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***Eugene F. Kranz Toledo Express
Airport Master Plan Update
Financial Feasibility and
Implementation Plan***



DATE

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Eugene F. Kranz Toledo Express Airport

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CHAPTER 5

FINANCIAL FEASIBILITY AND
IMPLEMENTATION PLAN

5.1 INTRODUCTION

The preceding chapters of this Master Plan identified an aviation demand forecast and the future facilities needed to meet that forecast demand, as well as those needed to sustainably maintain/improve airport safety. This chapter identifies a financially feasible Capital Improvement Plan (CIP) to implement Master Plan recommendations over the planning period. The comprehensive CIP will be used to guide future airport development and position TOL to meet the established vision for ultimate facility development. The future investments identified in the Port Authority's CIP for TOL involve many interrelated components that must be identified and implemented in a coordinated manner.

This chapter begins by identifying potential sources for capital project funding. Consideration is given to historical airport funding trends and Federal Aviation Administration (FAA) funding guidance to establish achievable future funding expectations. This allows for realistic CIP sequencing with rough order-of-magnitude (ROM) costs based on reasonable design and construction estimations. The process results in a practical, fundable, and implementable plan that the Port Authority can use to guide project timing and budgeting for facility improvements to meet future development needs.

In summary, this chapter:

- » Presents the approved 5-year CIP.
- » Outlines the processes involved in project implementation.
- » Describes historical and projected airport project funding sources, along with relevant financial figures.
- » Presents the updated 20-year CIP, including ROM cost estimates for all projects.
- » Provides a phasing plan for the 5-year, 10-year, and 20-year planning horizons, incorporating detailed project descriptions and the underlying rationale.
- » Evaluates the feasibility of funding the updated 20-year CIP.
- » Assesses the impact of the updated 20-year CIP on airport finances.

5.1.1 Implementation Process

Enhancing airport infrastructure involves a detailed process that often begins years before construction starts. At TOL, the initial stages have already commenced to progress improvements to the passenger terminal, signifying a dedicated effort to upgrade facilities. The major implementation steps for a complex, federally funded Airport Improvement Program (AIP) project are shown in **Figure 5-1**, illustrating that work should commence a minimum of five years prior to the actual need for the facility. This lead-in time is usually very helpful for coordination with the FAA and/or Ohio Department of Transportation (ODOT) regarding funding, environmental entitlement, and other regulatory compliance requirements, as well as time to complete site or facility design, and time to complete facility construction.

FIGURE 5-1

TYPICAL STEPS TO COMPLETE AN AIRPORT PROJECT

Typical Steps Four Years Prior to Construction

- ☐ Identify the project in the approved Airport Layout Plan and consult with FAA Airports District Office (ADO)
- ☐ Submit 5-year CIP (*by February 1st*)
- ☐ Validate project justification and funding eligibility and identify funding sources
- ☐ Determine probable level of environmental review (*planning may need to begin much earlier if EIS required*)
- ☐ Determine if ALP and/or Exhibit 'A' need updating
- ☐ Identify required flight procedure modifications and need for aeronautical survey
- ☐ Coordinate with local officials and airport users on project plans

Typical Steps Three Years Prior to Construction

- ☐ Refine project scope, cost estimates, and funding sources
- ☐ Determine if a Benefit/Cost Analysis or if FAA Letter of Intent (LOI) are necessary
- ☐ Determine if a reimbursable agreement is necessary for affected navigational aids (NAVAIDs)
- ☐ Initiate aeronautical survey as required
- ☐ Begin purchase or assembly of all necessary land for the project

Typical Steps Two Years Prior to Construction

- ☐ Refine project scope
- ☐ Solicit professional design services
- ☐ Prepare preliminary design, site planning, and cost estimates
- ☐ Initiate reimbursable agreements and coordinate any NAVAID requirements with the FAA
- ☐ Complete aeronautical survey and submit requests for new/modified flight procedures with the FAA
- ☐ Submit a request for airspace review of projects under non-rulemaking authority (NRA)
- ☐ Begin Benefit/Cost Analysis if determined to be necessary (*projects seeking over \$5M discretionary*)
- ☐ Initiate environmental assessment or categorical exclusion documentation
- ☐ Coordinate with local officials and airport users on refined project scope and schedule

Typical Steps One Year Prior to Construction

- ☐ Complete airspace study
- ☐ Complete project scope of work
- ☐ Complete environmental documentation
- ☐ Complete 90 percent design, plans, and specifications after FAA environmental findings are made
- ☐ Refine and update cost estimates
- ☐ Execute reimbursable agreements to support NAVAIDs, if relevant
- ☐ Prepare and coordinate Construction Safety Phasing Plan
- ☐ Initiate Safety Management Systems (SMS) process
- ☐ Secure all necessary local funding
- ☐ Secure environmental and other necessary permits

(Figure continued next page)

- ☐ Submit Benefit/Cost Analysis *(by March 1st)*
- ☐ Coordinate Safety Risk Management Panel with FAA-ATO or FAA-ARP, as necessary
- ☐ Finalize construction bidding, grant application, and grant acceptance schedules

Year of Construction

- ☐ Complete 100 percent design, plans, and specifications
- ☐ Complete FAA environmental documentation for current fiscal year *(by January 15th)*
- ☐ Advertise and secure bids according to ADO schedule
- ☐ Submit grant applications *(by May 1st, if discretionary funds expected bid by April 1st)*
- ☐ Accept federal grants *(within 30 days of offer)*
- ☐ Coordinate with local officials and airport users on the progress and schedule
- ☐ Issue notice-to-proceed
- ☐ Monitor environmental mitigation requirements during construction
- ☐ Provide weekly inspection reports

After Construction

- ☐ Submit final report and provide final test results *(within 60 days of construction end)*
- ☐ Close any accepted federal grants *(within 90 days of project acceptance)*
- ☐ Monitor environmental mitigation measures
- ☐ Submit final As-Built ALP and Exhibit 'A'

Source: Federal Aviation Administration - "Steps to AIP Funding for Your Airport Project: Quick Reference Guide", March 2016

5.1.2 NEPA Implementation Process

The environmental entitlement for projects within each development phase, which involves obtaining necessary approvals and permits in compliance with applicable federal rules and regulations, will need to be completed in advance of the design and construction to allow for project completion. FAA Order 1050.1F, *Policies and Procedures for Considering Environmental Impacts*, and 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airports*, require the evaluation of airport development projects as they relate to specific environmental impact categories.

Environmental Assessments (EAs) and Environmental Impact Statements (EISs) represent the most rigorous forms of environmental analysis, requiring a comprehensive assessment of impact categories in accordance with FAA Orders 1050.1F and 5050.4B. In contrast, Categorical Exclusions (CATEXs) demand evaluations of exceptional circumstances to confirm that projects, which usually have minimal environmental impacts, do not warrant more extensive analysis in EAs or EISs.

The only environmental documentation listed in the updated 20-year CIP, as detailed in Section 5.4, **Airport Development Phasing and Funding Plan**, includes two CATEXs linked to the proposed approach upgrades for Runway 7-25 and terminal improvements, respectively. Other near-term projects are similarly expected to require CATEX documentation, based on the assumption that none of these projects would give rise to extraordinary circumstances as defined in FAA Order 1050.1F, but the preparation of this documentation is included in the respective design effort of each development project. Furthermore, projects appearing in the mid-term to long-term horizon of the 20-year CIP are currently

expected to fit within the requirements of CATEX documentation and no EAs or EISs are currently slated for the identified projects in the updated CIP.

However, if any project were to cause an extraordinary circumstance (such as impacts to more than 0.5 acres of wetlands, threatened or endangered species, or known cultural resources), it would necessitate an EA. It's important to highlight that the final determination regarding the type of NEPA document required for each project, as well as its scope, rests with the FAA and would not occur until a refined scope for proposed improvements is developed as the need for the project draws nearer.

5.2 APPROVED 5-YEAR CAPITAL IMPROVEMENT PLAN

The Port Authority maintains a 5-year CIP for projects at TOL aimed at expanding, maintaining, and improving airport infrastructure, which is kept on file with ODOT. **Table 5-1** depicts the most current 5-year CIP for fiscal year (FY) 2023 to FY 2026, current as of May 4, 2023.¹ The Port Authority's 5-year CIP for TOL amounts to approximately \$41.1 million.

Funding for airport projects is coordinated with the FAA over a rolling 3-year period; however, updates to an airport's CIP can be submitted at any time for consideration. The current approved CIP focuses on various enhancements such as general aviation ramp improvements, air cargo apron rehabilitation, runway lighting upgrades, terminal improvements, passenger boarding bridge replacement, and runway approach upgrades, among others.

An essential outcome of any master plan is the revision of an airport's 20-year CIP. The updated CIP must incorporate and maintain the near-term programmed projects and funding plans, leveraging the existing mechanisms for implementation and funding. Consequently, while not all, the majority of projects listed in the approved CIP, as presented in **Table 5-1**, are also included in the updated CIP outlined in Section 5.4, **Airport Development Phasing and Funding Plan**.

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¹ The latest version of the CIP has undergone updates in planning sessions with airport staff and the FAA since the initiation of the master planning process. These revisions deviate from the information presented in **Table 1-5** (Approved 5-Year Capital Improvement Program (2022-2026)), as outlined in Chapter 1, **Inventory of Existing Conditions**.

TABLE 5-1
APPROVED 5-YEAR CAPITAL IMPROVEMENT PLAN (2023-2027)

Year	Project Description	Federal AIP Entitlement	Bipartisan Infrastructure Law	Federal AIP Discretionary	Total Federal Funding	Local Funds	State Matching	Passenger Facility Charge	Total Funding/Cost
5-Year FAA Approved CIP									
2023-1	Rehabilitate Apron (West GA, 27,760 Square Yards) - Construct	\$0	\$0	\$1,726,856	\$1,726,856	\$680,000	\$95,936	\$95,936	\$2,598,728
2023-2	Improve Airport Drainage/Erosion Control (16,450 Square Feet) - Construct	\$117,676	\$0	\$421,937	\$539,613	\$0	\$29,979	\$29,979	\$599,570
2023-3	Shift or Reconfigure Taxiway B11 (200' x 50') - Construct	\$1,670,322	\$0	\$0	\$1,670,322	\$0	\$92,796	\$92,796	\$1,855,914
2023-4	Acquire Snow Removal Equipment (2 pieces)	\$0	\$1,440,000	\$0	\$1,440,000	\$0	\$80,000	\$80,000	\$1,600,000
2024-1	Terminal Improvements - Categorical Exclusion (Reimbursement)	\$22,500	\$0	\$0	\$22,500	\$0	\$1,250	\$1,250	\$25,000
2024-2	Terminal Improvements - Design	\$1,080,000	\$400,000	\$0	\$1,480,000	\$400,000	\$60,000	\$60,000	\$2,000,000
2025-1	Terminal Improvements Phase 1 - Construct	\$1,697,500	\$4,185,760	\$11,802,500	\$17,685,760	\$5,000,000	\$750,000	\$1,564,240	\$25,000,000
2026-1	Terminal Improvements Phase 2 - Construct	\$1,212,890	\$1,506,440	\$12,287,110	\$15,006,440	\$5,000,000	\$750,000	\$4,243,560	\$25,000,000
2026-2	Paved Perimeter Road - Design	\$187,110	\$0	\$0	\$187,110	\$0	\$10,395	\$10,395	\$207,900
2027-1	Terminal Passenger Screening Upgrades - Design/Construct	\$990,000	\$0	\$0	\$990,000	\$0	\$55,000	\$55,000	\$1,100,000
2027-2	Paved Perimeter Road - Construct	\$410,000	\$0	\$3,793,540	\$4,203,540	\$0	\$233,530	\$233,530	\$4,670,600
2027-3	Rehabilitate Runway Edge Lighting (LED) - Design/Construct	\$0	\$0	\$1,278,000	\$1,278,000	\$0	\$71,000	\$71,000	\$1,420,000
Total		\$7,387,998	\$7,532,200	\$31,309,943	\$46,230,141	\$11,080,000	\$2,229,886	\$6,537,686	\$66,077,712

Note: Project details after 2027 beyond horizon of previous planning studies.

Source: Airport Records, 2022; Prepared by RS&H, 2022

5.3 AIRPORT FUNDING OUTLOOK

Generally, airports are unable to meet all capital development funding needs from internal funding sources. Federal, state, local, and private funding often combine with airport funds and bond proceeds (supported by airport revenues and/or municipal support) to generate the funds required to undertake capital improvement projects. Federal funding sources, notably AIP grants, can be subject to modifications by Congress or oversight by other entities controlling those funds. At the state level, many states contribute grant funding to support local airport programs. Locally, funding sources often include airport sponsor funds, bond proceeds driven by airport revenues or municipal support, and occasionally, private contributions.

To create a funding plan that effectively addresses TOL's capital development needs, it is crucial to assess and integrate evaluations of available funds from each source, taking into account historical allocations or awards for capital projects at TOL. Moreover, since project eligibility criteria can differ across funding sources, adopting a diverse funding approach is instrumental in successfully financing capital improvement endeavors. Planning project funding requires careful consideration of available funds from different sources and their specific eligibility criteria. The provided analysis aids in identifying potential funding sources and evaluating the eligibility of each project element for various programs or funding sources. The analysis conducted during the development of this Master Plan has identified projects intended to enhance the existing 5-year CIP. This expansion extends the capital project and funding plan to cover the 20-year planning horizon. The subsequent subsections outline the key external funding sources intended to support the preferred development.

5.3.1 Federal Funding Outlook

The primary federal sources of funding available to the Port Authority for projects at TOL are grants from the FAA's AIP, the 2021 Bipartisan Infrastructure Law (BIL), and revenues from non-committed Passenger Facility Charges (PFCs). By receiving federal funding for capital improvement projects, the Port Authority has an obligation to adhere to federal grant assurance requirements. These assurances obligate the Port Authority to comply with applicable federal law and guidance under the Code of Federal Regulations (CFR) Title 14, FAA Advisory Circulars, FAA Orders, and FAA Memos.

5.3.1.1 Airport Improvement Program

Federal funding is accessible to airports through the AIP based on the airport category designated in the National Plan of Integrated Airport Systems (NPIAS) and the priority of the improvement as determined within the national priority ranking system. In the NPIAS classification, TOL is categorized as a primary non-hub airport. This classification identifies commercial service airports with annual passenger boardings ranging between 2,500 and a maximum of 10,000.²

Primary non-hub airports receive entitlement funds that must be used within three fiscal years immediately following the year the funds were originally allocated. Based on its NPIAS categorization and percent share of national passenger levels, recent TOL entitlement funding has been approximately \$1.4 million per fiscal year.

