

CHAPTER SEVEN

PLAN IMPLEMENTATION AND CAPITAL IMPROVEMENT PLAN

GENERAL

The primary objective of this chapter is to analyze the financial feasibility of developing the projects included in the Capital Improvement Program (CIP) for Herlong Airport (HEG). The preceding chapters, including the Demand/Capacity Analysis, Facility Requirements and Alternatives Identification and Development Plans identified existing and future demand as well as facilities needed to accommodate current and projected service levels. As discussed in **Chapter 5, *Airport Concepts and Recommended Development***, Airfield Concept III combined with North Landside Developments II and III, Midfield Concept II, and South Side Development Concept I were selected as the preferred development plan for HEG. Therefore, projects included within the selected alternative were considered in the development of the twenty-year capital improvement program for HEG.

It is important to note that airport capital improvements are typically financed through state and federally imposed user taxes and from funds generated from airport operations. Typically, airports such as HEG will receive FAA GA Entitlement Grants (under AIR-21) in the amount of \$150,000 per year. Discretionary funds are distributed based upon established FAA priorities (as shown in **Appendix G, *FAA Project Priority Rates***) that are related to achieving capacity, safety and noise compatibility objectives as directed by Congress.

Typical projects eligible for discretionary funding include: new runways, taxiways and non-exclusive aprons, navigational aids, primary access roads, etc. In addition, the sequencing of key projects in the Capital Improvement Program recognizes that permitting, utility infrastructure, environmental planning studies, drainage plans, and similar work must first be funded before actual design and construction of certain larger facilities projects can proceed (such as runway improvements, taxiways, hangar construction and others). As a result, priority FAA project costs are eligible up to 95 percent (until FY 2008 at which time it reverts back to 90 percent), of which the remaining 5 percent (10 percent) is typically shared between the FDOT and Airport Sponsor. Under the Vision 100 program, the federal match for AIP eligible projects increased temporarily from 90 percent to 95 percent. However unless re-instated, this program will expire in fiscal year (FY) 2008. Based upon current airport funding reform documentation, released on March 5, 2007, the federal match for AIP eligible projects for small airports will revert to 90 percent from 95 percent,

for all but the smallest GA airports. As a result, 90 percent was used to determine estimated federal funding on future AIP eligible projects throughout the twenty year planning period.

Projects where federal funding is unavailable, FDOT may provide up to 50 percent funding. The remaining 50 percent of the project cost must be provided by the Airport Sponsor or from another funding source including private investment. While projects may be eligible for FAA and/or FDOT funds, historically General Aviation (GA) airports like HEG receive lower priority for these funds which limits the projects that can be feasibly developed.

The implementation plan presented herein describes the staging of proposed improvements, based upon need, prerequisite projects and anticipated funding, provides the basic financial requirements of each, and identifies various means of funding these improvements. It is the intent of this implementation plan to provide general financial guidance to Herlong Airport and JAA staff in making policy decisions regarding the recommended development of the Airport over the 20-year planning period.

FUNDING SOURCES

Funding Sources

Airport development is funded by four main funding sources. These include federal, state, local (sponsor) and private funding sources. Public grants and airport revenue bonds provide most of the capital funding, while user charges generally cover an airport's operating expenses and the debt service for airport bonds.

Typically, airport capital improvements are generally financed from state and federally imposed user taxes, and from funds generated from airport operations, including fuel taxes, space-leasing fees and other similar sources. Airport capital improvements are not funded from tax levies on the general public. However, the Airport Capital Improvement Program and Airport Operating Budget are combined to provide an estimate of total revenue and expenditures at the Airport. Therefore, airport management in developing the Airport Capital Improvement Program must consider the phasing and funding of key projects, such as runway improvements, taxiways, hangar construction, etc. in relation to preliminary site preparation. Site preparation, which includes environmental, utility infrastructure, permitting, drainage plans and other similar work, must be completed prior to design and construction. To address this issue, a 20 percent contingency fee was added to the overall cost of each project.

Federal Funding

In 1982, the passage of the Federal Airport and Airway Improvement Act enabled the federal government to provide financial assistance to airports in support of its broad objective to assist in the development of a nationwide system of public-use airports adequate to meet projected growth of civil aviation. The Act

provides funds for airport planning and development projects at airports included in the National Plan of Integrated Airport Systems (NPIAS) in the form of the Airport Improvement Program (AIP) grants.

User fees collected under the Airport and Airway Trust Fund Act provide a source of revenues used to fund AIP projects. Congress and the FAA decide the apportionment of these revenues and categorize them into two broad categories: Entitlements and Discretionary. Entitlement funding are divided among primary airports, General Aviation, cargo service airports and state block grants based on aviation activity and service levels. Discretionary funds are distributed based on established FAA priorities to any eligible airport and assist the FAA in achieving its capacity, safety and noise compatibility objectives. However, GA airport projects score lower in the FAA priority system than projects for commercial service airports. These projects may include:

- New runways, taxiways and non-exclusive use aprons
- Reconstruction of runways, taxiways and non-exclusive aprons
- Navigation Aids
- Federal air traffic control towers (ATCT)
- Passenger terminal buildings (non-revenue areas only)
- Primary airport access roads, and
- Land acquisition

The 1999 reauthorization of AIP legislation (AIR 21) set aside, for the first time, GA entitlement funding specifically reserved for GA airports. Eligible airports, based upon annual operations, may receive up to \$150,000 per year for eligible FAA projects or 20 percent of the 5-year cost of the need listed in the most recently published NPIAS. However, the distribution of funding for non-primary commercial service, general aviation and reliever airports is based not on annual operations but rather on the Airport's service area and/or population compared to similar airports within the 50 States, District of Columbia and Puerto Rico as stated within Title 49 U.S.C. Section 47114(d).

In addition to AIP grants, the FAA may also provide funding to airports via FAA Facilities and Equipment (F&E) spending. F&E is not part of the AIP program; however, these funds primarily support FAA constructed and maintained facilities such as runway instrumentation, weather reporting devices, and air traffic control facilities. The FAA funds the entire cost of an F&E project with no requirement for a local matching share.

