.0%
Per Turn Fees	-	-	391,865	573,321	562,617	N/A
Apron Parking Fees	279,429	311,788	454,429	767,655	837,388	24.5%
Ground Handling Fees	216,369	585,334	3,279,460	6,100,551	6,105,125	95.0%
Security Surcharge	152,946	169,297	171,895	173,708	199,463	5.5%
Passenger Service Fees	177,400	258,217	282,123	350,362	402,741	17.8%
Total Airline Revenues	\$ 6,582,846	\$ 6,856,925	\$ 10,564,128	\$ 14,908,310	\$ 15,732,128	19.0%
Nonairline Revenues						
Parking & Roadway Revenues	\$ 4,295,629	\$ 4,543,297	\$ 4,419,854	\$ 4,443,155	\$ 5,134,713	3.6%
Rental Car Revenue	1,470,527	1,549,959	1,354,802	1,327,624	1,455,397	-0.2%
Concession Revenue	166,842	207,626	216,032	214,914	245,435	8.0%
Other Terminal Rentals	362,170	460,581	483,184	512,114	579,591	9.9%
Other Terminal Revenues	103,143	222,694	67,261	76,057	121,140	3.3%
Advertising	128,027	109,914	209,114	291,711	291,711	17.9%
Hangar and T-Hangar Rentals	2,161,183	2,197,167	2,272,446	2,428,039	2,538,686	3.3%
Other Aviation Leased Revenues	151,339	171,806	295,796	170,167	170,755	2.4%
Non-Aviation Leased Revenues	302,009	395,034	377,659	631,273	880,818	23.9%
Aviation Service Revenues	1,434,736	1,803,497	1,337,006	1,697,854	1,509,413	1.0%
GA Airport Revenues	381,980	489,418	444,748	318,321	411,924	1.5%
Other Revenues	3,625	4,168	-	-	-	-100.0%
Total Nonairline Revenues	\$ 10,961,210	\$ 12,155,161	\$ 11,477,902	\$ 12,111,229	\$ 13,339,583	4.0%
Total Revenues	\$ 17,544,056	\$ 19,012,086	\$ 22,042,030	\$ 27,019,539	\$ 29,071,711	10.6%

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Table 8.7.2 Projected Revenues

Operating Revenues	Budget		Projected				Total Phase 1	Projected Total Phase 2	Projected Total Phase 3	Total - 2040	2019 CAGR 2019 - 2040
	2019	2020	2021	2022	2023						
Airline Revenues											
Landing Fees	\$ 5,090,005	\$ 5,319,015	\$ 5,486,538	\$ 5,630,944	\$ 5,780,306	\$ 27,306,808	\$ 31,288,207	\$ 94,468,859	\$ 153,063,874	2.8%	
Airline Terminal Rent	2,648,736	2,967,065	3,029,529	3,145,366	3,205,644	14,996,340	17,234,132	46,375,923	78,606,395	2.1%	
Per Turn Fees	718,244	745,437	761,130	790,233	805,377	3,820,421	4,329,855	11,651,356	19,801,633	1.7%	
Apron Parking Fees	722,605	745,867	761,580	777,838	794,635	3,802,524	4,245,467	11,946,416	19,994,408	1.6%	
Ground Handling Fees	6,166,183	6,261,569	6,358,015	6,457,641	6,558,326	31,801,734	34,347,483	93,388,315	159,537,532	1.5%	
Security Surcharge	203,799	208,552	213,007	217,114	221,110	1,063,581	1,165,657	3,244,567	5,473,805	1.8%	
Passenger Service Fees	432,325	441,838	451,276	459,977	468,443	2,253,859	2,469,560	6,873,937	11,597,356	1.8%	
Total Airline Revenues	\$ 15,981,896	\$ 16,689,343	\$ 17,061,076	\$ 17,479,112	\$ 17,833,839	\$ 85,045,266	\$ 95,080,362	\$ 267,949,373	\$ 448,075,002	2.1%	
Nonairline Revenues											
Parking & Roadway Revenues	\$ 5,343,191	\$ 5,411,143	\$ 5,526,733	\$ 5,633,288	\$ 5,736,968	\$ 27,651,323	\$ 33,537,184	\$ 102,322,919	\$ 163,511,427	3.0%	
Rental Car Revenue	1,480,622	1,546,492	1,614,277	1,681,599	1,750,225	8,073,216	9,861,681	33,223,680	51,158,577	4.0%	
Concession Revenue	259,375	270,914	282,789	294,582	306,604	1,414,264	1,727,567	5,820,116	8,961,947	4.0%	
Other Terminal Rentals	441,656	490,541	500,869	520,020	529,985	2,483,071	2,849,299	7,667,277	12,999,646	2.1%	
Other Terminal Revenues	104,660	106,596	108,571	110,586	112,641	543,054	595,516	1,677,617	2,816,187	1.9%	
Advertising	291,983	321,181	328,042	334,367	340,521	1,616,094	1,795,175	4,996,809	8,408,079	2.1%	
Hangar and T-Hangar Rentals	2,815,805	3,278,519	3,504,428	3,737,005	3,834,487	17,170,243	20,590,609	89,651,740	127,412,592	5.3%	
Other Aviation Leased Revenues	156,811	160,261	163,787	176,455	180,337	837,651	962,973	3,465,454	5,266,078	3.5%	
Non-Aviation Leased Revenues	700,948	716,369	732,129	748,236	764,697	3,662,379	4,083,360	11,818,998	19,564,737	2.2%	
Aviation Service Revenues	1,031,219	1,047,807	1,064,416	1,080,642	1,097,181	5,321,266	5,740,045	15,804,756	26,866,067	1.6%	
GA Airport Revenues	370,686	381,123	391,824	402,797	413,440	1,959,869	2,235,804	6,609,591	10,805,265	2.5%	
Other Airfield Revenues	91,667	-	-	-	-	91,667	-	-	91,667	N/A	
Total Nonairline Revenues	\$ 13,088,623	\$ 13,730,946	\$ 14,217,864	\$ 14,719,577	\$ 15,067,087	\$ 70,732,430	\$ 83,979,214	\$ 283,058,958	\$ 437,770,602	3.5%	
Total Revenues	\$ 29,070,519	\$ 30,420,289	\$ 31,278,940	\$ 32,198,689	\$ 32,900,927	\$ 155,777,697	\$ 179,059,576	\$ 551,008,331	\$ 885,845,604	2.8%	