² Airport Categories | Federal Aviation Administration. Accessed: https://www.faa.gov/airports/planning_capacity/categories, January 2024

Likewise, discretionary grants are offered through the AIP depending on the availability of funds and the FAA's assessment of need and priority ranking. Discretionary funding is based on a project's ranking in the National Priority List, as determined by the process found in FAA Order 5100.39A, *Airports Capital Improvement Plan*. Since 2012, TOL has obtained discretionary funding for several projects. Noteworthy allocations include \$5.7 million in 2012 for the rehabilitation of Runway 7-25, \$5.6 million in 2014 earmarked for a section of Taxiway B rehabilitation, and a significant \$8.9 million granted in 2020 for taxiway rehabilitation and construction.

5.3.1.2 Bipartisan Infrastructure Law

In November 2021, the Bipartisan Infrastructure Law (BIL) was signed by the President of the United States that included a reserve for airport development to be invested in various projects, including runways, taxiways, safety, and sustainability initiatives, as well as terminal, airport-transit connections, and roadway projects. The distribution of these funds is overseen by the FAA's Office of Airports (ARP). These investments are intended to enhance and improve the overall capabilities and facilities of airports across the country.³ The BIL included three funding allocations for airports, two of which are available to the Port Authority for development at TOL, the Airport Improvement Grant and The Airport Terminal Program. The third funding allocation was reserved for FAA internal use for the rehabilitation and development of FAA-owned facilities. BIL funding sources are available for the five-year duration of federal fiscal years 2022 through 2026.

5.3.1.2.1 Airport Improvement Grant

The Airport Improvement Grant, or AIG, allocates \$15 billion (or \$3 billion per year from 2022-2026) across all airports currently within the NPIAS, employing a comparable process and methodology to the AIP based on airport classification and passenger activity levels. Following the receipt of \$1,585,831 of BIL funds for FY 2022 and \$1,579,369 for FY 2023 for projects at TOL, the Port Authority anticipates receiving similar amounts annually for FY 2024 through 2026.⁴ These funds will supplement the AIP entitlement and other potential discretionary grants received by the Port Authority, adopting the same use and eligibility parameters as AIP funding, but with added eligibility for Passenger Facility Charge (detailed in subsection 5.3.1.3, **Passenger Facility Charges**) use. The funds allocated through the BIL will remain available for obligation until the conclusion of the fourth fiscal year following their distribution. If any funds remain unobligated by the fifth fiscal year, they are recovered and repurposed for competitive grants. This ensures that the allocated funds are effectively used for infrastructure projects within the specified time frame, and any unused funds are redirected towards other deserving projects through a competitive grant process.

5.3.1.2.2 Airport Terminal Program

The Airport Terminal Program (ATP) allocates \$5 billion (or \$1 billion per year from 2022-2026) in supplemental discretionary funding opportunities reserved specifically for the use in development and/or improvement of airport passenger terminal facilities. The ATP requires a unique application process and maintains the same eligibility use scenarios as AIP, but with a greater federal share of project costs based on airport classification. The window for applications in each fiscal year begins with a Notice of Funding Opportunity (NOFO) and at the time of this writing, FY2022 and FY2023 ATP grants had been awarded (totals of \$969M and \$967M, respectively) and the FY2024 applications were in review.

³ Bipartisan Infrastructure Law - Airport Infrastructure. Accessed: <https://www.faa.gov/bil/airport-infrastructure>, January 2024

⁴ Bipartisan Infrastructure Law Airport Infrastructure Grant Funding Amounts. Accessed: <https://www.faa.gov/general/bipartisan-infrastructure-law-airport-infrastructure-grant-funding-amounts>, January 2024

The terminal improvements program at TOL qualifies for both AIP and ATP funding. However, as the ATP is a near-term, competitive program of discretionary funding, the Port Authority continues to represent the terminal improvements funded through the AIP (and AIG), only to be adjusted if parallel ATP applications are successful during federal fiscal years 2024, 2025, and/or 2026.

5.3.1.3 Passenger Facility Charges

In addition to AIP funds, TOL is authorized by the FAA to collect PFCs to support eligible projects that enhance safety, security, or capacity; reduce noise; or increase air carrier competition. Under the PFC program, TOL has the authorization to collect \$4.50 per enplaned passenger and per flight segment. For a one-way trip, a maximum of two PFCs can be charged, and for a round trip, up to four PFCs can be charged, with a total cap of \$18.00. These fees are collected by air carriers during ticket sales and are subsequently remitted to the airport, with a handling fee of \$0.11 per collected PFC deducted.

Since 1993, TOL has submitted and received approval for eight PFC applications, granting a collection authority of nearly \$19 million for approved projects. From 2010 onwards, PFC collections have averaged about \$375,700 annually, peaking at over \$591,350 in 2018 when enplanements reached approximately 123,000. Due to changes in air service, particularly the structural shifts in the airline industry following the pressures of the COVID-19 pandemic, PFC collections at TOL currently only derive from enplaned passengers using Allegiant routes to leisure destinations in Florida and Arizona. As of September 2023, the airport has collected nearly the entire sum approved by existing PFC applications, and new applications are in progress to ensure the airport's authority to collect does not expire.

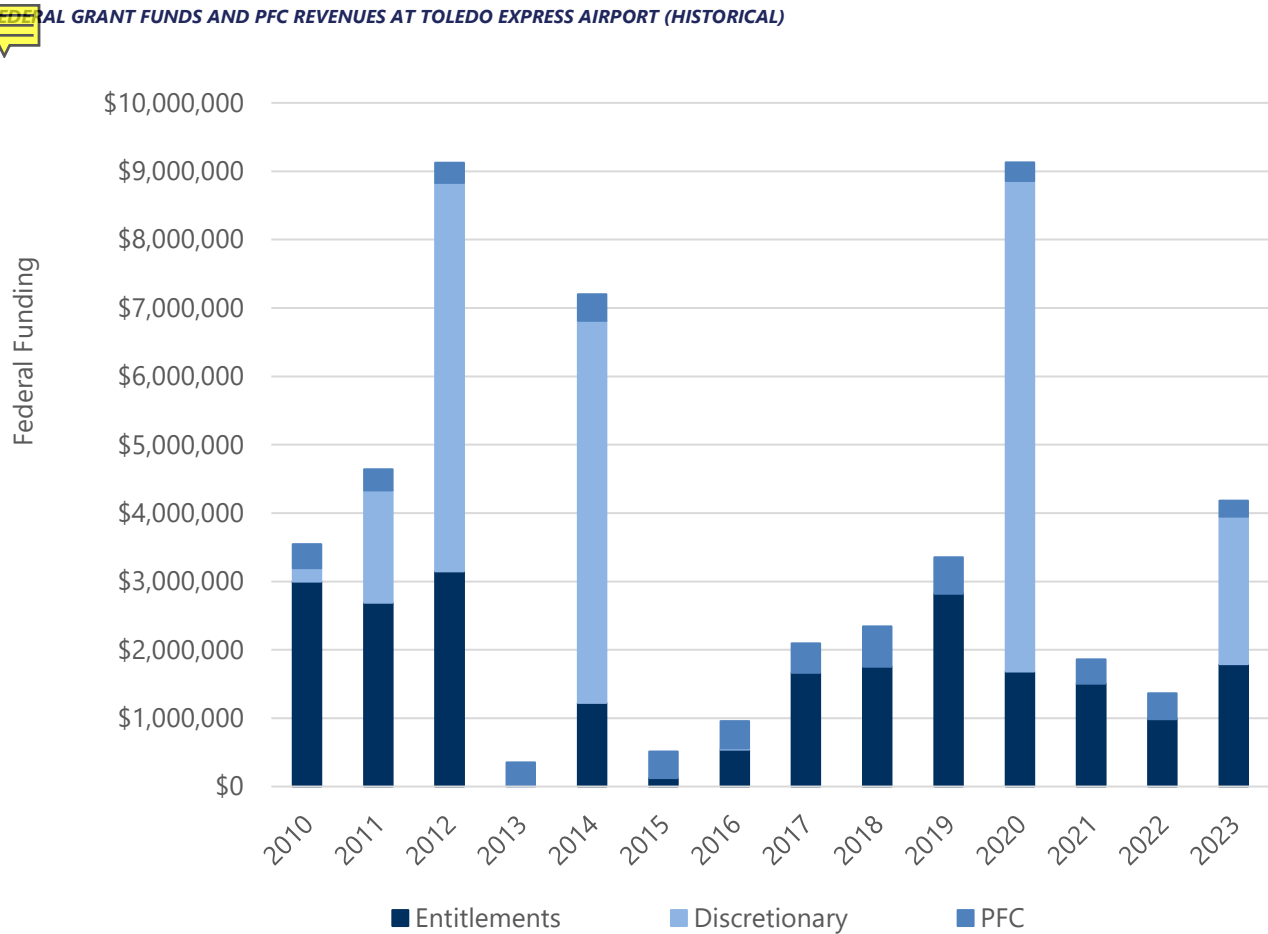
Figure 5-2 shows the historical federal grant funds and PFC revenues programmed by Toledo Express Airport for use on capital projects from combined AIP discretionary, entitlement, PFCs, and BIL funds.

As shown, historical entitlement funding at TOL fluctuated based upon enplanement levels and the short-term carryover of entitlement funds based upon project needs. During the 2010-2015 period, the Airport utilized about \$10 million in entitlements funds, which fluctuated annually based upon enplanements and capital project needs.

BIL funds received by TOL are not shown because they have not been programmed or encumbered for capital projects through 2023.

FIGURE 5-2

FEDERAL GRANT FUNDS AND PFC REVENUES AT TOLEDO EXPRESS AIRPORT (HISTORICAL)



Source: FAA; RS&H Analysis, 2023

5.3.2 State Funding Outlook

The State of Ohio provides funding to commercial service airports like TOL through one primary grant program administered by the Office of Aviation, matching local contributions to AIP-eligible components of federal grant projects. All publicly owned, public use commercial service airports in the State of Ohio that provide ODOT with minimum standard assurances⁵ are eligible for this program, summarized as follows:

Matching Grants (Commercial Service Airports)

This program covers up to 5 percent of the non-federal share for AIP projects at publicly owned commercial service airports in the state. Only project elements that are eligible for AIP funding may participate in the ODOT Matching Grant Program for Commercial Service Airports that has historically been limited to \$500,000 annually, split among seven commercial service airports in Ohio. As the state fiscal year (July-June) runs one quarter ahead of the federal fiscal year (October-September), the application process for these matching grants

⁵ The public shall be afforded use of the airport and its facilities as fully and equally as all other parties; The grant funds will be used for improvements on publicly owned property or on property for which an ODOT approved easement has been obtained; and the applicant agrees to maintain all airport-owned or controlled Part 77 surfaces free of obstructions that can be feasibly removed.

occurs in the state fiscal year after the associated year of federal grant award. The remainder of costs not covered under or eligible for federal and state matching sources for airport development projects must be covered by the Sponsor.

5.3.3 Local Funding Outlook

At TOL, the primary operating revenues financing airport operations mainly stem from rental income via non-airline tenant leases and fuel flowage fees. Additional revenue sources encompass user terminal area fees, charges, and landing fees. Grant funding for capital projects serves as the largest non-operating revenue for the airport, followed by PFC revenues and other non-operating sources.

Concerning expenses, the most significant annual operating expense is the depreciation of airport assets, which differs from other listed expenses as it is not a cash expense. Other notable operating expenses include costs for repairs and maintenance, utilities, contractual services, and personnel compensation and benefits.

Table 5-2 shows recent historical revenues and expenses, and a conservative projection of operating financial performance that might be anticipated at TOL under the ULCC Base forecast scenario with no substantial changes to recent operating conditions. For the recent historical period (2019-2022), TOL operating revenues have increased at an average rate of 5 percent annually while operating expenses have been reduced by 5 percent. The impacts of the global COVID-19 pandemic at TOL were a decrease of nearly 18 percent in 2020 revenues; however, operating expenses were managed carefully and reduced by nearly 24 percent to mitigate the decline in revenues.

The 2023 budget for TOL indicates that operating conditions have normalized and revenue from operating activities are anticipated to be near 2022 levels. At the same time, the TOL expenses are anticipated to continue cost savings such that net operating income may surpass \$785,000 for 2023. For the near-term, if operating activities continue at the same or similar levels cumulative operating income of about \$3.5 million may be achievable for near-term period under the ULCC Base forecast scenario. Notably, this projection of operating financial performance does not include depreciation because it is not a cash expense

TABLE 5-2
AIRPORT REVENUES AND EXPENSES - ULCC BASE AND LOW GROWTH (HISTORICAL AND PROJECTED)

	Historical				Budget
	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Operating Revenues					
Rental under Property Leases	\$0	\$0	\$0	\$0	\$0
Airport Landing Area	\$440,892	\$403,599	\$853,426	\$1,062,420	\$983,667
Airport Terminal Area	\$1,433,996	\$919,637	\$1,406,801	\$1,192,626	\$1,342,302
Other Rental and Fee Income	\$2,592,073	\$2,320,083	\$2,246,397	\$2,923,917	\$2,858,284
Other Income	\$92,866	\$100,253	\$74,325	\$35,755	\$60,000
Total Operating Revenues	\$4,559,827	\$3,743,572	\$4,580,949	\$5,214,718	\$5,244,253
Operating Expenses					
Personnel	\$2,990,248	\$2,358,302	\$751,709	\$1,667,131	\$1,606,119
Marketing	\$264,017	\$153,122	\$274,455	\$351,383	\$268,510
Contractual Services	\$719,021	\$504,192	\$712,023	\$817,833	\$447,730
Utilities	\$558,531	\$494,654	\$512,183	\$557,123	\$507,982
Repairs and Maintenance	\$1,584,963	\$1,172,177	\$1,506,628	\$1,822,122	\$1,422,238
Other Operating Expenses	\$69,001	\$35,255	\$29,693	\$29,959	\$206,200
Total Operating Expenses	\$6,185,781	\$4,717,702	\$3,786,691	\$5,245,551	\$4,458,779
Operating Income (without depreciation) (loss)	(\$1,625,954)	(\$974,130)	\$794,258	(\$30,833)	\$785,474