State Funding

The Florida Department of Transportation (FDOT) annually funds a state-sponsored airport development program supported by statewide aviation fuel taxes. The program generates over \$100 million per year. The FDOT assists publicly-owned Florida airports that are under public operational and developmental control. To be eligible for funds, an airport must have an approved airport master plan/layout plan and the project must be consistent with the airport's role defined in the Florida Aviation System Plan. FDOT's

grant program includes four major categories: airport planning, airport improvement, land acquisition and airport economic development. In general, only capital projects on airport property and any services that lead to capital projects are eligible, such as planning and design services. Eligible off-airport projects normally include purchases of mitigation land, noise mitigation, purchase of aviation easements, and certain access projects.

The FDOT will participate in projects not funded with FAA monies typically on a 50-50 to 80-20 basis, depending upon the nature and eligibility requirements of the project as well as airport use and ownership, whether GA or commercial service. According to the Florida Aviation Project Handbook, FDOT, July 2002, general aviation airports can receive up to 80 percent of project costs if federal funding is not available. Commercial Service airports, on the other hand, may receive up to 50 percent. Although HEG is designated as a general aviation airport, it is owned and operated by the Jacksonville Aviation Authority. Therefore, according to the FDOT District 2 representative, funding is based upon the Commercial Service Airport requirements, which is one-half of the local share when federal funding is available or up to 50 percent of project costs when federal funding is not available. Typically, projects funded through this aviation development program have been developed on a pay-as-you-go basis.

Funding from the FDOT is dependent upon the airport including its proposed near term projects in the FDOT five-year work program as well as in the Joint Automated Capital Improvement Program (JACIP), a cooperative funding program mechanism used by FAA and FDOT to coordinate annual funding and programming of Florida airport projects. FDOT funding is programmed six (6) years into the future. Project funding is also locked to the programmed projects two (2) years into the future. Thus, no new funding can be added unless after the six (6) year point. This funding schedule makes FDOT funding less responsive to emerging market needs. The current six (6) year FDOT work program is included in **Table 7-1**. FDOT is holding \$500,000 in funds for 2011 and 2012 in reserve for HEG that have not been assigned to a specific project.

In addition to the projects outlined in the FDOT Work Program, JAA has compiled a list of projects based upon development outlined in the previous master plan update as well as existing demand. The joint automated capital improvement program (JACIP) for Herlong Airport, as shown in **Table 7-2**, outlines anticipated cost estimates and funding sources for planned projects at HEG through the year 2020. Both the FAA and FDOT encourage each airport requesting project funding using federal and state funds to maintain a current version of their financial plan in the JACIP database. Updates must include specific projects for which the airport requests funding.

The FDOT encourages airports to use the findings outlined in their most recent master plan update or ALP update to populate the JACIP databases. Airports may not have exact cost estimates beyond the five year time period, but rough estimates of future project costs are acceptable for long-range planning.

**TABLE 7-1
HERLONG FDOT WORK PROGRAM (2007-2013)**

Project Information				Requested Funding						
Fiscal Year	Project Title	Project	UPIN	Cost Estimate	FDOT Design	FDOT Construction	FDOT Total	FAA Total	JAA Total	Total Funding
2007	Herlong Design & Construct T- Hangars	2169901- 94-01	PFL0000991	\$800,000	\$0	\$400,000	\$400,000	\$0	\$400,000	\$800,000
Total 2007				\$800,000	\$0	\$400,000	\$400,000	\$0	\$400,000	\$800,000
2008	Herlong Rehab Runway 7/25	2170132- 94-01	PFL0001568	\$500,000	\$25,000	\$0	\$25,000	\$0	\$125,000	\$150,000
Total 2008				\$500,000	\$25,000	\$0	\$25,000	\$0	\$125,000	\$150,000
2009	Herlong Rehab Runway 7/25	2170132- 94-01	PFL0001568	\$950,000	\$0	\$0	\$0	\$950,000	\$0.00	\$950,000
	Construct/Relocate Electrical Vault and Design/Construct T- Hangars	4099692- 94-01	PFL0000991	\$1,000,000	\$0	\$500,000	\$500,000	\$0	\$500,000	\$1,000,000
Total 2009				\$1,950,000	\$0	\$500,000	\$500,000	\$950,000	\$500,000	\$1,950,000
2010	Herlong Rehab Runway 7/25*	2170132- 94-01	PFL0001568	\$850,000	\$50,000	\$425,000	\$475,000*	\$0	\$375,000	\$850,000
	Herlong Rehab Runway 11/29	2170133- 94-01	PFL0002304	\$1,000,000	\$0.00	\$500,000	\$500,000	\$0	\$500,000	\$1,000,000
Total 2010				\$1,850,000	\$50,000	\$925,000	\$975,000	\$0	\$875,000	\$1,850,000
2011	Held for Future Projects	-	-	\$500,000	\$0	\$0	\$500,000	\$0	\$0	\$500,000
2012	Held for Future Projects	-	-	\$500,000	\$0	\$0	\$500,000	\$0	\$0	\$500,000
2013	Held for Future Projects	-	-	\$500,000	\$0	\$0	\$500,000	\$0	\$0	\$500,000

*Note: FDOT Funding only if FAA funding is not provided.
Source: JAA FDOT Work Program, July 2007