Airline Revenues

Airline revenues include Landing Fees, Terminal Rentals, Per Turn Fees, Apron Fees, Ground Handling Fees, Security Surcharge, and Passenger Service Fee revenues. Airline revenues increased by an average of 19.0 percent per year during the historical period from \$6.6 million in 2014 to \$15.7 million in 2018. Projected Airline revenues are presented on **Table 8.7.3**. Airline revenues are projected to increase from approximately \$16.0 million in 2019 to \$24.5 million in 2040 or by an average of 2.1 percent per year.

- Landing Fee revenues increased significantly during the historical period by approximately 11.6 percent. This significant increase was primarily a result of the additional airfield activity resulting from the increased cargo activity. The Airfield O&M increased during the historical period primarily due to the increase in cargo activity. As a result, Landing Fee revenues are projected to continue to grow during the forecast period from approximately \$5.1 million to \$9.0 million or an average annual rate of 2.8 percent. Additionally, the increases are expected to occur because of the projected increase in the landing fee rate due to anticipated increase in O&M, as discussed above, and increased amortization from local funds expected to fund Airfield projects. **Table 8.7.4** shows the Landing Fee calculation. The Landing Fee is projected to increase an average annual growth rate of 0.9 percent during the forecast period.
- A portion of Airline Terminal Rental revenue was reclassified as Per Turn fees, resulting in Airline Terminal Rental revenue decreasing from approximately \$3.2 million in 2014 to \$2.3 million in 2016. Terminal Rental revenue increased to \$3.2 million in 2018. However, total Terminal Rental fees (Terminal Rental revenue and Per Turn fees) increased from \$3.2 million in 2014 to approximately \$3.7 million in 2018. The increase is primarily due to increased operations from Allegiant Air. Per Turn fees have increased from approximately \$392,000 in 2016 to \$563,000 in 2018. Airline Terminal Rental revenue is projected to increase during the forecast period by an average of 2.1 percent per year. **Table 8.7.5** shows the Terminal Rental rate calculation. The Terminal Rental rate is projected to increase from \$78.46 in 2019 to an average rate of \$113.50 in Phase 3, which is primarily the result of increased O&M expenses during the forecast period. The Per Turn Fee is projected to increase by 1.6 percent per year from \$715.38 in 2019 to an average Per Turn Fee of \$1,120.90 in Phase 3 as shown on **Table 8.7.6**.
- Apron Parking Fee revenue increased by approximately 24.5 percent during the historical period from approximately \$279,000 in 2014 to \$837,000 in 2018. The expenses allocated to the apron area are equal to 10 percent of the Airfield expenses; therefore, the increase in Apron Fee revenues occurred because of the increased O&M allocated to the airfield and increased amortization allocated to the Apron. Apron Parking Fee revenue is projected to increase from \$722,000 in 2019 to an approximately \$1.0 million per year in Phase 3. The Apron Parking Fee calculation is shown on **Table 8.7.7**. The Passenger Apron Fee is projected to increase from \$0.53 in 2019 to an average rate of \$0.59 in Phase 3. Beginning in 2019, LNAA began charging the cargo carriers an apron surcharge. The surcharge is a result of the completion of the new cargo apron at the Airport. The amortization requirement from the new cargo apron is projected to be paid by 2038. The Cargo Apron Fee is projected to increase from \$0.77 in 2019 to an average of \$0.74 in Phase 3.
- Ground handling revenues increased significantly during the historical period because of the increased activity from cargo carriers as discussed above. Ground Handling revenues were approximately \$6.1 million in 2018. Ground Handling revenues grow at the same rate as cargo operations that currently are



the primary users of the LNAA's ground handling services. The revenues grow by an average of 1.5 percent per year during the forecast period.