	Projected									
	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033
Operating Revenues										
Rental under Property Leases	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Airport Landing Area	\$996,300	\$1,009,100	\$1,022,100	\$1,035,200	\$1,038,600	\$1,042,000	\$1,045,400	\$1,048,800	\$1,052,300	\$1,055,800
Airport Terminal Area	\$1,328,200	\$1,314,300	\$1,300,600	\$1,286,900	\$1,309,100	\$1,331,700	\$1,354,600	\$1,377,900	\$1,401,700	\$1,415,100
Other Rental and Fee Income	\$2,895,000	\$2,932,200	\$2,969,900	\$3,008,100	\$3,018,000	\$3,027,800	\$3,037,700	\$3,047,700	\$3,057,600	\$3,067,800
Other Income	\$60,800	\$61,600	\$62,300	\$63,100	\$63,400	\$63,600	\$63,800	\$64,000	\$64,200	\$64,400
Total Operating Revenues	\$5,280,300	\$5,317,200	\$5,354,900	\$5,393,300	\$5,429,100	\$5,465,100	\$5,501,500	\$5,538,400	\$5,575,800	\$5,603,100
Operating Expenses										
Personnel	\$1,358,900	\$1,376,400	\$1,394,100	\$1,412,000	\$1,416,600	\$1,421,200	\$1,425,900	\$1,430,500	\$1,435,200	\$1,440,000
Marketing	\$301,900	\$305,800	\$309,800	\$313,700	\$314,800	\$315,800	\$316,800	\$317,900	\$318,900	\$320,000
Contractual Services	\$667,700	\$676,300	\$684,900	\$693,800	\$696,000	\$698,300	\$700,600	\$702,900	\$705,200	\$707,500
Utilities	\$532,500	\$539,400	\$546,300	\$553,300	\$555,100	\$556,900	\$558,800	\$560,600	\$562,400	\$564,300
Repairs and Maintenance	\$1,604,000	\$1,624,600	\$1,645,500	\$1,666,700	\$1,672,100	\$1,677,600	\$1,683,100	\$1,688,600	\$1,694,100	\$1,699,800
Other Operating Expenses	\$89,800	\$90,900	\$92,100	\$93,300	\$93,600	\$93,900	\$94,200	\$94,500	\$94,800	\$95,100
Total Operating Expenses	\$4,554,800	\$4,613,400	\$4,672,700	\$4,732,800	\$4,748,200	\$4,763,700	\$4,779,400	\$4,795,000	\$4,810,600	\$4,826,700
Operating Income (without depreciation) (loss)	\$725,500	\$703,800	\$682,200	\$660,500	\$680,900	\$701,400	\$722,100	\$743,400	\$765,200	\$776,400

(Figure continued next page)

	Projected									
	FY 2034	FY 2035	FY 2036	FY 2037	FY 2038	FY 2039	FY 2040	FY 2041	FY 2042	FY 2043
Operating Revenues										
Rental under Property Leases	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Airport Landing Area	\$1,059,300	\$1,062,800	\$1,066,400	\$1,069,900	\$1,073,600	\$1,077,300	\$1,081,000	\$1,084,700	\$1,088,400	\$1,092,100
Airport Terminal Area	\$1,428,600	\$1,442,200	\$1,456,000	\$1,469,900	\$1,478,900	\$1,487,900	\$1,497,000	\$1,506,200	\$1,515,400	\$1,524,600
Other Rental and Fee Income	\$3,078,100	\$3,088,300	\$3,098,600	\$3,109,000	\$3,119,600	\$3,130,300	\$3,141,000	\$3,151,700	\$3,162,500	\$3,173,300
Other Income	\$64,600	\$64,800	\$65,000	\$65,300	\$65,500	\$65,700	\$65,900	\$66,200	\$66,400	\$66,600
Total Operating Revenues	\$5,630,600	\$5,658,100	\$5,686,000	\$5,714,100	\$5,737,600	\$5,761,200	\$5,784,900	\$5,808,800	\$5,832,700	\$5,856,600
Operating Expenses										
Personnel	\$1,444,800	\$1,449,600	\$1,454,500	\$1,459,300	\$1,464,300	\$1,469,300	\$1,474,400	\$1,479,400	\$1,484,400	\$1,489,500
Marketing	\$321,000	\$322,100	\$323,200	\$324,300	\$325,400	\$326,500	\$327,600	\$328,700	\$329,800	\$331,000
Contractual Services	\$709,900	\$712,300	\$714,600	\$717,000	\$719,500	\$721,900	\$724,400	\$726,900	\$729,400	\$731,800
Utilities	\$566,200	\$568,100	\$570,000	\$571,900	\$573,800	\$575,800	\$577,800	\$579,700	\$581,700	\$583,700
Repairs and Maintenance	\$1,705,400	\$1,711,100	\$1,716,800	\$1,722,600	\$1,728,500	\$1,734,400	\$1,740,300	\$1,746,200	\$1,752,200	\$1,758,200
Other Operating Expenses	\$95,400	\$95,700	\$96,100	\$96,400	\$96,700	\$97,100	\$97,400	\$97,700	\$98,000	\$98,400
Total Operating Expenses	\$4,842,700	\$4,858,900	\$4,875,200	\$4,891,500	\$4,908,200	\$4,925,000	\$4,941,900	\$4,958,600	\$4,975,500	\$4,992,600
Operating Income (without depreciation) (loss)	\$787,900	\$799,200	\$810,800	\$822,600	\$829,400	\$836,200	\$843,000	\$850,200	\$857,200	\$864,000

Source: Airport Financial Records; RS&H Analysis, 2023

Notes: Projected data rounded.

5.3.3.1 Customer Facility Charges

Collections from Customer Facility Charges (CFC) constitute another stream of airport revenue primarily designated for funding rental car facilities, associated infrastructure, and their operational expenses. CFCs are charges paid by rental car customers based on the number of contract days for a rented vehicle. Unlike PFCs, CFCs don't require approval from the FAA or any other Federal agency. Instead, CFCs are typically negotiated and implemented contractually between the airport and rental car companies, following specific terms outlining fund usage. CFC revenue is usually allocated for specific purposes, chiefly supporting rental car facilities and associated operational costs at the airport, including rental car-related capital expenses such as debt service, as well as rental car-related operating and maintenance expenses.

Between FY 2010 and FY 2022, TOL has gathered CFCs at a rate of \$2.00 per customer transaction per rental day. The total CFC collections for this period amount to approximately \$3 million, averaging around \$237,300 annually.

5.3.4 Issuance of Debt

A review of existing debt obligations of the Port Authority for capital projects and facility improvements at the TOL indicates outstanding debt of approximately \$7,087,207 for FY 2022. This debt is a combination of revenue bonds and notes, as follows:

- » Refunding Air Hub Project, Series 2012A
- » Ohio Development Services Agency (ODSA) Loan
- » Ohio Department of Transportation, State Infrastructure Bank (SIB) Loan
- » Various Energy Special Improvement District (ESID) loans

Table 5-3 presents a summary of recent historical outstanding debt and annual debt service, and the Debt Coverage Ratio (DCR) for the Airport for the planning period. As shown, TOL's DCR is projected to improve from Budget FY 2023 through the period as the Authority pays down outstanding debt.

The DCR is a metric of net revenues to annual debt service, which assesses debt capacity and the ability of operating income to cover debt service payments. DCR is an integral metric used by lenders to evaluate creditworthiness. Typically, for long-term debt secured by revenues or PFCs, the standard minimum threshold accepted by lending institutions is 1.25. The DCR for the Authority at TOL will meet this threshold by 2028.

TABLE 5-3
AIRPORT DEBT COVERAGE RATIO (HISTORICAL AND PROJECTED)

	Historical				Budget
	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Category					
Operating Revenues	\$4,559,827	\$3,743,572	\$4,580,949	\$5,214,718	\$5,244,253
Net Pledged Revenues	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$6,185,781	\$4,717,702	\$3,786,691	\$5,245,551	\$4,458,779
Net Revenues	(\$1,625,954)	(\$974,130)	\$794,258	(\$30,833)	\$785,474
Total Outstanding Debt	\$9,453,107	\$8,874,980	\$7,998,501	\$7,078,206	\$6,116,514
Annual Debt Service	\$1,155,975	\$1,275,118	\$1,284,479	\$1,284,778	\$1,280,389
Debt Coverage Ratio (DCR) (negative)	(1.41)	(0.76)	0.62	(0.02)	0.61

	Projected									
	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033
Category										
Operating Revenues	\$5,280,355	\$5,317,248	\$5,354,941	\$5,393,439	\$5,429,032	\$5,465,051	\$5,501,502	\$5,538,393	\$5,575,729	\$5,603,058
Net Pledged Revenues	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$4,554,820	\$4,613,375	\$4,672,684	\$4,732,755	\$4,748,228	\$4,763,751	\$4,779,326	\$4,794,951	\$4,810,627	\$4,826,685
Net Revenues	\$725,535	\$703,873	\$682,257	\$660,684	\$680,805	\$701,300	\$722,177	\$743,442	\$765,102	\$776,373
Total Outstanding Debt	\$5,109,960	\$4,044,124	\$2,000,059	\$1,532,081	\$1,189,632	\$1,050,103	\$905,579	\$755,869	\$600,777	\$487,669
Annual Debt Service	\$1,277,231	\$1,279,937	\$1,264,575	\$539,799	\$394,625	\$177,583	\$177,583	\$177,583	\$177,583	\$130,290
Debt Coverage Ratio (DCR) (negative)	0.57	0.55	0.54	1.22	1.73	3.95	4.07	4.19	4.31	5.96

	Projected									
	FY 2034	FY 2035	FY 2036	FY 2037	FY 2038	FY 2039	FY 2040	FY 2041	FY 2042	FY 2043
Category										
Operating Revenues	\$5,630,562	\$5,658,241	\$5,686,098	\$5,714,133	\$5,737,623	\$5,761,217	\$5,784,916	\$5,808,720	\$5,832,631	\$5,856,648
Net Pledged Revenues	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$4,842,796	\$4,858,961	\$4,875,180	\$4,891,453	\$4,908,175	\$4,924,954	\$4,941,790	\$4,958,684	\$4,975,636	\$4,992,645
Net Revenues	\$787,766	\$799,280	\$810,918	\$822,680	\$829,448	\$836,263	\$843,125	\$850,036	\$856,995	\$864,002
Total Outstanding Debt	\$371,142	\$251,093	\$127,416	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Annual Debt Service	\$130,290	\$130,290	\$130,290	\$130,290	\$0	\$0	\$0	\$0	\$0	\$0
Debt Coverage Ratio (DCR) (negative)	6.05	6.13	6.22	6.31	0	0	0	0	0	0

Source: Airport Financial Records; RS&H Analysis, 2023

5.3.4.1 Cash Flow Analysis

Utilizing the projection of operating revenues presented in **Table 5-2**, cash flow for TOL was projected for the 20-year planning period. Cash flow traces the movement of cash and cash equivalents for a period, and includes:

- » Cash flows from operating activities such as payments from customers to service providers, payroll, and benefits,
- » Cash flows from noncapital financing activities such as grants funds received and disbursed,
- » Cash flows from capital and related financing activities including grants funds received, capital construction, debt payments, and PFCs, and
- » Cash flows from investing activities such as interest and purchase of securities.

Error! Reference source not found. provides an overview of historical and projected cash flow for TOL based on 2019 and 2020 levels. Net TOL cash flow should be sufficient to produce roughly \$2.3 million for the near-term (2024-2028) period. This does not include cash flows from capital grants that might be anticipated for the CIP or cash payments to implement the program.

TABLE 5-4
CASH FLOW ANALYSIS (HISTORICAL AND PROJECTED)

	Historical				Base Year	
	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	
Net Cash Provided (Used) by:						
Operating Activities	N/A	N/A	\$457,181	\$1,064,277	\$760,729	
Noncapital Financing Activities	N/A	N/A	(\$242,725)	(\$940,665)	(\$591,695)	
Capital and Related Financing Activities	N/A	N/A	\$270,812	(\$219,775)	\$25,519	
Investing Activities	N/A	N/A	(\$6,955)	(\$30,842)	(\$18,899)	
Cash at Beginning of Year	N/A	N/A	\$1,693,818	\$2,172,131	\$2,045,126	
Cash at End of Year	N/A	N/A	\$2,172,131	\$2,045,126	\$2,220,780	
Change in Net Position	N/A	N/A	\$478,313	(\$127,005)	\$175,654	

	Projected									
	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033
Net Cash Provided (Used) by:										
Operating Activities	\$996,313	\$1,009,121	\$1,022,094	\$1,035,234	\$1,038,619	\$1,042,014	\$1,045,421	\$1,048,839	\$1,052,268	\$1,055,780
Noncapital Financing Activities	(\$585,497)	(\$579,364)	(\$573,294)	(\$567,289)	(\$577,061)	(\$587,000)	(\$597,111)	(\$607,397)	(\$617,859)	(\$623,764)
Capital and Related Financing Activities	\$25,847	\$26,179	\$26,515	\$26,856	\$27,202	\$27,551	\$27,905	\$28,264	\$28,628	\$28,723
Investing Activities	(\$19,141)	(\$19,388)	(\$19,637)	(\$19,889)	(\$20,145)	(\$20,404)	(\$20,666)	(\$20,932)	(\$21,201)	(\$21,272)
Cash at Beginning of Year	\$2,220,780	\$2,638,301	\$2,638,301	\$3,074,850	\$3,093,980	\$3,549,762	\$3,562,594	\$4,011,923	\$4,018,143	\$4,460,698
Cash at End of Year	\$2,638,301	\$3,074,850	\$3,093,980	\$3,549,762	\$3,562,594	\$4,011,923	\$4,018,143	\$4,460,698	\$4,459,978	\$4,900,165
Change in Net Position	\$417,521	\$436,549	\$455,678	\$474,912	\$468,615	\$462,161	\$455,549	\$448,774	\$441,835	\$439,467

(Figure continued next page)

	Projected									
	FY 2034	FY 2035	FY 2036	FY 2037	FY 2038	FY 2039	FY 2040	FY 2041	FY 2042	FY 2043
Grants										
Non-operating revenues	\$1,059,304	\$1,062,840	\$1,066,388	\$1,069,947	\$1,073,605	\$1,077,275	\$1,080,958	\$1,084,653	\$1,088,361	\$1,092,082
Interest expense	(\$629,726)	(\$635,744)	(\$641,820)	(\$647,954)	(\$651,913)	(\$655,896)	(\$659,903)	(\$663,934)	(\$667,991)	(\$672,072)
Other nonoperating expenses	\$28,819	\$28,915	\$29,012	\$29,109	\$29,208	\$29,308	\$29,408	\$29,509	\$29,609	\$29,711
Gain (Loss) on investments	(\$21,343)	(\$21,414)	(\$21,485)	(\$21,557)	(\$21,631)	(\$21,705)	(\$21,779)	(\$21,853)	(\$21,928)	(\$22,003)
Grant pass through	\$4,459,978	\$4,900,165	\$4,897,033	\$5,334,762	\$5,329,126	\$5,764,306	\$5,758,396	\$6,193,289	\$6,187,080	\$6,621,663
Total Non-operating Revenues (Expenses)	\$4,897,033	\$5,334,762	\$5,329,126	\$5,764,306	\$5,758,396	\$6,193,289	\$6,187,080	\$6,621,663	\$6,615,132	\$7,049,381
Change in Net Position	\$437,055	\$434,597	\$432,094	\$429,544	\$429,269	\$428,983	\$428,684	\$428,374	\$428,052	\$427,718

Source: TLCPA Financial Statements; RS&H Analysis, 2023

5.3.5 Airport Funding Outlook Summary

Based on the overview of funding sources outlined in this section, and under the assumption that no significant changes to FAA funding programs or state match participation occur, TOL can anticipate existing funding levels to continue throughout the planning period for planning purposes. Based on these assumptions the funding outlook for TOL from federal, state, PFC, BIL, and CFC sources is estimated as illustrated in **Table 5-5**.