**TABLE 7-2
FLORIDA DEPARTMENT OF TRANSPORTATION
HEG JOINT AUTOMATED CAPITAL IMPROVEMENT PROGRAM
2006-2020**

Sponsor Year	UPIN #	FDOT WP #	Project Description	Federal	State	Local	Total
2006	PFL0001571	217015 1	Design & Construct New Fuel Farm	\$0	\$250,000	\$250,000	\$500,000
2006	PFL0001568	217013 2	Rehabilitate Runway 7/25 & Signage	\$140,593	\$0	\$0	\$140,593
2006	PFL0001575	409970 1	Expand Terminal Vehicular Parking	\$0	\$50,000	\$50,000	\$100,000
2006	23J277	409968 1	West and South Access Road Improvements	\$0	\$100,000	\$100,000	\$200,000
2006	23J609	-	Comprehensive Planning	\$0	\$0	\$12,500	\$12,500
			2006 Total	\$140,593	\$400,000	\$412,500	\$953,093
2007	PFL0000991	216990 1	T-Hangar Development	\$0	\$400,000	\$400,000	\$800,000
2007	PFL0001568	217013 2	Rehabilitate Runway 7/25 & Signage	\$150,000	\$0	\$7,750	\$157,750
2007	23J275	-	Environmental Planning	\$0	\$0	\$12,500	\$12,500
2007	23J609	-	Comprehensive Planning	\$0	\$0	\$12,500	\$12,500
			2007 Total	\$150,000	\$400,000	\$432,750	\$982,750
2008	PFL0000079	-	EA for Turf Runway & Runway 7/25 Extension	\$150,000	\$0	\$10,000	\$160,000
2008	PFL0001568	217013 2	Rehabilitate Runway 7/25 & Signage	\$0	\$25,000	\$25,000	\$50,000
2008	PFL0001619	-	Replace AWOS	\$185,400	\$0	\$20,600	\$206,000
2008	23J275	-	Environmental Planning	\$0	\$0	\$12,500	\$12,500
2008	23J609	-	Comprehensive Planning	\$0	\$0	\$12,500	\$12,500
			2008 Total	\$335,400	\$25,000	\$80,600	\$441,000
2009	PFL0001568	217013 2	Rehab Runway 7/25 & Signage	\$851,657	\$0	\$0	\$851,657
2009	23J280	-	Open Bay Hangar	\$0	\$500,000	\$500,000	\$1,000,000
2009	PFL0000091	409969 2	Relocate Electrical Vault	\$0	\$500,000	\$500,000	\$1,000,000
2009	23J275	-	Environmental Planning	\$0	\$0	\$12,500	\$12,500
2009	23J609	-	Comprehensive Planning	\$0	\$0	\$12,500	\$12,500
			2009 Total	\$851,657	\$1,000,000	\$1,025,000	\$2,876,657
2010	PFL0001574	-	Design & Construct Runway 7 Extension	\$0	\$150,000	\$150,000	\$300,000
2010	PFL0002304	217013 3	Rehabilitate Runway 11/29	\$0	\$500,000	\$500,000	\$1,000,000
2010	PFL0001567	-	Design & Construct T-Hangars	\$0	\$500,000	\$500,000	\$1,000,000
2010	23J275	-	Environmental Planning	\$0	\$0	\$12,500	\$12,500
2010	23J609	-	Comprehensive Planning	\$0	\$0	\$12,500	\$12,500

**TABLE 7-2
FLORIDA DEPARTMENT OF TRANSPORTATION
HEG JOINT AUTOMATED CAPITAL IMPROVEMENT PROGRAM
2006-2020**

Sponsor Year	UPIN #	FDOT WP #	Project Description	Federal	State	Local	Total
			2010 Total	\$0	\$1,150,000	\$1,175,000	\$2,325,000
2011	PFL0000080	-	Design & Construct Turf Runway & Taxiway System	\$1,926,244	\$0	\$101,380	\$2,027,624
2011	PFL0001574	-	Design & Construct Runway 7 Extension	\$0	\$500,000	\$500,000	\$1,000,000
2011	23J276	-	REILs Runway 7/25	\$0	\$25,000	\$25,000	\$50,000
2011	PFL0000084	-	Drainage Improvements	\$0	\$100,000	\$100,000	\$200,000
2011	23J275	-	Environmental Planning	\$0	\$0	\$12,500	\$12,500
2011	23J609	-	Comprehensive Planning	\$0	\$0	\$12,500	\$12,500
			2011 Total	\$1,926,244	\$625,000	\$751,380	\$3,302,624
2012	PFL0003129	-	South Airfield Electrical Utilities	\$0	\$100,000	\$100,000	\$200,000
2012	PFL0002019	-	Overlay Taxiways C & D	\$0	\$500,000	\$500,000	\$1,000,000
2012	PFL0001573	-	Acquire Runway 25 Avigation Easement	\$0	\$30,000	\$30,000	\$60,000
2012	PFL0000990	-	Taxiway K - Design/Construct	\$0	\$150,000	\$150,000	\$300,000
2012	PFL0001570	-	East Airfield Access Road	\$0	\$632,500	\$632,500	\$1,265,000
2012	PFL0002017	-	Master Plan Update	\$150,000	\$25,000	\$25,000	\$200,000
2012	23J275	-	Environmental Planning	\$0	\$0	\$12,500	\$12,500
			2012 Total	\$150,000	\$1,437,500	\$1,450,000	\$3,037,500
2013	PFL0003129	-	South Airfield Electrical Utilities	\$0	\$300,000	\$300,000	\$600,000
2013	PFL0002020	-	Overlay East Apron	\$150,000	\$300,000	\$300,000	\$750,000
2013	PFL0001572	-	Acquire Runway 7 Avigation Easement	\$0	\$30,000	\$30,000	\$60,000
2013	PFL0002031	-	Overlay West Apron (Transient)	\$0	\$90,000	\$90,000	\$180,000
2013	PFL0002021	-	Install Localizer Runway 25	\$0	\$150,000	\$150,000	\$300,000
2013	PFL0002037	-	Clear Obstruction Runway 25 Precision Approach	\$73,800	\$4,100	\$4,100	\$82,000
2013	PFL0002306	-	Design/Construct REILS & ODALS on Rwy 7/25	\$150,000	\$8,333	\$8,333	\$166,666
2013	PFL0003224	-	Construct Taxiway Echo	\$150,000	\$100,000	\$100,000	\$350,000
2013	PFL0004088	-	T-Hangar Construction	\$0	\$500,000	\$500,000	\$1,000,000
2013	23J275	-	Environmental Planning	\$0	\$0	\$12,500	\$12,500
2013	23J609	-	Comprehensive Planning	\$0	\$0	\$12,500	\$12,500
			2013 Total	\$523,800	\$1,482,433	\$1,507,433	\$3,513,666
2014	PFL0004048	-	West Apron Expansion - Phase 2	\$150,000	\$75,000	\$75,000	\$300,000