- The Security surcharge is equal to \$0.50 per enplanement. The Security Surcharge increased by approximately 5.5 percent from \$153,000 in 2014 to approximately \$199,000 in 2018. The Security Surcharge grows by 1.8 percent that is equal to the rate of enplanements growth. There is no change to the expected Security Surcharge fee per passenger during the forecast period.
- Passenger Service fees are charged to the airlines for the services provided to the passengers at the Airport. Passenger Service fees increased from approximately \$177,000 in 2014 to \$403,000 in 2018. Passenger Service revenues are projected to grow at the rate of enplanements or by 1.8 percent per year during the forecast period.



Table 8.7.3 Projected Airline Revenues

Airline Revenues	Budget		Projected				Projected	Projected	Total - 2040	2018 CAGR 2018 - 2040
	2019	2020	2021	2022	2023	Total Phase 1	Total Phase 2	Total Phase 3		
Landing Fees	\$ 5,090,005	\$ 5,319,015	\$ 5,486,538	\$ 5,630,944	\$ 5,780,306	\$ 27,306,808	\$ 31,288,207	\$ 94,468,859	\$ 153,063,874	2.8%
Airline Terminal Rent	2,648,736	2,967,065	3,029,529	3,145,366	3,205,644	14,996,340	17,234,132	46,375,923	78,606,395	2.1%
Per Turn Fees	718,244	745,437	761,130	790,233	805,377	3,820,421	4,329,855	11,651,356	19,801,633	1.7%
Apron Parking Fees	722,605	745,867	761,580	777,838	794,635	3,802,524	4,245,467	11,946,416	19,994,408	1.6%
Ground Handling Fees	6,166,183	6,261,569	6,358,015	6,457,641	6,558,326	31,801,734	34,347,483	93,388,315	159,537,532	1.5%
Security Surcharge	203,799	208,552	213,007	217,114	221,110	1,063,581	1,165,657	3,244,567	5,473,805	1.8%
Passenger Service Fees	432,325	441,838	451,276	459,977	468,443	2,253,859	2,469,560	6,873,937	11,597,356	1.8%
Total Airline Revenues	\$ 15,981,896	\$ 16,689,343	\$ 17,061,076	\$ 17,479,112	\$ 17,833,839	\$ 85,045,266	\$ 95,080,362	\$ 267,949,373	\$ 448,075,002	2.1%



Table 8.7.4 Projected Landing Fee

Landing Fee	Budget		Projected			Total Phase 1	Projected	Projected
	2019	2020	2021	2022	2023		Total Phase 2	Total Phase 3
Direct Operating Expenses	\$ 4,891,450	\$ 5,025,622	\$ 5,164,179	\$ 5,307,289	\$ 5,455,129	\$25,843,669	\$ 29,672,141	\$ 91,301,086
Indirect Operating Expenses	634,736	653,868	671,895	690,515	709,750	3,360,764	3,860,550	11,878,902
O&M Reserve Requirement ¹²	64,308	25,551	26,097	26,955	27,846	170,757	153,861	496,246
Debt Service	16,990	16,605	16,192	15,721	15,299	80,807	76,544	51,331
Debt Service Coverage	4,248	4,151	4,048	3,930	3,825	20,202	19,136	12,833
Amortization of Capital Expenditures	204,139	240,963	269,048	269,048	269,048	1,252,245	1,301,742	2,248,345
Total Requirement	\$ 5,815,870	\$ 5,966,759	\$ 6,151,459	\$ 6,313,458	\$ 6,480,897	\$30,728,443	\$ 35,083,975	\$ 105,988,742
LESS: Apron Expenses ³	552,619	567,949	583,607	599,780	616,488	2,920,443	3,353,269	10,317,999
LESS: Apron O&M Reserve	6,431	2,555	2,610	2,695	2,785	17,076	15,386	49,625
LESS: Previous Year's Debt Service Coverage	3,819	4,248	4,151	4,048	3,930	20,196	19,133	16,661
LESS: World Fuel Annual Incentive	91,667	-	-	-	-	91,667	-	-
LESS: Security Surcharge (35%)	71,329	72,993	74,552	75,990	77,388	372,253	407,980	1,135,598
Net Requirement	\$ 5,090,005	\$ 5,319,015	\$ 5,486,538	\$ 5,630,944	\$ 5,780,306	\$27,306,808	\$ 31,288,207	\$ 94,468,859
Total Airline Landed Weight (000 lbs.) ⁴	1,078,013	1,185,240	1,201,579	1,218,228	1,235,195	5,918,256	6,442,209	17,503,368
Airline Landing Fee	\$ 4.72	\$ 4.49	\$ 4.57	\$ 4.62	\$ 4.68	\$ 4.61	\$ 4.86	\$ 5.40

¹ Represents 2 months (1/6) of the incremental change in O&M Expenses.

² 2019 O&M Reserve Requirement is based on the 2019 Budget.

³ Equals 10% of Direct and Indirect Airfield expenses.

⁴ 2019 landed weight is based on the 2019 Budget.