TABLE 5-5
ANTICIPATED FUNDING OUTLOOK BY SOURCE

	Near-Term (PAL 1)	Mid-Term (PAL 2)	Long-Term (PAL 3)	Total
	FY 2024-2028	FY 2029-2033	FY 2034-2043	
Funding Source				
Entitlement	\$7,000,000	\$7,000,000	\$14,000,000	\$28,000,000
Discretionary	\$16,055,000	\$16,055,000	\$32,110,000	\$64,220,000
PFC	\$1,885,000	\$1,885,000	\$3,770,000	\$7,540,000
BIL	\$4,757,493	\$0	\$0	\$4,757,493
CFC	\$1,190,000	\$1,190,000	\$2,380,000	\$4,760,000
State	\$802,750	\$802,750	\$1,605,500	\$3,211,000
Total	\$31,691,000	\$26,933,000	\$53,866,000	\$112,490,000

Note: BIL funding concludes with FY 2026 allocations.

Source: FAA; Airport Financial Records; RS&H Analysis, 2023

For planning purposes, annual funding levels for the mid- and long-term periods are estimated to align with those indicated for FY 2024-2028, potentially resulting in approximately \$26.9 million in the mid-term and \$53.9 million in the long-term. This would lead to a total 20-year cumulative funding outlook of \$112.5 million. It's important to note that this funding outlook is a projection based on recent historical funding levels and not specifically derived from TOL CIP needs, which are presented in the next section.

5.4 AIRPORT DEVELOPMENT PHASING AND FUNDING PLAN

This section outlines an airport development phasing and funding plan over near-, mid-, and long-term phases. Each phase presents detailed project descriptions, enabling projects, trigger points, and key implementation steps necessary to accomplish the objectives of the airport. The near-term development phase (PAL 1) recommends projects over the first five years of the twenty-year master planning horizon (2024-2028), the mid-term development phase (PAL 2) completes years six through ten of the planning horizon (2029-2033), and long-term (PAL 3) capital improvement projects include those which are expected to occur within the last ten years (2034-2043) of the master planning horizon. A summary of the CIP project list by programmed term and budget year along with estimated costs is shown in **Table 5-6**.

TABLE 5-6
CAPITAL IMPROVEMENT PLAN

Project Year (FY)		Totals				Federal Funding			State Funding		Local Funding	
		Federal	State	Local	Total Cost	AIP Entitlement	AIP Discretionary	BIL	State Match	PFC	Local Match	Other
Near-Term (PAL 1) — 2024-2028												
2024-1	Terminal Improvements - Design	\$1,508,000	\$84,000	\$909,000	\$2,501,000	\$1,400,000	\$0	\$108,000	\$84,000	\$325,000	\$84,000	\$500,000
2024-2	Snow Removal Equipment Acquisition	\$1,774,000	\$0	\$198,000	\$1,972,000	\$0	\$0	\$1,774,000	\$0	\$0	\$198,000	\$0
2025-1	Passenger Boarding Bridges Replacement	\$2,610,000	\$145,000	\$145,000	\$2,900,000	\$0	\$0	\$2,610,000	\$145,000	\$0	\$145,000	\$0
2025-2	Terminal Improvements - Construction	\$13,327,000	\$741,000	\$8,034,000	\$22,102,000	\$1,400,000	\$10,160,000	\$1,767,000	\$741,000	\$2,873,000	\$741,000	\$4,420,000
2026-1	Improve (West) Service Road - Design/Construction	\$3,991,000	\$222,000	\$222,000	\$4,435,000	\$0	\$3,991,000	\$0	\$222,000	\$0	\$222,000	\$0
2026-2	Runway 7-25 Approach Upgrades - Design	\$810,000	\$0	\$90,000	\$900,000	\$0	\$810,000	\$0	\$0	\$0	\$90,000	\$0
2026-3	Runway 7-25 Approach Upgrades - Construction	\$4,482,000	\$0	\$498,000	\$4,980,000	\$292,000	\$4,190,000	\$0	\$0	\$0	\$498,000	\$0
2027-1	Rehabilitate General Aviation Apron (Ph. II) - Design/Construction	\$2,345,000	\$131,000	\$269,000	\$2,745,000	\$1,278,000	\$1,067,000	\$0	\$131,000	\$0	\$131,000	\$138,000
2027-2	Construct Aircraft Rescue & Fire Fighting Building - Design/Construction	\$1,080,000	\$60,000	\$10,360,000	\$11,500,000	\$0	\$0	\$1,080,000	\$60,000	\$300,000	\$60,000	\$10,000,000
2028-1	Rehabilitate Runway 7-25 Lighting - Design/Construction	\$1,278,000	\$71,000	\$71,000	\$1,420,000	\$1,278,000	\$0	\$0	\$71,000	\$0	\$71,000	\$0
2028-2	Construct (South) Service Road - Design/Construction	\$5,229,000	\$0	\$581,000	\$5,810,000	\$122,000	\$5,107,000	\$0	\$0	\$0	\$581,000	\$0
Short-Term (PAL 1) Total		\$38,434,000	\$1,454,000	\$21,377,000	\$61,265,000	\$5,770,000	\$25,325,000	\$7,339,000	\$1,454,000	\$3,498,000	\$2,821,000	\$15,058,000

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Project Year (FY)		Totals				Federal Funding			State Funding		Local Funding	
		Federal	State	Local	Total Cost	AIP Entitlement	AIP Discretionary	BIL	State Match	PFC	Local Match	Other
Mid-Term (PAL 2) — 2029-2033												
2029-1	Rehabilitate General Aviation Apron (Ph. III) - Design/Construction	\$1,497,000	\$84,000	\$172,000	\$1,753,000	\$1,175,000	\$322,000	\$0	\$84,000	\$0	\$84,000	\$88,000
2029-2	Acquire Land for Development	\$225,000	\$13,000	\$13,000	\$251,000	\$225,000	\$0	\$0	\$13,000	\$0	\$13,000	\$0
2029-3	Construct Access Road - Design/Construction	\$868,000	\$49,000	\$49,000	\$966,000	\$0	\$362,000	\$506,000	\$49,000	\$0	\$49,000	\$0
2030-1	Construct Snow Removal Equipment and Airfield Maintenance Building - Design/Construction	\$14,715,000	\$818,000	\$6,268,000	\$21,801,000	\$1,400,000	\$13,315,000	\$0	\$818,000	\$0	\$818,000	\$5,450,000
2030-2	Rehabilitate Runway 7-25 (Maintenance) - Design/Construction	\$990,000	\$55,000	\$55,000	\$1,100,000	\$0	\$990,000	\$0	\$55,000	\$0	\$55,000	\$0
2031-1	Rehabilitate Taxiway N - Design/Construction	\$479,000	\$27,000	\$27,000	\$533,000	\$479,000	\$0	\$0	\$27,000	\$0	\$27,000	\$0
2031-2	Construct Taxiway B2 - Design/Construction	\$4,556,000	\$254,000	\$254,000	\$5,064,000	\$584,000	\$3,972,000	\$0	\$254,000	\$0	\$254,000	\$0
2031-3	Rehabilitate Runway 16-34 (Maintenance) - Design/Construction	\$338,000	\$19,000	\$19,000	\$376,000	\$338,000	\$0	\$0	\$19,000	\$0	\$19,000	\$0
2032-1	Rehabilitate General Aviation Apron (Ph. IV) - Design/Construction	\$1,497,000	\$84,000	\$172,000	\$1,753,000	\$1,400,000	\$97,000	\$0	\$84,000	\$0	\$84,000	\$88,000
2032-2	Construct GA Apron & Taxilane (Ph. I) - Design/Construction	\$5,857,000	\$326,000	\$669,000	\$6,852,000	\$0	\$5,857,000	\$0	\$326,000	\$0	\$326,000	\$343,000
2032-3	12-Unit T-Hangar - Design/Construction	\$0	\$0	\$3,934,000	\$3,934,000	\$0	\$0	\$0	\$0	\$0	\$0	\$3,934,000
2033-1	Construct GA Apron & Taxilane (Ph. II) - Design/Construction	\$4,773,000	\$266,000	\$546,000	\$5,585,000	\$1,400,000	\$3,373,000	\$0	\$266,000	\$0	\$266,000	\$280,000
2033-2	Conventional Hangar - Design/Construction	\$0	\$0	\$5,619,000	\$5,619,000	\$0	\$0	\$0	\$0	\$0	\$0	\$5,619,000
Mid-Term (PAL 2) Total		\$35,795,000	\$1,995,000	\$17,797,000	\$55,587,000	\$7,001,000	\$28,288,000	\$506,000	\$1,995,000	\$0	\$1,995,000	\$15,802,000

(Figure continued next page)

Project Year (FY)		Totals				Federal Funding			State Funding		Local Funding	
		Federal	State	Local	Total Cost	AIP Entitlement	AIP Discretionary	BIL	State Match	PFC	Local Match	Other
Long-Term (PAL 3) — 2034-2043												
2034-1	Improve Runway 7-25 Safety Area - Design/Construction	\$1,398,000	\$78,000	\$78,000	\$1,554,000	\$1,189,000	\$209,000	\$0	\$78,000	\$0	\$78,000	\$0
2034-2	Install Miscellaneous NAVAIDS (Wind Cone/Segmented Circle) - Design/Construction	\$212,000	\$12,000	\$12,000	\$235,000	\$212,000	\$0	\$0	\$12,000	\$0	\$12,000	\$0
2035-1	Construct Airport Police/Operations Building - Design/Construction	\$9,563,000	\$532,000	\$4,074,000	\$14,169,000	\$1,400,000	\$8,163,000	\$0	\$532,000	\$0	\$532,000	\$3,542,000
2036-1	MRO Facility Development - Design/Construction	\$0	\$0	\$28,097,000	\$28,097,000	\$0	\$0	\$0	\$0	\$0	\$0	\$28,097,000
2037-1	Construct GA Apron & Taxilane (Ph. III) - Design/Construction	\$5,887,000	\$328,000	\$673,000	\$6,888,000	\$2,800,000	\$3,087,000	\$0	\$328,000	\$0	\$328,000	\$345,000
2038-1	Conventional Hangar (30,000 SF) - Design/Construction	\$0	\$0	\$16,858,000	\$16,858,000	\$0	\$0	\$0	\$0	\$0	\$0	\$16,858,000
2039-1	Construct GA Apron & Taxilane (Ph. IV) - Design/Construction	\$3,403,000	\$190,000	\$389,000	\$3,982,000	\$2,800,000	\$603,000	\$0	\$190,000	\$0	\$190,000	\$199,000
2040-1	Conventional Hangar (50,000 SF) - Design/Construction	\$0	\$0	\$42,145,000	\$42,145,000	\$0	\$0	\$0	\$0	\$0	\$0	\$42,145,000
2041-1	Expand GA Apron & Taxilane - Design/Construction	\$3,902,000	\$217,000	\$446,000	\$4,565,000	\$2,800,000	\$1,102,000	\$0	\$217,000	\$0	\$217,000	\$229,000
2042-1	12-Unit T-Hangar - Design/Construction	\$0	\$0	\$3,934,000	\$3,934,000	\$0	\$0	\$0	\$0	\$0	\$0	\$3,934,000
2043-1	Conventional Hangar (10,000 SF) - Design/Construction	\$0	\$0	\$5,619,000	\$5,619,000	\$0	\$0	\$0	\$0	\$0	\$0	\$5,619,000
Long-Term (PAL 3) Total		\$24,365,000	\$1,357,000	\$102,325,000	\$128,046,000	\$11,201,000	\$13,164,000	\$0	\$1,357,000	\$0	\$1,357,000	\$100,968,000
Total		\$98,594,000	\$4,806,000	\$141,499,000	\$244,898,000	\$23,972,000	\$66,777,000	\$7,845,000	\$4,806,000	\$3,498,000	\$6,173,000	\$131,828,000

Source: Airport Records, RS&H Analysis, 2023

The planning-level cost estimates provided for each project are ROM calculations that consider the gross areas of the project and multiply them by a realistic unit cost factor. ROM estimates provide an approximation of costs and are valuable in the early planning stages to gauge the financial implications of the proposed projects. As the projects progress, more detailed and accurate cost estimates will be developed to refine the budgeting and funding requirements. An illustration of airfield capital projects included within the airport's CIP is provided at the conclusion of this chapter in **Figure 5-11**.

The following subsections offer descriptions of the projects outlined in the updated 20-year CIP. These projects are strategically organized according to the airport's priority, their capacity to enable further developments, and the accessibility of funding.