TABLE 7-2
FLORIDA DEPARTMENT OF TRANSPORTATION
HEG JOINT AUTOMATED CAPITAL IMPROVEMENT PROGRAM
2006-2020

Sponsor Year	UPIN #	FDOT WP #	Project Description	Federal	State	Local	Total
2014	23J278	-	North Apron Expansion	\$0	\$500,000	\$500,000	\$1,000,000
2014	PFL0002026	-	Rehabilitate Taxiways A & B	\$612,900	\$34,050	\$34,050	\$681,000
2014	PFL0002038	-	Implement Precision Instrument Rwy 25 Approach	\$847,800	\$47,100	\$47,100	\$942,000
			2014 Total	\$1,610,700	\$656,150	\$656,150	\$2,923,000
2015	PFL0002028	-	Renovate Terminal Building	\$0	\$200,000	\$200,000	\$400,000
			2015 Total	\$0	\$200,000	\$200,000	\$400,000
2016	PFL0002033	-	Construct Helicopter Landing Pads/Parking	\$150,000	\$250,000	\$250,000	\$650,000
			2016 Total	\$150,000	\$250,000	\$250,000	\$650,000
2017	PFL0002035	-	Clear Obstruction Rwy 7 Precision Approach	\$73,800	\$4,100	\$4,100	\$82,000
			2017 Total	\$73,800	\$4,100	\$4,100	\$82,000
2018	PFL0002036	-	Implement Precision Approach to Runway 7	\$839,800	\$41,100	\$41,100	\$922,000
			2018 Total	\$839,800	\$41,100	\$41,100	\$922,000
2019	PFL0002034	-	Construct Drainage Improvements	\$150,000	\$150,000	\$150,000	\$450,000
			2019 Total	\$150,000	\$150,000	\$150,000	\$450,000
2020	PFL0000089	-	Residential Community Development	\$0	\$0	\$300,000	\$300,000
2020	PFL0000090	-	Develop Glider Area	\$0	\$343,000	\$343,000	\$686,000
			2020 Total	\$0	\$343,000	\$643,000	\$986,000
			Work Plan Total	\$7,051,994	\$8,735,336	\$9,317,960	\$25,105,290

Source: Jacksonville Aviation Authority, JACIP March 2007

Local (Sponsor) Funding

JAA is anticipated to fund the local match of the project costs with through the airport general fund or through alternative funding sources. The JAA share of funding is anticipated to come from two sources: JAA annual net remaining revenues and unrestricted cash flow. Net remaining revenues refers to revenues produced from leases, fuel sales etc. at Herlong Airport. Whereas, unrestricted cash flow refers to funding from alternate sources, either through the JAA general fund, private investment, etc. The ability of JAA to spend airport earnings and reserves for capital projects at Cecil Field, Herlong, Craig and JIA is controlled

by the Signatory Airline Agreement, the Bond Resolution and by the strategic direction of the JAA Board. However, the Signatory Airlines, commercial service airlines operating from JIA that have a Signatory Airport Agreement with JAA, have no responsibility to pay for costs attributed to Excluded Cost Centers. Excluded cost centers include ground transportation, non-aviation and specific aviation facilities, Craig Airport, Herlong Airport and Cecil Field. As a result, JAA uses the balances of its funds after operating expenses and required transfers are made to pay the sponsor's share of capital improvements at the Excluded Cost Centers. In addition, revenues obtained from airport improvements will also be used to facilitate the capital improvements at the Airport.

Revenues that HEG generates now and in the future are anticipated to be obtained primarily from lease agreements, fuel flowage rates and license agreement fees. Additional revenues will come from miscellaneous revenues and charges as well as option fees. Option fees at airports such as HEG typically refer to lease hold options. Lease hold options can consist of tenants leasing land but owning the facilities with the option of the facility reverting back to the airport after a specified time, or the tenant leases a facility or piece of land with the option to purchase.

The planned construction of new T-hangars and box hangar space as well as anticipated land leases associated with corporate and conventional hangar development will provide a portion of the local revenues necessary to implement the overall Master Plan development program. Therefore, successful marketing and development of HEG and the proposed business parks by JAA will likely increase the financial sustainability of the airport.

Any anticipated funding shortfalls specifically within the short to mid-term will require JAA to provide additional funding or to find alternative funding sources. In addition, the portion of FAA Discretionary funding available will depend upon the priority rating (50 or higher) of the project. Therefore, the financial feasibility of each project must be considered at the time of the grant application in order to determine project eligibility and implementation.

Other Funding Sources

Several federal and state assistance funding sources (other than FAA and FDOT Aviation) are available to JAA. Some of these include:

- Transportation Act of the 21st Century (TEA-21) – Airports eligible for access road development and intermodal-related projects.
- Florida Economic Development Transportation Fund Agency – Administered by Enterprise Florida, Incorporated. This program provides funding to local governments for transportation projects serving as an inducement for a company's Florida location, retention and expansion project.

- These funds have limited dollar available to airports and specific funding requirements that limit their usefulness to most development projects.

Third Party/Private Development

In addition, capital improvement projects benefiting only a private tenant or group of private tenants, normally will not garner funding from the FAA, FDOT, or the airport sponsor. However, projects that serve aviation functions and generate revenue can attract private investment. The potential for private funding was considered within this implementation plan, and many projects, especially hangar development on the airfield, are likely to be funded by private entities.

FINANCIAL FEASIBILITY

Capital Improvement Plan

The Capital Improvement Program (CIP), including the development schedule and project cost summaries, is presented in the following sections for each development phase. Improvements presented in the CIP for each period assume the maximum anticipated federal and state participation based upon the FAA National Priority Rating. Using the National Priority System as shown in **Appendix G**, as well as the current airport JACIP as shown in **Table 7-2**, the funding feasibility of planned projects was determined.

The Cash Flow Analysis section of this chapter addresses in general terms the financial feasibility of this development program. Cost projections are based on constant 2006 dollars and include estimated engineering fees and contingencies. Further, conservative funding assumptions based upon historic data were used to determine the anticipated federal, state, local and third party/private participation associated with the cash flow analysis. The projections, however, should be used for planning purposes only and do not imply that funding for these projects will necessarily be available. Each year indicates the initiation of design and/or environmental efforts as identified in the tables. It is assumed however based upon anticipated funding that construction would be undertaken either in the following year or over a multi year period.

Program Phasing and Cost Estimates

An initial development schedule for the proposed improvements was prepared based upon facility requirements, which were determined by the operational forecasts. Since actual activity levels realized at the airport may vary, it is important that staging of these proposed improvement projects remain sensitive to such variations. The project development schedule throughout the planning period was refined through discussions with Airport management and JAA. As a result, project timelines were established in order of priority during each short-, intermediate-, and long-term phase.

The resulting list of prioritized improvements was determined based upon the urgency of need, ease of implementation, logic of project sequencing, and Airport staff input. The objective was to establish an

efficient order for project development and implementation that satisfied the forecast aviation activity for HEG and the needs expressed by airport staff. The development schedule is divided into three general stages: the short-term (2006-2010), the intermediate-term (2011-2015) and the long-term (2016-2026).

Cost estimates were developed for each project from 2006 through 2026. The projected costs were based on the preliminary layouts developed as part of the Alternatives Analysis. Estimated quantities of major items, such as pavement or fill material, were used in conjunction with unit cost values to determine construction cost for mobilization, drainage (where applicable), and engineering services. Additionally, a contingency amount of 20 percent of the estimated construction cost was added to account for items that are unknown at this time.