Table 8.7.5 Projected Terminal Rental Rate

Terminal Rental Rate	Budget		Projected				Total Phase 1	Projected	Projected
	2019	2020	2021	2022	2023	Total Phase 2		Total Phase 3	
Direct Operating Expenses	\$ 4,964,375	\$ 5,100,547	\$ 5,241,170	\$ 5,386,413	\$ 5,536,458	\$ 26,228,963	\$ 30,114,513	\$ 92,662,264	
Indirect Operating Expenses	964,056	991,700	1,019,041	1,047,281	1,076,454	5,098,533	5,855,168	18,016,334	
O&M Reserve Requirement ¹²	(3,759)	27,303	27,994	28,914	29,870	110,321	165,043	532,310	
Debt Service	840,405	847,567	848,430	845,426	850,929	4,232,757	4,257,268	2,854,938	
Debt Service Coverage	210,101	211,892	212,107	211,357	212,732	1,058,189	1,064,317	713,734	
Amortization of Capital Expenditures	456,899	999,949	999,949	1,129,454	1,102,878	4,689,128	5,768,181	10,660,231	
Total Requirement	\$ 7,432,078	\$ 8,178,958	\$ 8,348,691	\$ 8,648,845	\$ 8,809,319	\$ 41,417,892	\$ 47,224,489	\$ 125,439,811	
LESS: Previous Year's Debt Service Coverage	212,429	210,101	211,892	212,107	211,357	1,057,886	1,064,122	926,662	
LESS: Passenger Support Services ³	432,325	441,838	451,276	459,977	468,443	2,253,859	2,469,560	6,873,937	
LESS: Security Surcharge (65%)	132,469	135,559	138,455	141,124	143,721	691,328	757,677	2,108,968	
Net Requirement	\$ 6,654,855	\$ 7,391,460	\$ 7,547,068	\$ 7,835,637	\$ 7,985,799	\$ 37,414,820	\$ 42,933,130	\$ 115,530,244	
Total Rentable Space	75,812	75,812	75,812	75,812	75,812	379,060	379,060	909,744	
Total Administrative Space	9,009	9,009	9,009	9,009	9,009	45,047	45,047	108,112	
Total Rentable and Admin Space	84,821	84,821	84,821	84,821	84,821	424,107	424,107	1,017,857	
Blended Terminal Rental Rate	\$ 78.46	\$ 87.14	\$ 88.98	\$ 92.38	\$ 94.15	\$ 88.22	\$ 101.23	\$ 113.50	
Wiley Space Terminal Rental Rate	\$ 26.19	\$ 29.09	\$ 29.70	\$ 30.84	\$ 31.43	\$ 28.25	\$ 32.42	\$ 36.13	
Weighted Average Terminal Rental Rate	\$ 82.63	\$ 91.77	\$ 93.70	\$ 97.29	\$ 99.15	\$ 89.12	\$ 102.26	\$ 113.98	

¹ Represents 2 months (1/6) of the incremental change in O&M Expenses.

² 2019 O&M Reserve Requirement is based on the 2019 Budget.

³ Represents the charges associated with customer service in the Airport (ex. Curbside check in assistance).



Table 8.7.6 Projected Per Turn Fee

Per Turn Fee	Budget		Projected			Projected		Projected
	2019	2020	2021	2022	2023	Total Phase 1	Total Phase 2	Total Phase 3
Projected Terminal Fees	\$ 4,179,980	\$ 4,642,689	\$ 4,740,428	\$ 4,921,682	\$ 5,016,002	\$ 23,500,782	\$ 26,966,952	\$ 72,566,303
Projected Enplanements ¹	407,597	417,104	426,014	434,227	442,219	2,127,162	2,331,314	6,489,134
Annual Rental Cost per Enplanement	\$ 10.26	\$ 11.13	\$ 11.13	\$ 11.33	\$ 11.34	\$ 11.05	\$ 11.57	\$ 11.18
Projected Enplanements ¹	407,597	417,104	426,014	434,227	442,219	2,127,162	2,331,314	6,489,134
Gates in Use	7	7	8	8	8	38	40	102
Projected Enplanements per Gate	58,228	59,586	53,252	54,278	55,277	55,978	58,283	63,619
Average Rental Fee per Gate	\$ 597,140	\$ 663,241	\$ 592,554	\$ 615,210	\$ 627,000	\$ 618,442	\$ 674,174	\$ 711,434
Total Passenger Operations ²	5,843	4,679	4,735	4,782	4,825	24,863	24,731	64,740
Days	365	365	365	365	365	1,825	1,825	4,380
Passenger Operations per Day	16.01	12.82	12.97	13.10	13.22	13.62	13.55	14.78
Total Gates in Use	7	7	8	8	8	38	40	102
Passenger Operations per Day per Gate	2.29	1.83	1.62	1.64	1.65	0.36	0.34	0.14
Days	365	365	365	365	365	1,825	1,825	4,380
Total Turns per Gate per Year	835	668	592	598	603	654	618	635
Projected Gate Cost per Turn	\$ 715.38	\$ 992.18	\$ 1,001.18	\$ 1,029.29	\$ 1,039.66	\$ 945.19	\$ 1,090.42	\$ 1,120.90

¹ 2019 enplanements are based on the 2019 Budget.

² 2019 passenger operations are based on the 2019 Budget.