5.4.1 Projects Currently Underway

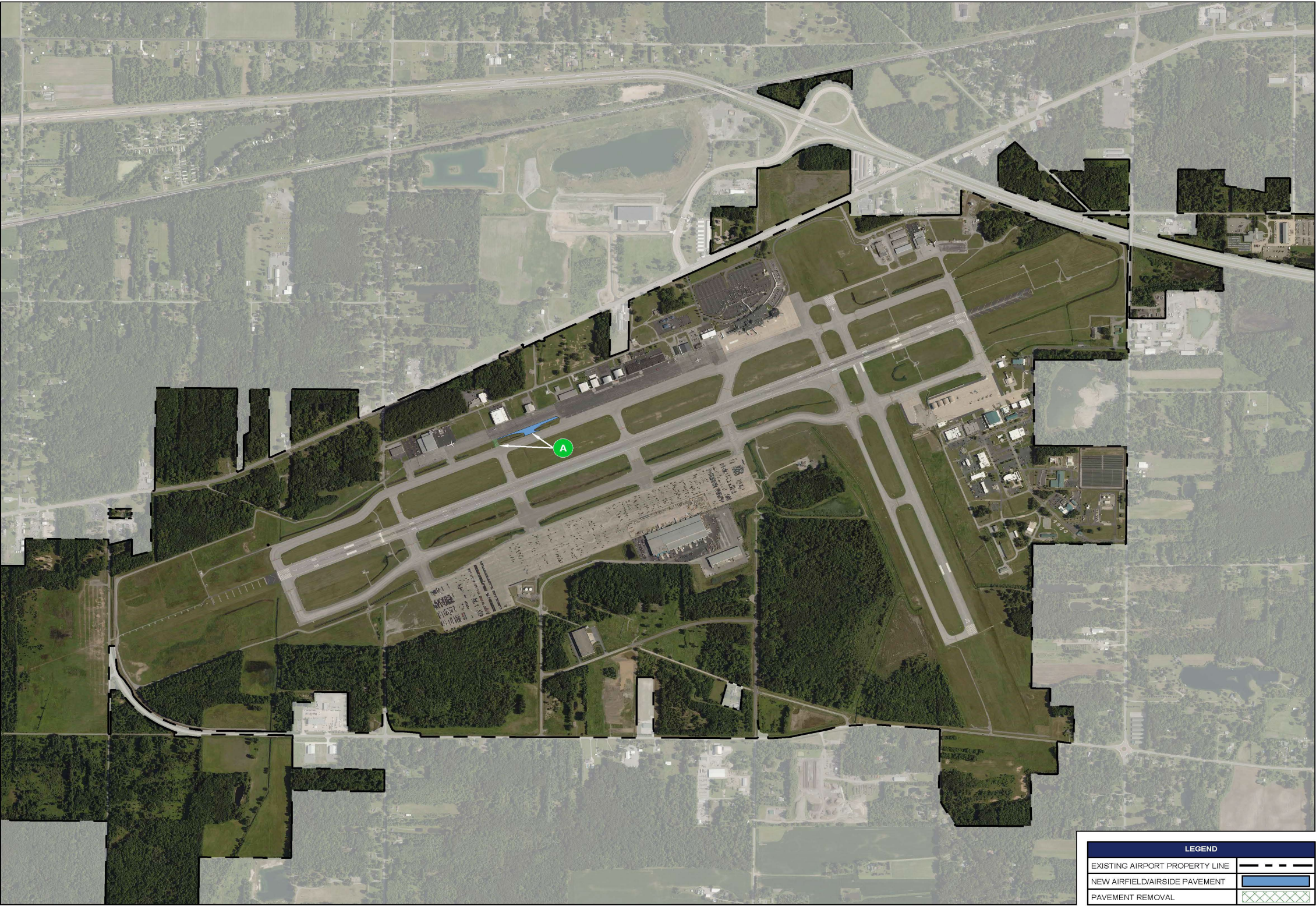
At the time of this Master Plan, one FY 2023 development project has been funded and is currently being completed. The project underway in FY 2023 is detailed below.

A) Shift or Reconfigure Taxiway B11 - Design/Construction (2023)

The relocation of a taxiway connector linking Taxiway B to the general aviation apron. The existing connector does not support the current fleet mix of that portion of the airfield and does not meet a number of FAA airfield design requirements and will be moved to a compliant location and design. This change is detailed in Chapter 3, **Facility Requirements**.

The development currently underway at TOL is shown as project "A", in **Figure 5-3**.

FIGURE 5-3
PROJECTS CURRENTLY UNDERWAY



Source: RS&H, 2023

Toledo Express Airport
Development Phasing Plan

PROJECTS CURRENTLY UNDERWAY

- A Shift or Reconfigure Taxiway B11

5.4.2 Near-term Development Projects (PAL 1)

Near-term capital improvements encompass development projects slated to commence within the upcoming five-year period (FY 2024 to FY 2028). The provided list of near-term development projects is strategically phased based on priority, their capacity to enable further advancements, and the availability of funding. These projects' implementation aims to tackle capacity constraints while ensuring the overall viability and sustainability of the airport.

Near-term programmed development at TOL is shown as projects 1-11 in the following list and on **Figure 5-4** at the conclusion of this subsection.

1) Terminal Improvements - Design (2024-1)

The TLCPA has developed a renovation strategy for the existing commercial passenger terminal facility at TOL to promote flexible future growth potential. The renovation begins by focusing on replacing infrastructure that is beyond its useful life including mechanical, electrical, plumbing, and other building infrastructure needs as well as cosmetic updates to select public-use spaces. This project includes engineering investigation and design as well as preliminary construction phasing strategies.

2) Snow Removal Equipment Acquisition (2024-2)

The acquisition of two additional pieces of Snow Removal Equipment (SRE) at TOL, in accordance with the airport's Snow and Ice Control Plan (SICP) to supplement and/or replace existing fleet equipment.

3) Passenger Boarding Bridges Replacement (2025-1)

The replacement of two passenger boarding bridges beyond their useful life to support existing and future levels of scheduled commercial flights and aircraft.

4) Terminal Improvements - Construction (2025-2)

This project includes the construction of designed improvements to renovate and modernize the existing commercial passenger terminal facility at TOL, emphasizing adaptability for future growth. This project targets the replacement of infrastructure that has exceeded its useful life, encompassing mechanical, electrical, plumbing, and other building infrastructure requirements. Additionally, it includes cosmetic updates to specific public-use spaces. Project phasing strategies will enable the terminal to remain functional during construction.

5) Improve (West) Service Road - Design/Construction - Design/Construction (2026-1)

This project targets deficiencies in sections of the perimeter road located west of Runway 7-25. Many areas are either unpaved or in substandard condition, necessitating certain large vehicles such as ARFF trucks, SRE, and fuel trucks to use airfield runway and taxiway surfaces for access. The project's core focus is the design and construction of improvements to establish safe and suitable pathways for these vehicles, reducing reliance on airfield surfaces for access. Additionally, this project involves installing adjacent fencing.

6) Runway 7-25 Approach Upgrades - Design (2026-2)

The design phase of upgrading Runway 7-25's current standard Category I (CAT I) approaches to CAT II for Runway 7 and Special Authorization (SA) CAT II for Runway 25, achieving lower visibility minimums of 1,200 feet runway visual range (RVR) and 100-foot decision altitude (DA). The initiative is grounded in a comprehensive feasibility study outlined in Appendix F, **Approach Upgrade Study**. Planned upgrades include replacement of both instrument landing systems (ILS), installing a midfield RVR sensor, new Distance Measuring Equipment (DME) for Runway 7's ILS, enhancements to power supply redundancy, and upgrades to communication and status monitoring systems.

7) Runway 7-25 Approach Upgrades - Construction (2026-3)

The construction phase of upgrading Runway 7-25's current standard Category I (CAT I) approaches to CAT II for Runway 7 and Special Authorization (SA) CAT II for Runway 25, achieving lower visibility minimums of 1,200 feet runway visual range (RVR) and 100-foot decision altitude (DA). The initiative is grounded in a comprehensive feasibility study outlined in Appendix F, **Approach Upgrade Study**. Planned upgrades include replacement of both instrument landing systems (ILS), installing a midfield RVR sensor, new Distance Measuring Equipment (DME) for Runway 7's ILS, enhancements to power supply redundancy, and upgrades to communication and status monitoring systems. Improvements to be phased to ensure minimal interruptions to routine operations.

8) Rehabilitate General Aviation Apron (Ph. II) - Design/Construction (2027-1)

Rehabilitation efforts centered on a segment of the General Aviation (GA) ramp located east of the Phase 1 project scheduled for construction in the calendar year 2023. The scope of Phase II work extends from the facility operated by the Toledo Jet Center on the airfield's northwest side to the helipad positioned between the Promedica hangar and TOL Aviation. The planned scope involves minor pavement rehabilitation, including mill and overlay with grade correction, as well as the application of pavement markings.

9) Construct Aircraft Rescue & Fire Fighting Building - Design/Construction (2027-2)

The design and construction of a new ARFF Facility at a newly identified mid-field location to improve airfield response times and replace outdated facilities. Given that the OANG currently offers ARFF services to the airport, the new facility will maintain its joint-use status for both OANG and airport staff. It will be designed to accommodate ARFF trucks, equipment, and personnel.

10) Rehabilitate Runway 7-25 Lighting - Design/Construction (2028-1)

This project encompasses the rehabilitation of the aging runway edge lighting systems on Runway 7-25. The anticipated scope involves replacing fixtures, bases, and cabling. Additionally, during the scoping and design phase, an assessment of other connected runway lights, such as centerline and touchdown zone lights, will be conducted for potential inclusion in future programming. The goal of this upgrade and refurbishment is to improve visibility, enhance safety, and increase operational efficiency on the primary runway at TOL.

11) Construct (South) Service Road- Design/Construction (2028-2)

This project aims to establish a complete airfield perimeter road by constructing new access roads on the south side of the airfield. The primary objective is to enable direct access from the existing cargo apron to the OANG facilities, improving airfield operational functions and streamlining access.

FIGURE 5-4
NEAR-TERM PROJECTS



Source: RS&H, 2023

Toledo Express Airport
Development Phasing Plan

PROJECTS CURRENTLY UNDERWAY

A Shift or Reconfigure Taxiway B11

NEAR-TERM (PAL 1) PROJECTS (2024-2028)

- 1 Terminal Improvements - Design*
- 2 Snow Removal Equipment Acquisition*
- 3 Passenger Boarding Bridges Replacement
- 4 Terminal Improvements - Construction*
- 5 Improve (West) Service Road
- 6 Runway 7-25 Approach Upgrades - Design*
- 7 Runway 7-25 Approach Upgrades - Construction*
- 8 Rehabilitate General Aviation Apron (Ph. II)
- 9 Construct Aircraft Rescue & Fire Fighting Building
- 10 Rehabilitate Runway 7-25 Lighting*
- 11 Construct (South) Service Road

5.4.3 Mid-term Development Projects (PAL 2)

Mid-term capital improvements encompass development projects slated to begin during the second five-year period of the planning phase (FY 2029 to FY 2033). The provided mid-term project list is strategically phased to reflect priority, include projects that enable further developments, and consider funding availability. Implementation of these projects is planned based on demand, with each project allocated to a specific year according to enabling projects and expected funding.

The mid-term programmed development at TOL is shown in the following list as projects 12-24 and on **Figure 5-5** at the conclusion of this subsection.

12) Rehabilitate General Aviation Apron (Ph. III) (2029-1)

Continued rehabilitation efforts for common-use, general aviation aprons located between TOL Aviation (FBO) and Owens Corning, Inc. hangars on the airfield's north side.

13) Acquire Land for Development (2029-2)

Strategic land acquisition includes securing two parcels to provide for contiguous airport property boundary on the north side of the airport along Airport Highway. Improved control over compatible development, enhanced airport access, and non-aeronautical revenue sources are all program goals.

14) Construct Access Road - Design/Construction (2029-3)

Improving airport access by adding and upgrading access roads near the GA ramp on the northwest side of the airfield, establishing a direct connection between Airport Highway and the West Airport Service Road providing access to the majority of general aviation tenants. This enhancement aims to elevate accessibility for all airport users.

15) Construct Snow Removal Equipment and Airfield Maintenance Building - Design/Construction (2030-1)

Constructing a new airfield maintenance/SRE Facility in a better-suited location on the southern side of the airfield to tackle equipment storage challenges and pave the way for potential airport development in the existing area. Existing facilities have exceeded their useful life, are undersized, and located in an area of the airfield better suited for revenue generating aeronautical development.

16) Rehabilitate Runway 7-25 (Maintenance) - Design/Construction (2030-2)

This proactive initiative is focused on improving the durability and structure of Runway 7-25 by addressing pavement cracks. The project aims to mitigate the risks of surface wear, ultimately extending the lifespan of the airfield infrastructure. By employing crack sealing and seal coats, which typically have a three-year lifespan, the project allows for segmented completion to minimize operational disruptions. Additionally, the reapplication of all associated airfield markings is included in the scope of the initiative.

17) Rehabilitate Taxiway N - Design/Construction (2031-1)

The intersection of Runway 7-25 and Taxiway N currently features a nonstandard curve causing operational challenges. Adjusting the pavement geometry to meet current FAA standards will resolve these issues, enhancing airfield safety and traffic flow without compromising operational capacity or safety.

18) Construct Taxiway B2 - Design/Construction (2031-2)

The design and construction of a new taxiway connector (B2) in accordance with regulatory standards are crucial to ensure safer and more regulated access between the apron and runway, aligning with FAA guidance. This project will facilitate the removal of both existing taxiways adjacent to the proposed taxiway (B6 and B9). Taxiway B6 currently allows direct access from an apron to a runway, and B9 poses a direct access risk to the mid-section of the runway among other nonstandard conditions further detailed in Chapter 3, **Facility Requirements**.

19) Rehabilitate Runway 16-34 (Maintenance) - Design/Construction (2031-3)

A proactive initiative targeting the enhancement of Runway 16-34's durability and structure by addressing pavement cracks. This project mitigates surface wear risks, effectively extending the airfield infrastructure's lifespan. The utilization of crack sealing and seal coats, usually lasting three years, allows for segmented completion to minimize operational disruptions.

20) Rehabilitate General Aviation Apron (Ph. IV) - Design/Construction (2032-1)

Rehabilitation efforts focused on a segment of the GA apron adjacent to the InterJet/Sierra West, Inc., Federal Aerospace Institute, US Customs, and Owens-Illinois, Inc. hangar on the north side of the airfield, positioned west of the terminal building.

21) Construct GA Apron & Taxilane (Ph. I) - Design/Construction (2032-2)

Expansion of the GA apron on the northwest side of the airfield intended to meet the future demand for hangar development. This expansion includes the construction of two access roadways connecting from the improved west perimeter road, along with fencing.

22) 12-Unit T-Hangar - Design/Construction (2032-3)

This project entails constructing a 12-unit T-hangar in the northwest general aviation development area, catering to the anticipated demand and boosting the airport's general aviation infrastructure.