It should be noted that the CIP cost estimates are provided in 2006 dollars, and anticipated federal (including GA Entitlement and Discretionary Funding), state, local and private/third party participation is based upon the FAA funding priority level (see **Appendix G**) as well as maximum funding participation (i.e. 90 percent federal and 5 percent state and 5 percent local or 50 percent state and 50 percent local). Further, the short, mid and long-term CIP incorporates the projects within the FDOT Work Program (**Table 7-1**). Projects phased within the CIP may differ from the existing JACIP and work program based upon changing needs and facility requirements at the airport as identified in **Tables 7-3 through 7-6**. Projects without probable FAA or FDOT funding may have to be deferred.

Based upon the FAA National Priority Rankings, projects with a priority ranking of less than 70 would be unlikely to obtain FAA discretionary funding. Further, improvements to Runway 11/29 and associated taxiways were also deemed ineligible for discretionary funding since Runway 7/25 alone accommodates the wind coverage requirements. The state funding for eligible projects was determined to be only 50 percent since HEG is part of the Jacksonville Aviation System which includes Jacksonville International Airport. Finally, non-aviation development and large (10,000 SF or larger) aviation hangars and buildings are expected to be constructed by a private third party. Lastly, any runway construction, either an extension or new construction, typically requires that an environmental assessment be performed prior to design and construction. However, based upon recent changes to FAA Order 1051.E, if the development is anticipated to have no environmental impacts and does not increase the DNL contours by greater than 1.5 DNL, then the airport could apply for a Categorical Exclusion rather than conducting an Environmental Assessment (EA). Based upon initial findings, it appears that the extension of Runway 7 and the construction of the Turf (utility) Runway (7U/25U) are candidates for categorical exclusions. Still, since the decision to allow a categorical exclusion rather than a full environmental assessment rests with the FAA, a cost estimate for the more costly environmental assessment was used in the CIP and Cash Flow Analysis. If an EA is not required, the associated money could be reprogrammed to a different eligible project.

Short-Term Developments

As previously stated, FDOT funding is programmed six (6) years into the future, and is locked to the programmed projects two (2) years into the future. Thus, typically, no new funding can be added unless

after the six (6) year cycle. However, based upon the needs of the community and JAA, this master plan has identified several projects that will be required within the short and early mid-term. Therefore, **Tables 7-4, Short-Term Capital Improvement Financial Feasibility Plan (2006-2010)**, and **7-5, Mid-Term Capital Improvement Financial Feasibility Plan (2011-2015)**, identify projects currently included in the FDOT Work Program and non-FDOT funded projects. Projects which are not programmed with FDOT funding are shown as funded with federal funds, if eligible, or local funding only.

However, since FAA and FDOT funding will be required for eligible projects currently not included in the FDOT Work Program, **Tables 7-3A, Proposed Short-Term Capital Improvement Funding**, **7-4A, Intermediate Term Proposed Capital Improvement Project Funding**, and **Table 7-5A, Long-Term Proposed Capital Improvement Project Funding**, will provide CIP cost estimates in 2006 dollars. In addition, anticipated federal, state, local and private funding will be based upon the FAA funding priority level in addition to maximum funding participation. The projects listed in **Tables 7-3 and 7-3A** are shown in order by priority. Anticipated FDOT and FAA funding are based upon project eligibility and requested funding within June 2007 FDOT Work Program.

Intermediate-Term Developments

Tables 7-4 and 7-4A provide a CIP for projects anticipated to occur between 2011 and 2015, and primarily include midfield development. **Table 7-4** identifies the current project funding as provided in the June 2007 FDOT Work Program. **Table 7-4A** outlines anticipated federal, state, local and private funding that could be obtained assuming maximum funding participation. It is important to note that priorities for these developments could change as this timeframe draws near, especially since another master plan update will be undertaken during this period.

Long-Term Developments

A CIP was also prepared for the long-term period (2016-2026). It is assumed that a priority for these developments will be assigned as the timeframe draws near, especially since a Master Plan Update is planned during the intermediate term. A full listing of projects needed from 2016 until 2026 is given in **Table 7-5** based upon historical annual FDOT participation of \$500,000. **Table 7-5A** provides anticipated funding based upon project eligibility and maximum FAA and FDOT funding anticipated (i.e. 90% and 5%, respectively). During this long-term period, routine pavement maintenance, smaller equipment purchases, and a Master Plan Update are also planned. These projects are expected to cost approximately \$80 million over the ten-year period.