Table 8.7.7 Projected Apron Fee

Apron Fee	Budget		Projected				Projected	Projected
	2019	2020	2021	2022	2023	Total Phase 1	Total Phase 2	Total Phase 3
Direct Operating Expenses	\$ 552,619	\$ 567,949	\$ 583,607	\$ 599,780	\$ 616,488	\$ 2,920,443	\$ 3,353,269	\$ 10,317,999
O&M Reserve Requirement ¹²	6,431	2,555	2,610	2,695	2,785	17,076	15,386	49,625
Amortization	7,619	19,426	19,426	19,426	19,426	85,322	97,128	19,426
Total Requirement	\$ 566,668	\$ 589,930	\$ 605,643	\$ 621,902	\$ 638,698	\$ 3,022,841	\$ 3,465,784	\$ 10,387,049
LESS: Non-Signatory Paid Premiums/Diversions	-	-	-	-	-	-	-	-
Net Requirement	\$ 566,668	\$ 589,930	\$ 605,643	\$ 621,902	\$ 638,698	\$ 3,022,841	\$ 3,465,784	\$ 10,387,049
Total Landed Weight ³	1,078,013	1,185,240	1,201,579	1,218,228	1,235,195	5,918,256	6,931,567	17,503,368
Annual Passenger Carrier Apron Fee	\$ 0.53	\$ 0.50	\$ 0.50	\$ 0.51	\$ 0.52	\$ 0.51	\$ 0.50	\$ 0.59
<u>Cargo Carrier Surcharge</u>								
Amortization for Cargo Apron	\$ 155,937	\$ 155,937	\$ 155,937	\$ 155,937	\$ 155,937	\$ 779,684	\$ 779,684	\$ 1,559,367
Cargo Landed Weight ³	648,476	726,646	736,663	746,870	757,273	3,615,929	3,949,585	10,730,953
Cargo Carrier Surcharge	\$ 0.24	\$ 0.21	\$ 0.21	\$ 0.21	\$ 0.21	\$ 0.22	\$ 0.20	\$ 0.15
Annual Cargo Carrier Apron Fee	\$ 0.77	\$ 0.71	\$ 0.72	\$ 0.72	\$ 0.72	\$ 0.73	\$ 0.70	\$ 0.74

¹ Represents 2 months (1/6) of the incremental change in O&M Expenses.

² 2019 O&M Reserve Requirement is based on the 2019 Budget.

³ 2019 landed weight is based on the 2019 Budget.



Non-Airline Revenues

Non-airline revenues include all revenues from Airport operations not paid by commercial service or cargo airlines. Non-airline revenues include public parking, rental car, concession, building rental, advertising, hangar rental, aviation services, and other miscellaneous revenues. As seen on **Table 8.7.1**, non-airline revenues increased by an average of 4.0 percent per year during the historical period from \$10.9 million in 2014 to \$13.3 million in 2018. **Table 8.7.8** presents the projected revenues and non-airline revenues are projected to increase from \$13.1 million in 2019 by an average of 3.5 percent per year during the forecast period.



Table 8.7.8 Projected Non-Airline Revenues

Non-Airline Revenues	Budget		Projected				Projected	Projected	Total - 2040	2018 CAGR 2018 - 2040
	2019	2020	2021	2022	2023	Total Phase 1	Total Phase 2	Total Phase 3		
Parking & Roadway Revenues	\$ 5,343,191	\$ 5,411,143	\$ 5,526,733	\$ 5,633,288	\$ 5,736,968	\$ 27,651,323	\$ 33,537,184	\$ 102,322,919	\$ 163,511,427	3.0%
Rental Car Revenue	1,480,622	1,546,492	1,614,277	1,681,599	1,750,225	8,073,216	9,861,681	33,223,680	51,158,577	4.0%
Concession Revenue	259,375	270,914	282,789	294,582	306,604	1,414,264	1,727,567	5,820,116	8,961,947	4.0%
Other Terminal Rentals	441,656	490,541	500,869	520,020	529,985	2,483,071	2,849,299	7,667,277	12,999,646	2.1%
Other Terminal Revenues	104,660	106,596	108,571	110,586	112,641	543,054	595,516	1,677,617	2,816,187	1.9%
Advertising	291,983	321,181	328,042	334,367	340,521	1,616,094	1,795,175	4,996,809	8,408,079	2.1%
Hangar and T-Hangar Rentals	2,815,805	3,278,519	3,504,428	3,737,005	3,834,487	17,170,243	20,590,609	89,651,740	127,412,592	5.3%
Other Aviation Leased Revenues	156,811	160,261	163,787	176,455	180,337	837,651	962,973	3,465,454	5,266,078	3.5%
Non-Aviation Leased Revenues	700,948	716,369	732,129	748,236	764,697	3,662,379	4,083,360	11,818,998	19,564,737	2.2%
Aviation Service Revenues	1,031,219	1,047,807	1,064,416	1,080,642	1,097,181	5,321,266	5,740,045	15,804,756	26,866,067	1.6%
GA Airport Revenues	370,686	381,123	391,824	402,797	413,440	1,959,869	2,235,804	6,609,591	10,805,265	2.5%
Other Airfield Revenues	91,667	-	-	-	-	91,667	-	-	91,667	N/A
Total Nonairline Revenues	\$ 13,088,623	\$ 13,730,946	\$ 14,217,864	\$ 14,719,577	\$ 15,067,087	\$ 70,732,430	\$ 83,979,214	\$ 283,058,958	\$ 437,770,602	3.5%