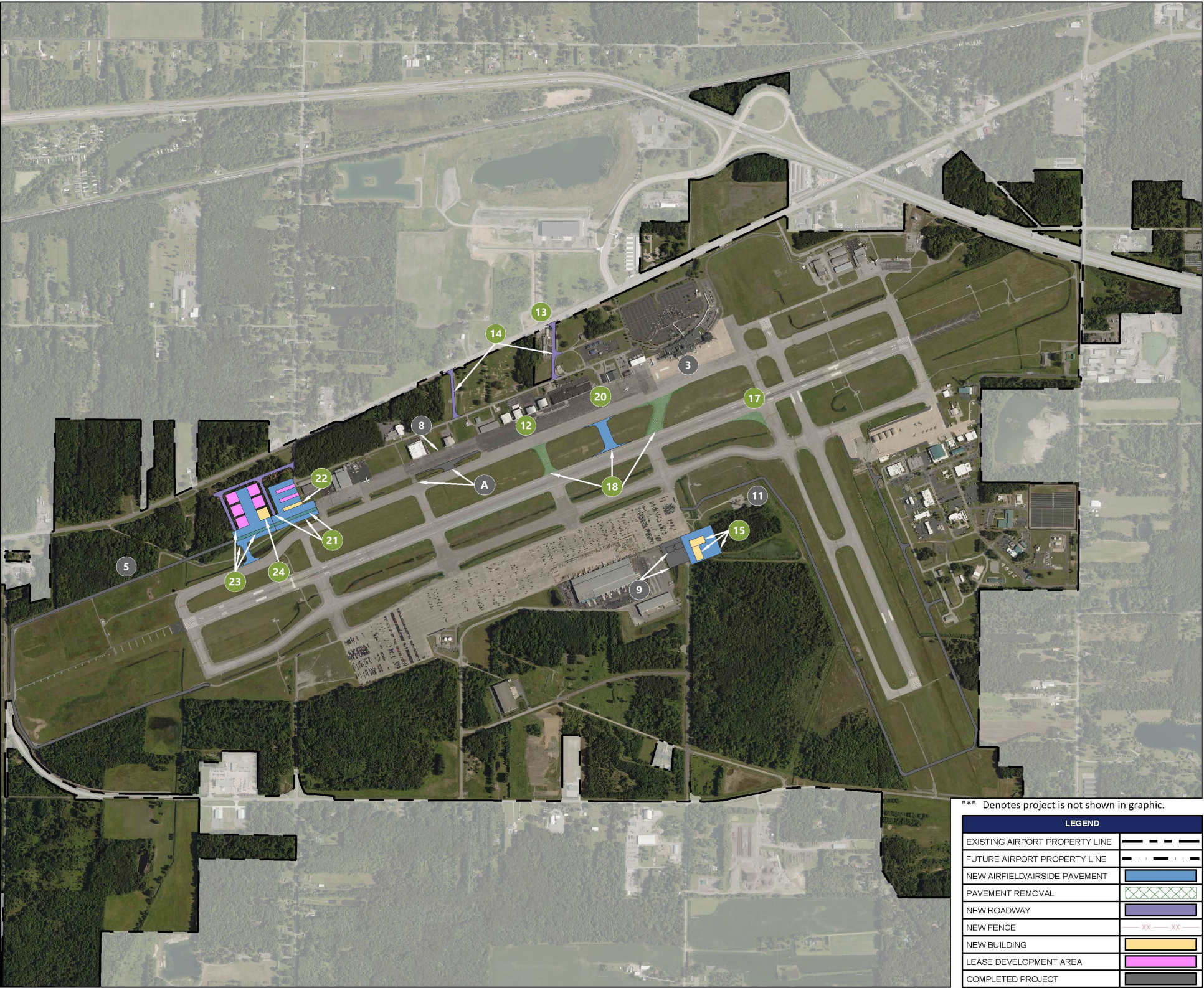
23) Construct GA Apron & Taxilane (Ph. II) - Design/Construction (2033-1)

Continued expansion of the GA apron on the northwest side of the airfield intended to meet the future demand for hangar development. This expansion includes the construction of two access roadways stemming from the improved west perimeter road, along with fencing.

24) Conventional Hangar - Design/Construction (2033-2)

Design and construction of a conventional hangar within the northwest general aviation development area to serve anticipated tenant needs and accommodate the airport's expanding general aviation operations

FIGURE 5-5
MID-TERM PROJECTS



Toledo Express Airport Development Phasing Plan

PROJECTS CURRENTLY UNDERWAY

- A Shift or Reconfigure Taxiway B11

NEAR-TERM (PAL 1) PROJECTS (2024-2028)

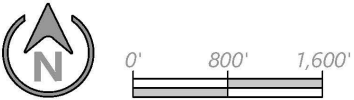
- 1 Terminal Improvements - Design*
- 2 Snow Removal Equipment Acquisition*
- 3 Passenger Boarding Bridges Replacement
- 4 Terminal Improvements - Construction*
- 5 Improve (West) Service Road
- 6 Runway 7-25 Approach Upgrades - Design*
- 7 Runway 7-25 Approach Upgrades - Construction*
- 8 Rehabilitate General Aviation Apron (Ph. II)
- 9 Construct Aircraft Rescue & Fire Fighting Building
- 10 Rehabilitate Runway 7-25 Lighting*
- 11 Construct (South) Service Road

MID-TERM (PAL 2) PROJECTS (2029-2033)

- 12 Rehabilitate General Aviation Apron (Ph. III)
- 13 Acquire Land for Development
- 14 Construct Access Road
- 15 Construct Snow Removal Equipment and Airfield Maintenance Building
- 16 Rehabilitate Runway 7-25 (Maintenance)*
- 17 Rehabilitate Taxiway N
- 18 Construct Taxiway B2
- 19 Rehabilitate Runway 16-34 (Maintenance)*
- 20 Rehabilitate General Aviation Apron (Ph. IV)
- 21 Construct GA Apron & Taxilane (Ph. I)
- 22 12-Unit T-Hangar
- 23 Construct GA Apron & Taxilane (Ph. II)
- 24 Conventional Hangar

** Denotes project is not shown in graphic.

LEGEND	
EXISTING AIRPORT PROPERTY LINE	---
FUTURE AIRPORT PROPERTY LINE	- - - - -
NEW AIRFIELD/AIRSIDE PAVEMENT	
PAVEMENT REMOVAL	
NEW ROADWAY	
NEW FENCE	XX XX
NEW BUILDING	
LEASE DEVELOPMENT AREA	
COMPLETED PROJECT	



5.4.4 Long-term Development Projects (PAL 3)

Long-term capital improvements encompass development projects projected to initiate during the final ten years of the planning period (FY 2034 to FY 2043). A majority of projects in the long-term are focused on expansion of airside and landside pavements to support privately funded aeronautical development. The provided long-term project list is strategically phased to reflect priority, incorporate projects enabling further advancements, and consider funding availability. These projects' implementation is planned based on demand, with each project designated for a specific year according to enabling projects and expected funding.

The long-term programmed development at TOL is shown in the following list as projects 25-35 and on **Figure 5-6** at the conclusion of this subsection.

25) Improve Runway 7-25 Safety Area - Design/Construction (2034-1)

This project aims to enhance the safety area of Runway 7-25 by removing Taxiways D9 and D11, addressing their failure to meet FAA standards and eliminating the direct access risk they pose to the mid-section of the runway.

26) Install Miscellaneous NAVAIDS (Wind Cone and Segmented Circle) - Design/Construction (2034-2)

A new segmented circle and wind cone installation near midfield, accompanied by an additional wind cone near the approach end of Runway 34.

27) Construct Airport Police/Operations Building - Design/Construction (2035-1)

The project aims to relocate and modernize the aging public safety facility at TOL, critical for managing airfield operations and security, to meet future operational needs. The existing facilities are beyond their useful life and are currently located in an area of the airfield better suited for aeronautical development. Planned consolidation of ARFF, maintenance/SRE, and public safety helps streamline airport staffing needs and logistics.

28) MRO Facility Development - Design/Construction (2036-1)

Design and construction of a new multi-tenant maintenance, repair, and overhaul (MRO) facility adjacent to the current cargo apron at TOL. The facility can be catered to light or heavy aircraft repair, as well as can support either general aviation or commercial operators.

29) Construct GA Apron & Taxilane (Ph. III) - Design/Construction (2037-1)

Expansion of the GA apron on the northeast side of the airfield to fulfill the future need for hangar development. Additionally, this project includes demolishing nearby taxiway pavement to create a direct link between the future ramp space and Taxiway A and removing an existing maintenance facility to free up space for these developments.

30) Conventional Hangar (30,000 SF) - Design/Construction (2038-1)

This project is set to be located adjacent to the planned expansion of the northeast GA apron. Spanning approximately 30,000 square feet, a new conventional hangar will complement the area's infrastructure upgrades, offering dedicated space for aircraft storage.

31) GA Apron & Taxilane Expansion (Ph. IV) - Design/Construction (2039-1)

Expansion of the GA apron on the northeast side of the airfield to fulfill the future need for hangar development.

32) Conventional Hangar (50,000 SF) - Design/Construction (2040-1)

This project is set to be located adjacent to the planned expansion of the northeast GA apron. Spanning approximately 50,000 square feet, a new conventional hangar will complement the area's infrastructure upgrades, offering dedicated space for large aircraft storage. Additionally, it includes the demolition of the existing National Flight Services, Inc. corporate headquarters/hangar.

33) GA Apron & Taxilane Expansion (Ph. V) - Design/Construction (2041-1)

Expansion of the GA apron on the northeast side of the airfield to fulfill the future need for hangar development. This project also involves the repositioning of the perimeter road to the north and the installation of fencing.

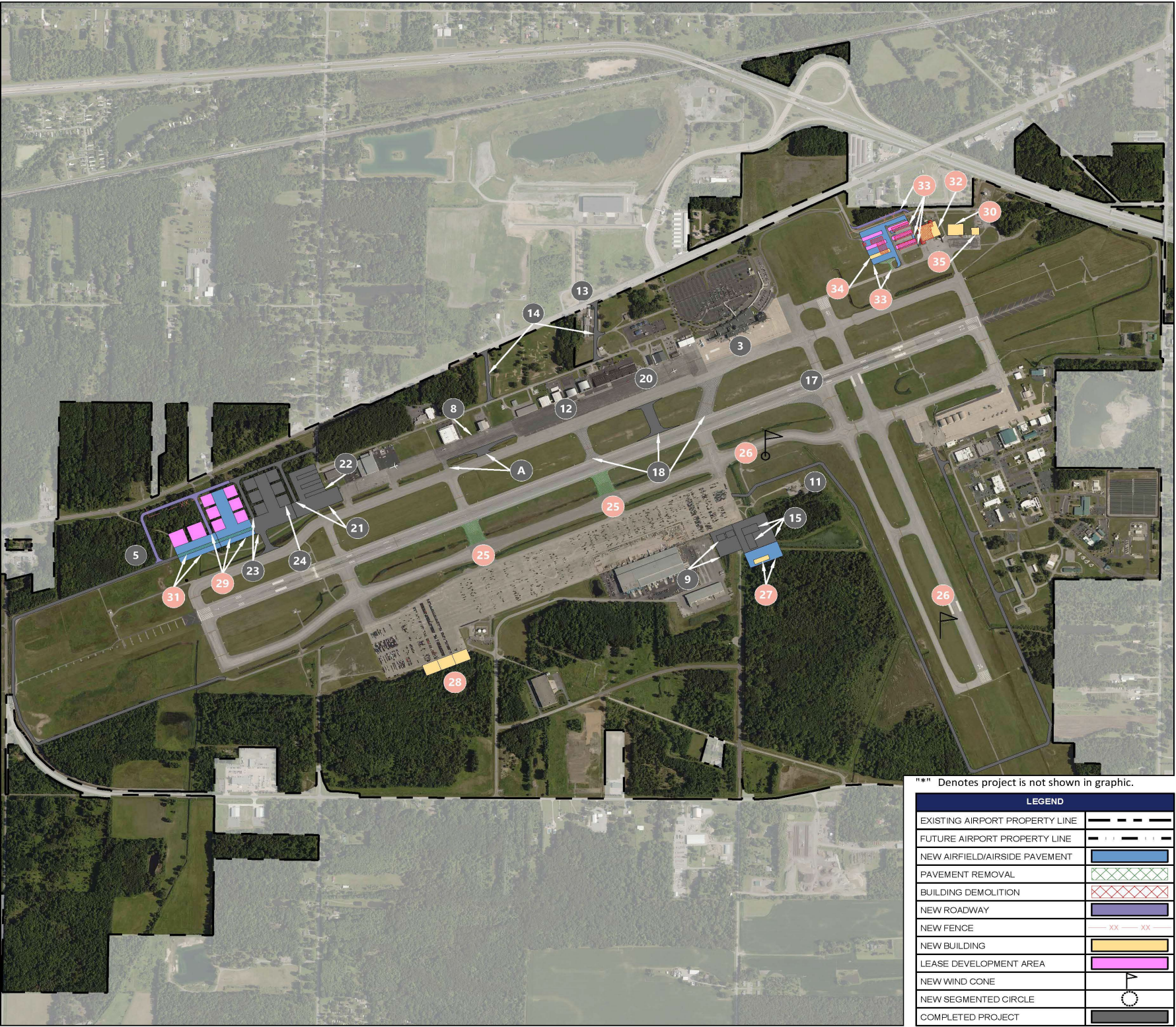
34) 12-Unit T-Hangar - Design/Construction (2042-1)

This project entails constructing a 12-unit T-Hangar in the northeast general aviation development area, catering to the anticipated demand and boosting the airport's general aviation infrastructure.

35) Conventional Hangar (10,000 SF) - Design/Construction (2043-1)

This project is set to be located adjacent to the planned expansion of the northeast GA apron. Spanning approximately 10,000 square feet, a new conventional hangar will complement the area's infrastructure upgrades, offering dedicated space for aircraft storage.