**TABLE 7-3
SHORT-TERM CAPITAL IMPROVEMENT PROGRAM (2006-2010)
FINANCIALLY FEASIBLE FUNDING**

Year	UPIN #	FDOT WP #	Sponsor Priority Ranking	FAA Feasibility	Development Item Description	Development Costs & Contingencies (2006)	Federal Funding			JAA (Local) Share	Total
							GA Entitlements	Discretionary	FDOT Share		
2006	23J609	-	0	58	Comprehensive Planning	\$12,500.00	\$0.00	\$0.00	\$0.00	\$12,500.00	\$12,500.00
2006	PFL0001571	217015 1	1	20	Design and Construct New Fuel Farm (2 Tanks) ¹	\$486,422.10	\$50,000.00	\$0.00	\$250,000.00	\$186,422.10	\$486,422.10
2006	PFL0001575	409970 1	3	19	Expand Terminal Vehicular Parking	\$100,000.00	\$0.00	\$0.00	\$50,000.00	\$50,000.00	\$100,000.00
2006	23J277	409968 1	4	23	West and South Access Road Improvements ¹	\$200,000.00	\$100,000.00	\$0.00	\$100,000.00	\$0.00	\$200,000.00
2006	FL0000083	409966 1	5	68	Airport Master Plan Update	\$20,000.00	\$0.00	\$0.00	\$0.00	\$20,000.00	\$20,000.00
Total 2006						\$818,922.10	\$150,000.00	\$0.00	\$400,000.00	\$268,922.10	\$818,922.10
2007	PFL0000991	2169901-94-01	1	0	Construct 14-unit T-hangar ³	\$1,202,061.67	\$0.00	\$0.00	\$400,000.00	\$802,061.67	\$1,202,061.67
2007	-	-	2	68	Conduct Cost-Benefit Feasibility Study for Runway 7-25 Extension ²	\$35,000.00	\$0.00	\$0.00	\$0.00	\$35,000.00	\$35,000.00
2007	-	-	7	92	Signage Plan/Design ²	\$29,000.00	\$0.00	\$26,100.00	\$0.00	\$2,900.00	\$29,000.00
Total 2007						\$1,266,061.67	\$0.00	\$26,100.00	\$400,000.00	\$839,961.67	\$1,266,061.67
2008	PFL0001568	2170132-94-01	1	72	Rehabilitate Runway 7-25 & Signage (Phase I) - Design ^{1&3}	\$311,611.06	\$150,000.00	\$0.00	\$25,000.00	\$136,611.06	\$311,611.06
2008	PFL0001574	-	1	70	Runway 7 Extension Design ^{1&2}	\$147,434.24	\$56,511.00	\$0.00	\$0.00	\$90,923.24	\$147,434.24
2008	PFL0000079	-	2	68	EA for Turf Runway & Runway 7/25 Extension ²	\$350,800.00	\$0.00	\$0.00	\$0.00	\$350,800.00	\$350,800.00
2008	PFL0001574	-	2	70	Runway 7 Extension - Construction including 20% contingency ^{1&2}	\$572,093.48	\$43,489.00	\$0.00	\$0.00	\$528,604.48	\$572,093.48
2008	-	-	2	50	Runway 7-25 Stopways and Markings Design ²	\$127,237.64	\$0.00	\$0.00	\$0.00	\$127,237.64	\$127,237.64
2008	PFL0001619	-	5	48	Replace AWOS ¹	\$189,000.00	\$50,000.00	\$0.00	\$0.00	\$139,000.00	\$189,000.00
2008	-	-	6	58	Pavement Condition Report ²	\$30,000.00	\$0.00	\$0.00	\$0.00	\$30,000.00	\$30,000.00
Total 2008						\$1,728,176.42	\$300,000.00	\$0.00	\$25,000.00	\$1,403,176.42	\$1,728,176.42
2009	PFL0001568	2170132-94-01	1	72	Rehab Runway 7/25 & Signage	\$1,076,500.00	\$0.00	\$968,850.00	\$0.00	\$107,650.00	\$1,076,500.00
2009	PFL0000091	4099692-94-01	3	72	Construct/Relocate Electrical Vault & Design/Construct T-Hangars (14 Unit)	\$1,532,302.00	\$0.00	\$0.00	\$500,000.00	\$1,032,302.00	\$1,532,302.00
2009	-	-	5	22	Extend access road to T-Hangars 1, 2 & 3 ²	\$115,204.00	\$0.00	\$0.00	\$0.00	\$115,204.00	\$115,204.00
2009	-	-	6	86	Relocate Fence Line associated with T-Hangar Development ²	\$87,756.18	\$0.00	\$78,980.56	\$0.00	\$8,775.62	\$87,756.18
2009	PFL0001574	-	3	50	Design/Construct Runway Extension (Stopways and Markings)	\$491,114.73	\$0.00	\$0.00	\$0.00	\$491,114.73	\$491,114.73
2009	-	-	4	53	Taxiway A Extension with Markings and Lighting ^{1&2}	\$535,395.48	\$150,000.00	\$0.00	\$0.00	\$385,395.48	\$535,395.48
2009	-	-	6	43	Runway 7 PAPI Relocation ²	\$32,210.58	\$0.00	\$0.00	\$0.00	\$32,210.58	\$32,210.58
2009	23J276	-	7	50	REILs Runway 7/25	\$89,604.00	\$0.00	\$0.00	\$0.00	\$89,604.00	\$89,604.00
Total 2009						\$3,960,086.98	\$150,000.00	\$1,047,830.56	\$500,000.00	\$2,262,256.41	\$3,960,086.98
2010	PFL0001568	2170132-94-01	1	72	Rehabilitate Runway 7/25 ³	\$1,076,500.00	\$0.00	\$0.00	\$475,000.00	\$601,500.00	\$1,076,500.00



**TABLE 7-3
SHORT-TERM CAPITAL IMPROVEMENT PROGRAM (2006-2010)
FINANCIALLY FEASIBLE FUNDING**

Notes: ¹GA Entitlement Funding
²Not in JACIP
³Included FDOT Work Program

Year	UPIN #	FDOT WP #	Sponsor Priority Ranking	FAA Feasibility	Development Item Description	Development Costs & Contingencies (2006)	Federal Funding			JAA (Local) Share	Total
							GA Entitlements	Discretionary	FDOT Share		
2010	PFL0002304	2170133-94-01	1	72	Rehabilitate Runway 11/29 ^{1&3}	\$2,215,387.92	\$150,000.00*	\$0.00	\$500,000.00	\$1,565,387.92	\$2,215,387.92
					Total 2010	\$3,291,887.92	\$150,000.00	\$0.00	\$975,000.00	\$2,166,887.92	\$3,291,887.92
					Short-Term Project Total (2006-2010)	\$11,065,135.08	\$750,000.00	\$1,073,930.56	\$2,300,000.00	\$6,941,204.52	\$11,065,135.08

Notes: *FAA may participate in rehabilitation of Runway 11/29 even though Runway 7/25 provides 96.99 percent all weather wind coverage at 10.5 knots.
Sources: JAA FDOT Work Program, JACIP (March 2007), Historical Funding, FAA Project Priority Funding and The LPA Group, 2007