- Parking and roadways revenues grew during the historical period by an average of 3.6 percent per year to \$5.1 million. There were no parking rate increases included in the historical period. Transportation network companies (TNCs) began operating at the Airport in 2016; however, there is insufficient data to determine the full impact that TNCs will have on parking revenues. The projected parking revenues are based on \$2 rate increases in all lots in 2025 and 2035 and the growth in enplanements during the forecast period. Parking revenues are projected to increase by an average annual rate of 3.0 percent during the forecast period.
- Rental car revenue fluctuated during the historical period from approximately \$1.5 million in 2014 to \$1.5 million in 2015 followed by a decline to \$1.3 million in 2017. Rental car revenue then increased in 2018 to approximately \$1.5 million. The recent decreases are partially a result of the LNA allowing TNCs to have access to the Airport. Car rental revenue is projected to grow at the rate of enplanement growth plus inflation during the forecast period. Rental car revenues are projected to increase from approximately \$1.5 million in 2019 and grow by an average annual rate of 4.0 percent during the forecast period.
- Concession revenues increased from approximately \$167,000 in 2014 to \$245,000 in 2018 or approximately 8.0 percent during the period. During this time, enplanements increased at the Airport by about 11.3 percent. Concessions revenue is tied to the increase in passengers and price. Concession revenues are projected to increase at a rate equal to enplanement growth plus inflation, or by an average of 3.8 percent per year. Concession revenues are projected to grow from \$259,000 in 2019 and grow at an average annual rate of 4.0 percent during the forecast period.
- Other terminal rental revenues are revenues the LNA receives for renting space in the terminal to non-airline tenants. Other terminal rental revenues increased from \$362,000 in 2014 to \$579,000 in 2018. The other terminal rentals are set at the same rate as the airline terminal rental space and are projected to grow at the same rate as the airline terminal rental rate or by an average of 2.1 percent. Other terminal rental revenue is projected to grow from approximately \$2,000 in 2019 at an average annual rate of 2.1 percent during the forecast period.
- Other terminal revenues include miscellaneous terminal revenues and utility fees. Other terminal revenues fluctuated during the historical period. Other terminal revenues increased from approximately \$103,000 in 2014 to \$223,000 in 2015, and then subsequently declined to \$76,000 by 2017 before increasing again to \$121,000. Other terminal revenues grow by an average of 3.3 percent per year. The miscellaneous terminal revenues are grown by inflation and the utility fees grow by 1.0 percent per year, which is equal to the utility expenses. Other terminal revenues are projected to grow an average annual rate of 1.9 percent during the forecast period.
- Advertising revenues increased by an average of 17.9 percent per year during the historical period from \$128,000 in 2014 to \$292,000 in 2018. The majority of the increase occurred in 2016 due to the LNA taking over the advertising when the contract with Clear Channel ended. Since the LNA is no longer sharing revenue with Clear Channel, advertising revenues are projected to increase by 10.0 percent per year until 2020 and then by rate of enplanements for each year thereafter. Advertising revenues are projected to increase at an average annual growth rate of 2.1 percent during the forecast period.



- Hangar and T-Hangar rentals increased from \$2.2 million in 2014 to \$2.5 million in 2018. The existing hangar and T-Hangar projections account for the growth rates described in the hangar leases. In addition, LNAA management provided the projected rent for the new Hangar 11. Two bulk hangars are expected to be completed in 2029, which are expected to be funded with GARBs. It is estimated that each of the new hangars will receive rental revenue equal to Hangar 11. Hangar and T-Hangar revenues are projected to increase at an average annual rate of 5.3 percent during the forecast period.
- Other Aviation Leased revenues increased by an average of 2.4 percent per year during the historical period. Other Aviation Leased revenues include air cargo building rents, land rents, ramp fees, and gate card fees. In 2018, other Aviation Leased revenues were approximately \$171,000. Other Aviation Leased revenues are projected to increase by an average of 3.5 percent per year during the forecast period. The projected increase includes an assumption of increased revenue from Project 1-3 – Expand Cargo Existing Area.
- Non-Aviation Leased revenues include building rentals and land rentals. These revenues increased by an average of 23.9 percent per year. The significant increase occurred because of additional building rental revenues. Non-Aviation Leased revenues increased from \$302,000 in 2014 to \$881,000 in 2018. Non-Aviation Leased revenues are projected to increase by the rate of inflation during the forecast period.
- Aviation Service revenues include fuel sales, into-plane fees, non-commercial landing fees, and hangar and ramp rentals. Aviation Service revenues grew from \$1.4 million in 2014 to \$1.5 million in 2018 or by an average of 1.0 percent per year. Aviation Service revenues are projected to grow by a combination of the projected operations growth rate and inflation, which is an average of 1.6 percent per year.
- General Aviation (GA) Airport revenues are revenues from the operation of Queen City Airport and Braden Airpark. GA Airport revenues increased by an average of 1.5 percent from 2014 to 2018. GA Airport revenues increased from approximately \$382,000 in 2014 to \$412,000 in 2018. GA Airport revenues increase during the forecast period at the average annual rate of 2.5 percent during the forecast period.