FIGURE 5-6
LONG-TERM PROJECTS



Toledo Express Airport Development Phasing Plan

PROJECTS CURRENTLY UNDERWAY	LONG-TERM (PAL 3) PROJECTS (2034-2043)
<div>A</div> Shift or Reconfigure Taxiway B11	<div>25</div> Improve Runway 7-25 Safety Area
NEAR-TERM (PAL 1) PROJECTS (2024-2028)	<div>26</div> Install Miscellaneous NAVAIDS
<div>1</div> Terminal Improvements - Design*	<div>27</div> Construct Airport Police/Operations Building
<div>2</div> Snow Removal Equipment Acquisition*	<div>28</div> MRO Facility Development
<div>3</div> Passenger Boarding Bridges Replacement	<div>29</div> Construct GA Apron & Taxilane (Ph. III)
<div>4</div> Terminal Improvements - Construction*	<div>30</div> Conventional Hangar (30,000 SF)
<div>5</div> Improve (West) Service Road	<div>31</div> Construct GA Apron & Taxilane (Ph. IV)
<div>6</div> Runway 7-25 Approach Upgrades - Design*	<div>32</div> Conventional Hangar (50,000 SF)
<div>7</div> Runway 7-25 Approach Upgrades - Construction*	<div>33</div> Expand GA Apron & Taxilane
<div>8</div> Rehabilitate General Aviation Apron (Ph. II)	<div>34</div> 12-Unit T-Hangar
<div>9</div> Construct Aircraft Rescue & Fire Fighting Building	<div>35</div> Conventional Hangar (10,000 SF)
<div>10</div> Rehabilitate Runway 7-25 Lighting*	
<div>11</div> Construct (South) Service Road	
MID-TERM (PAL 2) PROJECTS (2029-2033)	
<div>12</div> Rehabilitate General Aviation Apron (Ph. III)	
<div>13</div> Acquire Land for Development	
<div>14</div> Construct Access Road	
<div>15</div> Construct Snow Removal Equipment and Airfield Maintenance Building	
<div>16</div> Rehabilitate Runway 7-25 (Maintenance)*	
<div>17</div> Rehabilitate Taxiway N	
<div>18</div> Construct Taxiway B2	
<div>19</div> Rehabilitate Runway 16-34 (Maintenance)*	
<div>20</div> Rehabilitate General Aviation Apron (Ph. IV)	
<div>21</div> Construct GA Apron & Taxilane (Ph. I)	
<div>22</div> 12-Unit T-Hangar	
<div>23</div> Construct GA Apron & Taxilane (Ph. II)	
<div>24</div> Conventional Hangar	

5.4.5 Notable Projects Recommended to Occur Beyond the Planning Period

Other projects have been identified for TOL that are anticipated for implementation beyond the 20-year planning period. ROM estimates are not included for these projects. These projects are:

Air Cargo Apron & Facilities Development

Planning for TOL's future cargo expansion is vital, especially given the projected 4.15 percent compounded growth rate in aviation activity. The arrival of a new cargo operator could also impact existing facilities. To prepare, two primary options for developing the south cargo apron are being carefully evaluated. These proactive measures aim to meet growing demands and adapt to potential operational shifts in the cargo sector.

Air Traffic Control Tower - Relocation

This project entails replacing the outdated Air Traffic Control Tower (ATCT) and Terminal Radar Approach Control (TRACON) facilities due to infrastructure issues and Line of Sight (LoS) challenges at certain runway thresholds. The FAA also staffs a safety service center (SSC) at TOL that would be relocated to the new ATCT/TRACON facility. A preferred replacement site, proposed in a previous study and consistent with this master plan, is located near the commercial terminal and employee parking.

East Perimeter Road Improvements

This project targets deficiencies in sections of the perimeter road located east of Runway 7-25. Many areas are either unpaved or in substandard condition, necessitating certain large vehicles like ARFF trucks to use airfield runways and taxiways for access. The project's core focus is on designing and executing improvements to establish safe and suitable pathways for these vehicles, reducing reliance on airfield surfaces for access.

Conventional/Corporate Hangar Development

The construction of new conventional and corporate hangars on the northwest side of the airport. These facilities are intended to offer dedicated space for both conventional and corporate aircraft, catering to diverse aviation needs and operations in that area of the airfield.

5.5 CIP FUNDING NEED

A summary of CIP funding needs by planning periods and funding sources is presented in **Table 5-7**. As shown, the total 20-year capital improvement plan program amounts to nearly \$245 million, with near- and mid-term costs of about \$61.3 and \$55.6 million, respectively.

TABLE 5-7
ANTICIPATED FUNDING BY SOURCE

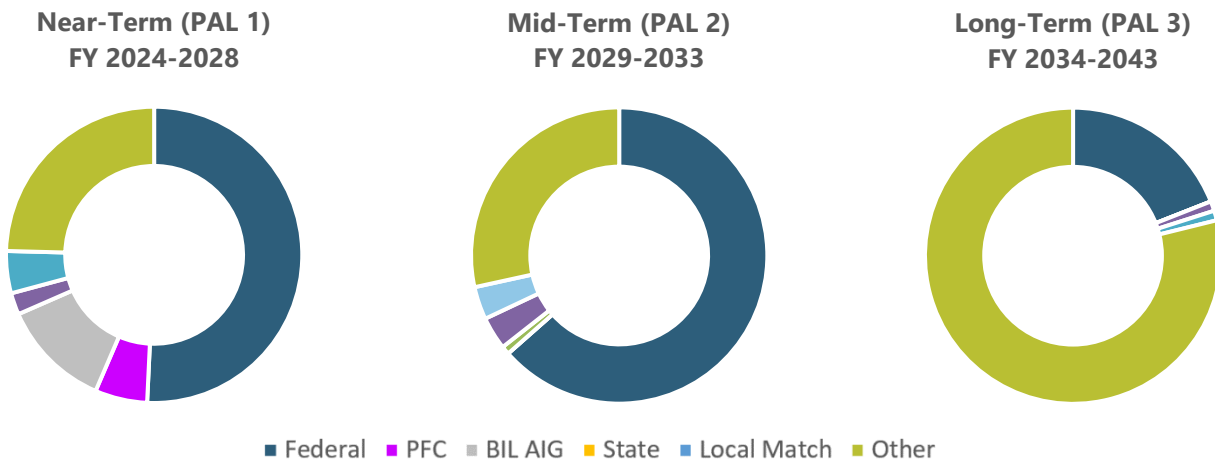
	Near-Term (PAL 1) FY 2024-2028	Mid-Term (PAL 2) FY 2029-2033	Long-Term (PAL 3) FY 2034-2043	Total
Funding Source				
Entitlement	\$5,770,000	\$7,000,000	\$11,200,000	\$23,970,000
Discretionary	\$25,325,000	\$28,286,000	\$13,164,000	\$66,775,000
PFC	\$3,498,000	\$0	\$0	\$3,498,000
BIL AIG	\$7,338,000	\$506,000	\$0	\$7,844,000
State Match	\$1,454,000	\$1,991,000	\$1,357,000	\$4,802,000
Local Match	\$2,820,000	\$1,991,000	\$1,357,000	\$6,168,000
Other	\$15,058,000	\$15,801,000	\$100,968,000	\$131,827,000
Total	\$61,263,000	\$55,575,000	\$128,046,000	\$244,884,000

Source: FAA; Airport Financial Records; RS&H Analysis, 2023

Notes: BIL funding concludes with FY 2026 allocations.

As shown in **Table 5-7**, overall implementation of the CIP will require substantial funding from TOL funding partners. **Figure 5-7** illustrates how shares of funding evolve over the for the 20-year planning period, where reliance on Federal AIP entitlement and discretionary grants is important in the first two periods, with the requirement for other/private funds increasing over the period.

FIGURE 5-7
FUNDING NEED BY TERM



Source: FAA; Airport Financial Records; RS&H Analysis, 2023

When accounting for recurring projects, a total of 38 capital projects have been identified in the Master Plan CIP, with an additional five projects potentially required beyond the planning period. These additional projects involve air cargo-related development, the relocation of the air traffic control tower, east perimeter road improvements, and hangar development. A total of 11 projects are programmed in the near-term, spanning from 2024 to 2028. Many of these projects will enable TOL to adhere to airport safety standards set by the FAA, meet facility demand requirements, and achieve the strategic development goals of the airport. Overall, this development plan positions the Port Authority to effectively continue developing TOL as a vital economic asset within northwest Ohio.

5.6 FUNDING AVAILABILITY AND FINANCIAL FEASIBILITY

The analysis presented in this chapter suggests that there will likely sufficient federal funding to implement the TOL CIP, however it will be important to identify local/sponsor funding to compete well for discretionary grants in the near- and mid-term periods. The following summarizes the outlook of funding availability by source:

- » **TOL Available Cash** – As described in previous sections, TOL operating performance is producing net income that can be used to implement the CIP; however, cash flow indicates that debt service may reduce available funds until 2026 when bonds have fully matured and 2027-2028 when a number of notes are retired. During the near-term period, and depending on the Port Authority's cash account balances, cash flow should be sufficient to produce about \$2.3 million, which is just \$500,000 shy of the \$2.8 million identified for local share of project costs.
- » **Entitlement Funds** – The TOL CIP utilizes AIP entitlement funds for AIP-eligible projects throughout the planning period, allocated to 22 of the 24 projects in the near- and mid-term periods. Entitlement funds have been allocated prior to estimating the amount of funds required from other sources, including BIL, discretionary, PFC, and state and local match funds. The outlook for entitlement funding need in the near-term is about \$5.8 million, which is about \$1.2 million annually and within reach based

upon recent history. However, a decline in passenger activity could reduce entitlement funds available and increase reliance on competitive discretionary grants or delay projects.

- » **Discretionary Grants** – Since 2010, TOL has received more than \$20.3 million in discretionary AIP grants, which is approximately \$3.4 million annually. The CIP has identified a need to maintain this level of average annual discretionary grant support of \$3.3 million for the 20-year period; however, this need is “front-loaded” for the near-term period to implement necessary improvements to the terminal and in the mid-term for a combined SRE/airport maintenance facility. This increases the annual need to about \$5 million annually for the near-term to modernize an aging terminal that has not been improved substantially since AIP grants were received in 2016 and 11 years earlier in 2005.
- » **PFC Revenues** – PFC funding is programmed for the near-term period to assist with terminal improvements design and construction, and the ARFF facility; however, PFC revenues in the near-term may not be sufficient to meet the level of need, and use of mid-term revenues may be needed to reimburse TOL should local funds be expensed to planned terminal improvements. As described previously, PFC revenues expended through 2023 are approaching TOL’s collection authority under existing applications, and the Port Authority has submitted a new PFC application to ensure TOL’s collection authority does not expire. TOL continues air service development efforts, and increased passenger levels from new destinations by Allegiant or the introduction of new service would improve PFC revenues and shorten the timeline for reimbursing the Port Authority. Based on the ULCC forecast of enplanements, near- and mid-term PFC collections could amount to \$3.3 million, which is close to the \$3.5 million identified in the near-term.
- » **BIL Program Infrastructure Funds** – The CIP anticipates about \$1.6 million annually in BIL AIG allocations for 2024-2026, and are programmed to contribute to funding terminal improvements, replacement of aging passenger boarding bridges and SRE equipment, as well as a planned new ARFF facility.
- » **State Match Funds** - ODOT participation in the CIP program is anticipated to continue with up to a 5 percent match of local/sponsor funds for AIP-eligible projects and amounts to about \$4.8 million over the 20-year period for an average of \$239,000 annually. Currently, the state matching program for commercial service airports is capped at \$500,000 annually which may require a larger local share on behalf of the Sponsor to cover any matching grant shortfalls. Near- and mid-term 5-year needs are programmed to be about \$1.5 and \$2.0 million, respectively.
- » **Other Funds** – Other funds planned for in the CIP are those from sources external to the Airport, federal, and state funding partners. The need for funds from these sources for the 20-year period is substantial, amounting to nearly \$132 million; however, most of this need is in the long-term, 2033-2043 period. In the long-term, these funds will be relied upon for revenue-generating, general aviation hangar facilities and MRO development, the timing of which is dependent on demand. In the near-term, this funding is anticipated from partners like the Ohio Air National Guard (OANG) that operates the ARFF station at TOL and is currently programmed to provide \$10 million for the design and

construction of a new ARFF facility in the near-term period as a placeholder for development thresholds.

Other funding sources may also be available to support funding of specific CIP projects, such as CFC revenues, which are generally used for rental car facilities, and related pavement and parking maintenance and improvements. Historically, CFC revenues have reached \$237,000 on average annually; however, 2022 collections were about \$134,500 and future CFC revenues may not contribute substantially to CIP projects.

Depending upon the financial performance of the airport, and enplanement levels which impact AIP entitlement grant funding and PFC revenues, there may be a requirement to identify supplementary financial support to implement the planned CIP, especially in the near- and mid-term. If adequate funding is not available from these sources, initiation of certain projects may need to be deferred to later years, or the use of bond issuance or low interest loans or commercial notes may be utilized as the Authority has done in the past. Additionally, the Port Authority has submitted an application for funding through the BIL Airport Terminals Program to support planned terminal improvements, which would reduce the need for AIP discretionary grant funds for this program.

5.6.1 Opportunities for Revenue Enplanement

As the Port Authority begins to implement the CIP in the near- and mid-term periods, revenue generation will become increasingly important. As shown in the review of TOL's operating financial performance (see **Table 5-2**), the airport generates income from various sources, the largest of which is rental and fee income from tenants on the airfield. For the recent historical period (2019-2022), operating revenues from rental and fees have accounted for an average of 56 percent of total operating revenues annually, ranging from more than \$2.6 million in 2019 to over \$2.9 million in 2022. It is these revenues that helped sustain the airport during the global COVID-19 pandemic, maintaining a level of about \$2.3 million during 2020 and 2021.

As noted in the CIP, there are opportunities to generate additional revenues through attracting new tenants and users for conventional hangars on available land situated on the north side of the airport and MRO facility or expansion of cargo operations on the south side of the Airport. For planning purposes and the CIP, most of these projects are placed in the long-term (2033-2043) period because the demand for these facilities at this time is not certain. However, if these development opportunities were aggressively pursued in the near-term, they may begin to attract users and/or tenants to commit to long-term leases for land that will generate revenues for TOL.

Another approach to enhance revenues is for TOL to explore the possibility of raising fees imposed on tenants and aeronautical users. Airports generally revise fees, rates, and charges periodically, either on an annual basis or every few years. These adjustments are influenced by local or regional economic indicators, such as the Consumer Price Index (CPI), to align with prevailing economic conditions. A snapshot of leasing and policy and rates and charges in place at the airport includes the following fees:

- » Ground Rent
- » Building/Hangar Rent
- » Landing Fees

- » Fuel Flowage Fees
- » Loading Bridge Fees
- » Terminal Rent

When considering fee increases, the Authority should strive to strike a balance between covering the costs of providing facilities and maintaining competitiveness in the market. This equilibrium is crucial for all users, with airlines, in particular, being highly sensitive to cost increments, including terminal rents, landing fees, fuel flowage, and other usage fees such as loading bridge fees.