**TABLE 7-3A
SHORT-TERM PROPOSED CAPITAL IMPROVEMENT PLAN
MAXIMUM FUNDING**

Phasing Identifier	Year	UPIN #	FDOT WP #	Sponsor Priority Ranking	FAA Feasibility	Development Item Description	Development Costs & Contingencies (2006)	Federal Funding		State	Local/Other Sources	Private	Total
								GA Entitlements	Discretionary				
Notes: ¹ GA Entitlement Funding ² Not in JAA Work Program ³ Included FDOT Work Program *FDOT Funding Locked through 2009													
S-01	2006	23J609		0	58	Comprehensive Planning	\$12,500	\$0	\$0	\$0	\$12,500	\$0	\$12,500
S-02	2006	PFL0001571	217015 1	1	20	Design and Construct New Fuel Farm (2 Tanks) ¹	\$486,422	\$50,000	\$0	\$250,000	\$186,422	\$0	\$486,422
S-03	2006	PFL0001575	409970 1	3	19	Expand Terminal Vehicular Parking	\$100,000	\$0	\$0	\$50,000	\$50,000	\$0	\$100,000
S-04	2006	23J277	409968 1	4	23	West and South Access Road Improvements ¹	\$200,000	\$100,000	\$0	\$100,000	\$0	\$0	\$200,000
S-05	2006	FL0000083	409966 1	5	68	Airport Master Plan Update	\$20,000	\$0	\$0	\$0	\$20,000	\$0	\$20,000
Total 2006							\$818,922	\$150,000	\$0	\$400,000	\$268,922	\$0	\$818,922
S-06	2007	23J275/23J609	-	0	61/58	Environmental & Comprehensive Planning	\$25,000	\$0	\$0	\$0	\$25,000	\$0	\$25,000
S-07	2007	PFL0000991	2169901-94-01	1	0	Construct 14-unit T-hangar ³	\$1,202,062	\$0	\$0	\$400,000	\$802,062	\$0	\$1,202,062
S-08	2007	-	-	2	68	Conduct Cost-Benefit Feasibility Study for Runway 7-25 Extension ²	\$35,000	\$0	\$0	\$0	\$35,000	\$0	\$35,000
S-09	2007	-	-	7	92	Signage Plan/Design ²	\$29,000	\$0	\$27,550	\$0	\$1,450	\$0	\$29,000
S-10	2007	-	-	8	0	Expand Royal Atlantic Facilities ²	\$728,865	\$0	\$0	\$0	\$0	\$728,865	\$728,865
Total 2007							\$2,019,927	\$0	\$27,550	\$400,000	\$863,512	\$728,865	\$2,019,927
S-11	2008	23J275/23J609	-	0	61/58	Environmental & Comprehensive Planning	\$25,000	\$0	\$0	\$0	\$25,000	\$0	\$25,000
S-12	2008	PFL0001568	2170132-94-01	1	72	Rehabilitate Runway 7-25 & Signage (Phase I) - Design ¹	\$311,611	\$150,000	\$0	\$25,000	\$136,611	\$0	\$311,611
S-13	2008	PFL0001574	-	1	70	Runway 7 Extension Design ^(1 & 2)	\$147,434	\$56,511	\$76,180	\$0	\$14,743	\$0	\$147,434
S-14	2008	PFL0000079	-	2	68	EA for Turf Runway & Runway 7/25 Extension	\$350,800	\$0	\$315,720	\$0	\$35,080	\$0	\$350,800
S-15	2008	PFL0001574	-	2	70	Runway 7 Extension - Construction including 20% contingency ¹	\$572,093	\$43,489	\$0	\$500,000	\$28,604	\$0	\$572,093
S-16	2008	-	-	2	50	Runway 7-25 Stopways and Markings Design ²	\$127,238	\$0	\$0	\$63,619	\$63,619	\$0	\$127,238
S-17	2008	PFL0001619	-	5	48	Replace AWOS ¹	\$189,000	\$50,000	\$0	\$0	\$139,000	\$0	\$189,000
S-18	2008	-	-	6	58	Pavement Condition Report ²	\$30,000	\$0	\$0	\$15,000	\$15,000	\$0	\$30,000
Total 2008							\$1,753,176	\$300,000	\$391,900	\$603,619	\$457,658	\$0	\$1,753,176
S-19	2009	23J275/23J609	-	0	61/58	Environmental & Comprehensive Planning	\$25,000	\$0	\$0	\$0	\$25,000	\$0	\$25,000
S-20	2009	PFL0001568	2170132-94-01	1	72	Rehab Runway 7/25 & Signage ³	\$1,076,500	\$0	\$968,850	\$0	\$107,650	\$0	\$1,076,500
S-21	2009	23J280	-	1	34	Construct Open Bay/Maintenance Hangar North GA Area	\$1,848,057	\$0	\$0	\$0	\$1,848,057	\$0	\$1,848,057
S-22	2009	-	-	1	50	Construct 3,700 SY Apron adjacent to Maintenance Hangar ²	\$467,718	\$0	\$0	\$0	\$467,718	\$0	\$467,718
S-23	2009	PFL0000091	4099692-94-01	3	72	Construct/Relocate Electrical Vault &	\$1,532,302	\$0	\$0	\$500,000	\$1,032,302	\$0	\$1,532,302



**TABLE 7-3A
SHORT-TERM PROPOSED CAPITAL IMPROVEMENT PLAN
MAXIMUM FUNDING**

Phasing Identifier	Year	UPIN #	FDOT WP #	Sponsor Priority Ranking	FAA Feasibility	Development Item Description	Development Costs & Contingencies (2006)	Federal Funding		State	Local/Other Sources	Private	Total
								GA Entitlements	Discretionary				
						Design/Construct T-Hangars (14 Unit) ³							
S-24	2009	-	-	5	22	Extend access road to T-Hangars 1, 2 & 3 ²	\$115,204	\$0	\$0	\$0	\$115,204	\$0	\$115,204
S-25	2009	-	-	6	86	Relocate Fence Line associated with T-Hangar Development ²	\$87,756	\$0	\$83,368	\$0	\$4,388	\$0	\$87,756
S-26	2009	PFL0001574	-	3	50	Design/Construct Runway Extension (Stopways and Markings)	\$491,115	\$0	\$0	\$0	\$491,115	\$0	\$491,115
S-27	2009	-	-	4	53	Taxiway A Extension with Markings and Lighting ^{1&2}	\$535,395	\$150,000	\$0	\$0	\$385,395	\$0	\$535,395
S-28	2009	-	-	6	43	Runway 7 PAPI Relocation ²	\$32,211	\$0	\$0	\$0	\$32,211	\$0	\$32,211
S-29	2009	23J276	-	7	50	REILs Runway 7/25	\$89,604	\$0	\$0	\$0	\$89,604	\$0	\$89,604
						Total 2009	\$6,300,862	\$150,000	\$1,052,218	\$500,000	\$4,598,644	\$0	\$6,300,862
S-30	2010	23J275/23J609	-	0	61/58	Environmental & Comprehensive Planning	\$25,000	\$0	\$0	\$0	\$25,000	\$0	\$25,000
S-31	2010	PFL0001568	2170132-94-01		72	Rehabilitate Runway 7/25 ³	\$1,076,500	\$0	\$0	\$475,000	\$601,500	\$0	\$1,076,500
S-32	2010	PFL0002304	2170133-94-01	1	72	Rehabilitate Runway 11/29 ^{1&3}	\$2,215,388	\$150,000	\$0	\$500,000	\$1,565,388	\$0	\$2,215,388
S-33	2010	PFL0004048	-	2	50	West Apron Expansion Phase 2	\$1,357,208	\$0	\$0	\$678,604	\$678,604	\$0	\$1,357,208
S-34	2010	-	-	3	50	Airfield Sign System Upgrades including new Signage ²	\$463,904	\$0	\$0	\$231,952	\$231,952	\$0	\$463,904
S-35	2010	-	-	6	19	Construct 1,069 SY of Automobile Parking ²	\$134,704	\$0	\$0	\$67,352	\$67,352	\$0	\$134,704
S-36	2010	-	-	7	0	Construct 150' x 100' Corporate Hangar in North GA Area ²	\$2,275,064	\$0	\$0	\$0	\$0	\$2,275,064	\$2,275,064
S-37	2010	-	-	8	46	Construct Blimp Hangar and Apron ²	\$3,300,976	\$0	\$0	\$0	\$0	\$3,300,976	\$3,300,976
						Total 2010	\$10,848,744	\$150,000	\$0	\$1,952,908	\$3,169,796	\$5,576,040	\$10,848,744
						Short-Term Project Total (2006-2010)	\$21,741,631	\$750,000	\$1,471,668	\$3,856,527	\$9,358,531	\$6,304,905	\$21,741,631