8.8 Projected Airline Cost per Enplaned Passenger

Airline cost per enplaned passenger (CPE) is an important metric that airports and airlines use to assess the cost of operating at a particular airport. Included on **Table 8.8.1**, CPE is calculated by dividing the passenger airline revenues (passenger landing fee revenues, terminal rental revenue, per turn fees, apron rental fees, passenger support service fees, and security surcharges) by the total enplanements. The CPE is projected to increase from \$15.35 in the 2019 Budget to an average CPE of \$16.75 during Phase 3 or by an average of 0.4 percent per year, based on the calculations presented in this chapter.

The CPE is growing less than the projected inflation, which is favorable when compared with other airports. The projected growth in the CPE appears to be reasonable when compared, given the 20-year duration and projected expense associated with the Master Plan.



Table 8.8.1 Projected Airline Cost per Enplanement

Cost per Enplanement	Budget		Projected				Projected	Projected	CAGR 2019 - 2040
	2019	2020	2021	2022	2023	Total Phase 1	Total Phase 2	Total Phase 3	
Passenger Airline Landing Fees	\$ 2,028,124	\$ 2,058,037	\$ 2,122,855	\$ 2,178,729	\$ 2,236,520	\$10,624,264	\$12,106,055	\$ 36,551,957	2.5%
Airline Terminal Rents	2,648,736	2,967,065	3,029,529	3,145,366	3,205,644	14,996,340	17,234,132	46,375,923	2.0%
Per Turn Fees	718,244	745,437	761,130	790,233	805,377	3,820,421	4,329,855	11,651,356	1.7%
Passenger Airline Apron Revenue	225,790	228,256	234,336	240,627	247,126	1,176,134	1,340,983	4,018,964	2.5%
Passenger Support Services	432,325	441,838	451,276	459,977	468,443	2,253,859	2,469,560	6,873,937	1.7%
Security Surcharge	203,799	208,552	213,007	217,114	221,110	1,063,581	1,165,657	3,244,567	1.7%
Total Airline Revenues	\$ 6,257,017	\$ 6,649,186	\$ 6,812,134	\$ 7,032,045	\$ 7,184,218	\$33,934,599	\$38,646,243	\$ 108,716,705	2.1%
Enplanements ¹	407,597	417,104	426,014	434,227	442,219	2,127,162	2,331,314	6,489,134	1.7%
Airline Cost Per Enplanement	\$ 15.35	\$ 15.94	\$ 15.99	\$ 16.19	\$ 16.25	\$ 15.95	\$ 16.58	\$ 16.75	0.4%

¹ 2019 enplanements are based on the 2019 Budget.



8.9 Projected Net Revenue Requirement

The issuance of additional bonds will require an annual Net Revenue Requirement of at least 1.57 times debt service. Based on the projections discussed in this chapter, the Net Revenue Requirement is expected to remain above 1.57 throughout the forecast period, as seen on **Table 8.9.1**.



Table 8.9.1 Projected Net Revenue Requirement

Net Revenue Requirement	Budget	Projected					Projected	Projected
	2019	2020	2021	2022	2023	Total Phase 1	Total Phase 2	Total Phase 3
Operating Revenue	\$29,070,519	\$30,420,289	\$31,278,940	\$32,198,689	\$32,900,927	\$ 155,869,364	\$ 179,059,576	\$ 551,008,331
O&M Expenses	23,169,741	23,805,285	24,461,598	25,139,480	25,839,766	122,415,870	140,550,514	432,473,504
Net Operating Income	\$ 5,900,778	\$ 6,615,004	\$ 6,817,342	\$ 7,059,209	\$ 7,061,161	\$ 33,453,493	\$ 38,509,062	\$ 118,534,827
Plus:								
Coverage from Landing Fee	4,248	4,151	4,048	3,930	3,825	20,202	19,136	12,833
Coverage from Apron	-	-	-	-	-	-	-	-
Coverage from Terminal	210,101	211,892	212,107	211,357	212,732	1,058,189	1,064,317	713,734
PFCs applied to Debt Service	-	451,757	451,757	451,757	451,757	1,807,028	2,258,786	5,421,085
Transfers from General Fund ¹	-	-	-	-	-	-	-	-
Net Revenue	\$ 6,115,127	\$ 7,282,804	\$ 7,485,254	\$ 7,726,253	\$ 7,729,475	\$ 36,338,913	\$ 41,851,301	\$ 124,682,479
Debt Service	\$ 3,828,330	\$ 4,445,295	\$ 4,450,365	\$ 4,448,497	\$ 4,202,071	\$ 21,374,558	\$ 23,333,744	\$ 43,130,159
Net Revenue Requirement ²	1.60	1.64	1.68	1.74	1.84	1.70	1.79	2.89

¹ The General Bond Resolution allows the Authority to make transfers from the general fund to meet the Net Revenue Requirement.