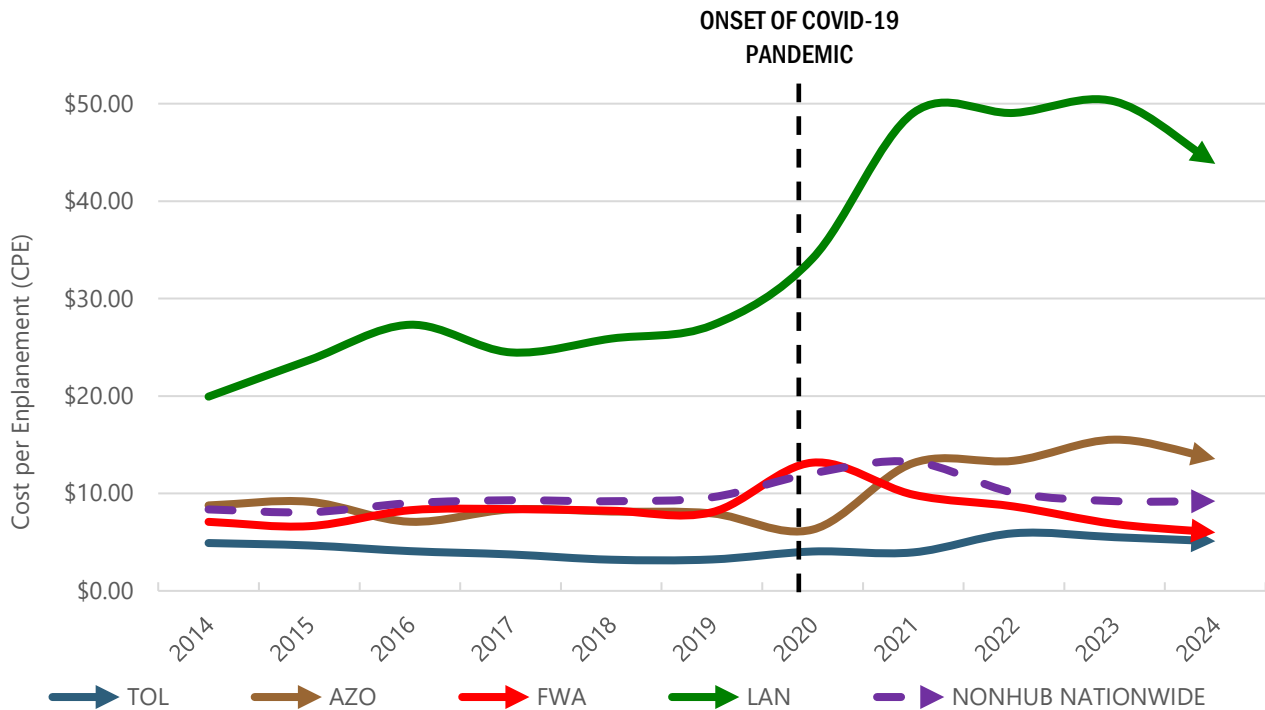
A metric that the airline industry monitors is Cost per Enplaned Passenger (CPE), which is the average expense incurred by airlines per passenger for utilizing airport facilities. CPE serves as a key indicator of a commercial airport's financial performance, providing insights into operating costs and the rate and fee structure, which airports balance to remain competitive for air carrier services. Depending upon the rate methodology, airports like TOL with significant non-airline aeronautical revenues can utilize portions of these revenues to offset and reduce the airline rate base to yield a CPE that is competitive.

For TOL, a comparison of CPE is shown in **Figure 5-8** and **Figure 5-9**. Figure 5-8 presents a comparison of TOL CPE with other non-hub airports that Airport management uses as benchmarks⁶. Figure 5-9 compares TOL CPE to other airports in the Great Lakes Region with similar enplanement levels and CPE. Both figures include the average CPE for all non-hub airports nationwide.

FIGURE 5-8

CPE COMPARISON – AIRPORT MANAGEMENT BENCHMARKS (HISTORICAL)

⁶ The reported CPEs at Kalamazoo/Battle Creek International (AZO) and Capital Region International in Lansing (LAN) follow a different trend, showing increases post-pandemic despite enplanement levels that have not yet recovered to 2019 levels. This trend indicates rate structures that differ from the other airports. The reported CPE at LAN should be considered an outlier, with CPE that was \$50 in 2022.



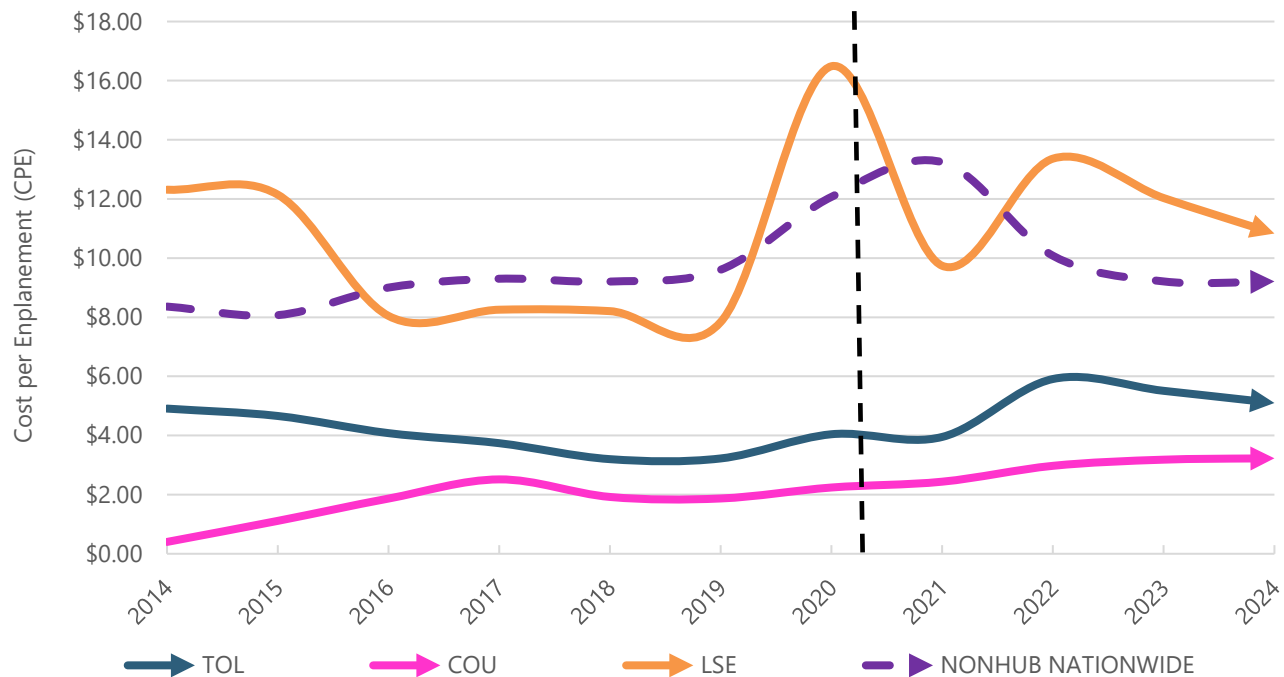
Source: FAA Certification Activity Tracking System (CATS, FAA-5100-127); RS&H Analysis, 2024

As shown in Figure 5-8, the CPE at TOL has tracked below other benchmarked airports for the period, remaining steady through the COVID-19 pandemic. Nationally, non-hub CPEs increased in the wake of the pandemic and have returned to pre-pandemic levels, which is reflected in data reported by Fort Wayne International (FWA).

Figure 5-9 illustrates trends in CPE at other non-hubs in the Great Lakes, which generally follow the national trendline. While the recovery for TOL appears to track a year behind the national average, TOL appears to be holding steady in relation to other non-hubs.

FIGURE 5-9
CPE COMPARISON – OTHER REGIONAL BENCHMARKS (HISTORICAL)

ONSET OF COVID-19
PANDEMIC



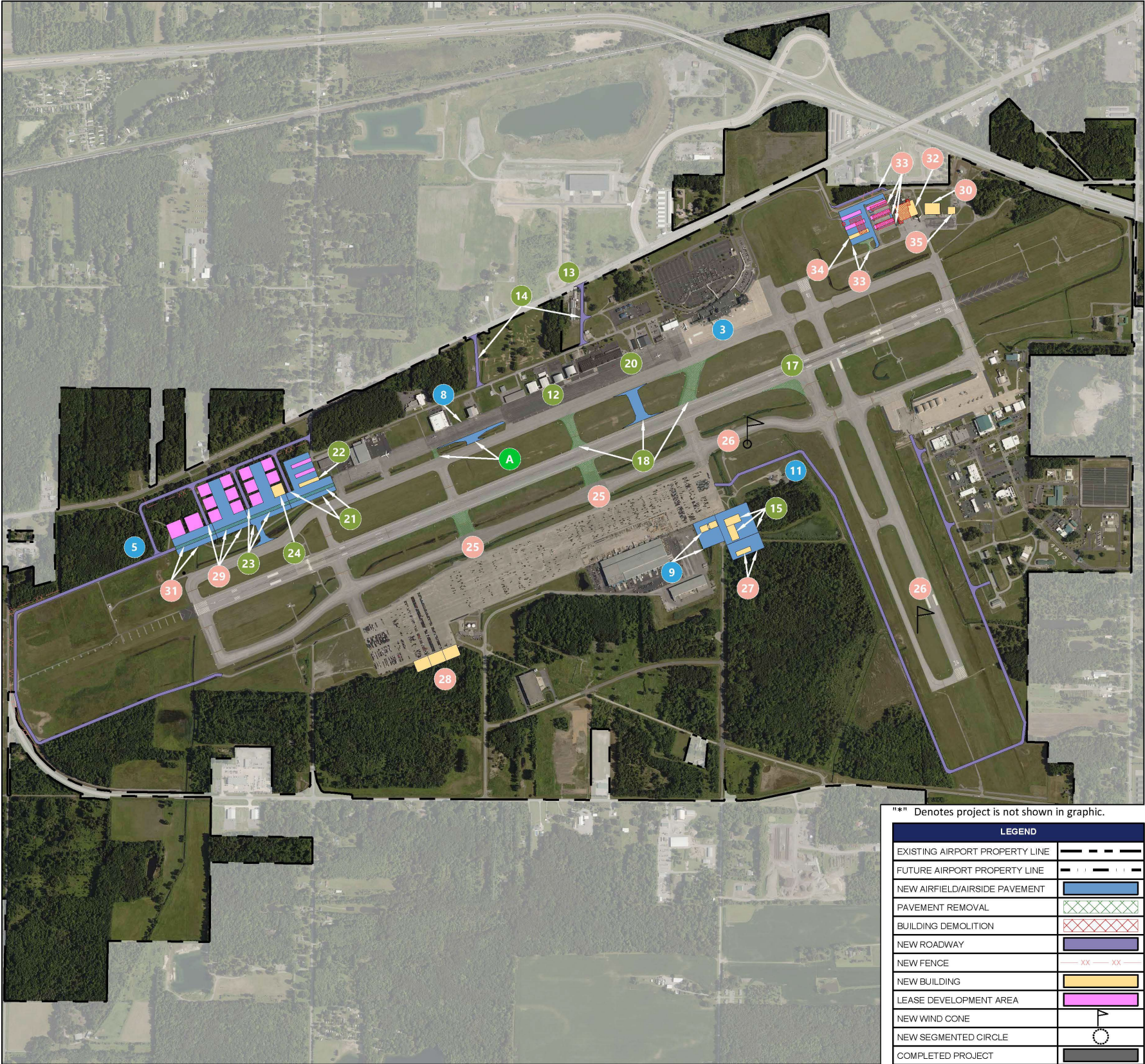
Source: FAA Certification Activity Tracking System (CATS, FAA-5100-127); RS&H Analysis, 2024

As shown, trends in CPE at TOL and other non-hubs in the Great Lakes for the pre-COVID period generally follow the national trendline. While the recovery for TOL appears to track a year behind the national average, TOL appears to be holding steady in relation to other non-hubs in the region and nationally. As described, variations in CPE between airports do not consider terms of airline agreements or rate structures.

One conclusion from this comparison is that is market capacity for TOL to increase aeronautical fees assessed of airlines while remaining competitive as compared to other non-hubs nationally and in the Great Lakes Region. For TOL, consideration of changes to rates and charges should begin soon and follow a transparent process and methodology that is shared with the airlines to maintain positive relationships with airline partners.

These opportunities for enhancing revenues, if realized in the near- and mid-term periods could positively impact implementation of the TOL CIP by improving the airport's cash flow and fund availability for the local share of AIP-eligible and other projects.

FIGURE 5-10
DEVELOPMENT PHASING PLAN



Toledo Express Airport Development Phasing Plan

- PROJECTS CURRENTLY UNDERWAY**

 - A Shift or Reconfigure Taxiway B11

NEAR-TERM (PAL 1) PROJECTS (2024-2028)

 - 1 Terminal Improvements - Design*
 - 2 Snow Removal Equipment Acquisition*
 - 3 Passenger Boarding Bridges Replacement
 - 4 Terminal Improvements - Construction*
 - 5 Improve (West) Service Road
 - 6 Runway 7-25 Approach Upgrades - Design*
 - 7 Runway 7-25 Approach Upgrades - Construction*
 - 8 Rehabilitate General Aviation Apron (Ph. II)
 - 9 Construct Aircraft Rescue & Fire Fighting Building
 - 10 Rehabilitate Runway 7-25 Lighting*
 - 11 Construct (South) Service Road

MID-TERM (PAL 2) PROJECTS (2029-2033)

 - 12 Rehabilitate General Aviation Apron (Ph. III)
 - 13 Acquire Land for Development
 - 14 Construct Access Road
 - 15 Construct Snow Removal Equipment and Airfield Maintenance Building
 - 16 Rehabilitate Runway 7-25 (Maintenance)*
 - 17 Rehabilitate Taxiway N
 - 18 Construct Taxiway B2
 - 19 Rehabilitate Runway 16-34 (Maintenance)*
 - 20 Rehabilitate General Aviation Apron (Ph. IV)
 - 21 Construct GA Apron & Taxilane (Ph. I)
 - 22 12-Unit T-Hangar
 - 23 Construct GA Apron & Taxilane (Ph. II)
 - 24 Conventional Hangar
- LONG-TERM (PAL 3) PROJECTS (2034-2043)**

 - 25 Improve Runway 7-25 Safety Area
 - 26 Install Miscellaneous NAVAIDS
 - 27 Construct Airport Police/Operations Building
 - 28 MRO Facility Development
 - 29 Construct GA Apron & Taxilane (Ph. III)
 - 30 Conventional Hangar (30,000 SF)
 - 31 Construct GA Apron & Taxilane (Ph. IV)
 - 32 Conventional Hangar (50,000 SF)
 - 33 Expand GA Apron & Taxilane
 - 34 12-Unit T-Hangar
 - 35 Conventional Hangar (10,000 SF)

Source: RS&H, 2023