² The Series 2015 Bonds require a Net Revenue Requirement of at least 1.57 times debt service.



8.10 Sensitivity Analysis

Given the size and complexity of funding the Master Plan projects as currently presented, Airport management requested the development of an analysis to demonstrate the impact that a change in a material assumption would have on the Airport’s ability to fund the Master Plan. **Table 8.10.1** includes the results of a hypothetical scenario whereby the Airport experiences no growth in enplanements throughout the forecast period. Such a scenario would affect multiple funding sources assumed in the financing plan such as PFCs, AIP, and local funds. As shown on **Table 8.10.1**, the alternative enplanement forecast does not produce enough PFCs to fund the masterplan projects with the assumed timing and project costs. This would require Airport management to continue its efforts to identify new funding sources, contain expenditures and manage project costs. Without direct efforts from Airport management this scenario will result in the Airport not meeting the Net Revenue Requirement in Phase 2 without a transfer from available funds in the General Fund. The resulting impact to the funding plan could be mitigated by Airport management’s efforts to contain costs and complete only those capital projects that are deemed critical to the operation of the Airport.



Table 8.10.1 Key Financial Projections for Traffic Sensitivity Analysis

	Budget		Projected				Projected	Projected
	2019	2020	2021	2022	2023	Total Phase 1	Total Phase 2	Total Phase 3
Base Case Forecast								
Net Revenues	\$6,115,127	\$7,282,804	\$ 7,485,254	\$ 7,726,253	\$ 7,729,475	\$36,338,913	\$41,851,301	\$ 124,682,479
Net Revenue Requirement	1.60	1.64	1.68	1.74	1.84	1.70	1.79	2.89
Landing Fee Rate	\$ 4.72	\$ 4.49	\$ 4.57	\$ 4.62	\$ 4.68	\$ 4.61	\$ 4.86	\$ 5.40
Terminal Rental Rate	\$ 78.46	\$ 87.14	\$ 88.98	\$ 92.38	\$ 94.15	\$ 88.22	\$ 101.23	\$ 113.50
Airline CPE	\$ 15.35	\$ 15.94	\$ 15.99	\$ 16.19	\$ 16.25	\$ 15.95	\$ 16.58	\$ 16.75
General Fund Balance	\$6,476,905	\$5,292,447	\$ 7,481,795	\$ 5,811,284	\$ 65,416	\$ 65,416	\$11,821,620	\$ 92,887,386
PFC Fund Balance	\$ 313,130	\$ 212,459	\$ 150,903	\$ 125,404	\$ 134,990	\$ 134,990	\$ 1,085,216	\$ 4,629,928
Alternate Forecast ¹								
Net Revenues	\$6,115,127	\$7,001,198	\$ 7,035,339	\$ 7,119,421	\$ 6,968,251	\$34,239,336	\$35,161,225	\$ 85,789,502
Net Revenue Requirement	1.60	1.57	1.58	1.60	1.66	1.60	1.51	1.99
Landing Fee Rate	\$ 4.72	\$ 4.49	\$ 4.57	\$ 4.63	\$ 4.69	\$ 4.62	\$ 4.87	\$ 5.41
Terminal Rental Rate	\$ 78.46	\$ 87.32	\$ 89.30	\$ 92.84	\$ 94.74	\$ 88.53	\$ 102.22	\$ 115.70
Airline CPE	\$ 15.35	\$ 16.64	\$ 17.03	\$ 17.57	\$ 17.93	\$ 16.90	\$ 19.25	\$ 22.44
General Fund Balance	\$6,476,905	\$5,010,841	\$ 6,750,275	\$ 4,472,932	\$(2,034,160)	\$(2,034,160)	\$ 3,031,969	\$ 45,204,757
PFC Fund Balance	\$ 272,753	\$ 92,281	\$ (88,191)	\$ (268,663)	\$ (449,135)	\$ (449,135)	\$(1,073,949)	\$ (5,001,113)

¹ Assumes no enplanement growth for commercial carriers throughout the forecast period.



8.11 Summary

The following points highlight the findings of the financial analysis contained in this section:

- The proposed capital plan includes \$556.4 million in project costs. The projects included in the funding plan will allow the Airport to improve its infrastructure and enhance the Airport's ability to serve its community.
- The funding plan is designed to maximize the receipt of FAA and PFC funding for eligible projects while minimizing the impact of the master plan projects on airline costs. The capital plan will be funded with AIP Grants, PFCs, PennDOT Grants, 3rd Party Financing, and GARBs.
 - If any of the funding sources are not available, the LNAA will adjust the timing of the affected projects or eliminate the project(s) from the capital plan.
- The projected Net Revenue Requirement is projected to remain above the 1.57 minimum requirement, with a minimum of 1.57 in 2028. The Net Revenue Requirement ranges from 1.57 to 4.09.
- The CPE is projected to grow by 0.4 percent per year during the forecast period.
- It is projected the Airport CPE will remain in the upper range of costs when compared with peer airports. Although the CPE is in the upper range, the financing plan as structured will allow Airport Management to monitor the rate of growth in the CPE by phasing and prioritizing the start-up of Master Plan projects as necessary.