Sources: JAA FDOT Work Program, JACIP (March 2007), Historical Funding, FAA Project Priority Funding and The LPA Group, 2007

**TABLE 7-4
MID-TERM CAPITAL IMPROVEMENT PROGRAM (2011-2015)
FINANCIALLY FEASIBLE FUNDING**

Notes: ¹ GA Entitlement Funding											
² Not in JAA Work Program											
³ Included FDOT Work Program											
Year	UPIN #	FDOT WP #	Sponsor Priority Ranking	FAA Feasibility	Development Item Description	Development Costs & Contingencies (2006)	Federal Funding			JAA (Local) Share	Total
							GA Entitlements	Discretionary	FDOT Share		
2011	-	-	1	48	Relocate Airport Entrance Road ²	\$367,641.43	\$0.00	\$0.00	\$183,820.72	\$183,820.72	\$367,641.43
2011	-	-	3	19	Reconfigure Airport Parking ^{1&2}	\$432,735.75	\$150,000.00	\$0.00	\$141,367.88	\$141,367.88	\$432,735.75
2011	-	-	4	86	Relocate Airport Fence Line ²	\$130,116.64	\$0.00	\$117,104.98	\$6,505.83	\$6,505.83	\$130,116.64
2011	PFL0000080	-	4	53	Design/Construct 2000 x 60 foot Turf Runway (7U-25U)	\$1,046,389.35	\$0.00	\$0.00	\$211,470.68	\$834,918.67	\$1,046,389.35
Total 2011						\$1,976,883.18	\$150,000.00	\$117,104.98	\$543,165.10	\$1,166,613.09	\$1,976,883.18
2012	PFL0002019	-	4	68	Overlay Taxiways C & D	\$1,696,920.00	\$0.00	\$0.00	\$1,000,000.00	\$696,920.00	\$1,696,920.00
2012	PFL0002017	-	9	68	Master Plan Update ¹	\$200,000.00	\$150,000.00	\$0.00	\$25,000.00	\$25,000.00	\$200,000.00
Total 2012						\$1,896,920.00	\$150,000.00	\$0.00	\$1,025,000.00	\$721,920.00	\$1,896,920.00
2013	PFL0003224	-	2	50	Construct Taxiway Echo with lights ¹	\$271,211.00	\$150,000.00	\$0.00	\$60,600.00	\$60,611.00	\$271,211.00
2013	-	-	2	84	Replace and Relocated existing MIRLS with HIRL on Runway 7-25 ²	\$288,481.92	\$0.00	\$259,633.73	\$14,424.10	\$14,424.10	\$288,481.92
2013	-	-	4	45	Runway 7-25 - Marking Removal and Remarking ²	\$342,590.56	\$0.00	\$0.00	\$171,295.28	\$171,295.28	\$342,590.56
2013	PFL0002306	-	5	50	Design/Construct REILs on Runway 7/25	\$89,604.00	\$0.00	\$0.00	\$89,604.00	\$0.00	\$89,604.00
Total 2013						\$991,887.48	\$150,000.00	\$259,633.73	\$335,923.37	\$246,330.37	\$991,887.48
2014	PFL0002026	-	1	68	Rehabilitate Taxiways A and B ¹	\$1,779,346.80	\$150,000.00	\$0.00	\$1,000,000.00	\$629,346.80	\$1,779,346.80
Total 2014						\$1,779,346.80	\$150,000.00	\$0.00	\$1,000,000.00	\$629,346.80	\$1,779,346.80
2015	-	-		0	Closed Runways Pavement Removal (Taxiways L & M) ¹ & ²	\$181,457.00	\$150,000.00	\$0.00	\$15,728.50	\$15,728.50	\$181,457.00
2015	-	-		68	Closed Runways Taxilane Overlay/Repaving (Taxiways L & M) ²	\$1,151,009.00	\$0.00	\$0.00	\$1,000,000.00	\$151,009.00	\$1,151,009.00
2015	-	-		47	Install Markings and Lighting on Southern Taxiways (L & M) ²	\$368,522.00	\$0.00	\$0.00	\$368,522.00	\$0.00	\$368,522.00
Total 2015						\$1,700,988.00	\$150,000.00	\$0.00	\$1,384,250.50	\$166,737.50	\$1,700,988.00
Total 2011-2015						\$8,346,025.46	\$750,000.00	\$376,738.71	\$4,288,338.98	\$2,930,947.77	\$8,346,025.46

Sources: JAA FDOT Work Program, JACIP (March 2007), Historical Funding, FAA Project Priority Funding and The LPA Group, 2007

**TABLE 7-4A
MID-TERM PROPOSED CAPITAL IMPROVEMENT PROGRAM (2011-2015)
MAXIMUM FEASIBLE FUNDING**

Notes	1 GA Entitlement Funding			2 Not in JAA Work Program			3 Included FDOT Work Program							
	Phasing Identifier	Year	UPIN #	FDOT WP #	Sponsor Priority Ranking	FAA Feasibility	Development Item Description	Development Costs & Contingencies (2006)	GA Entitlements	Discretionary	State	Local/Other Sources	Private	Total
	I-01	2011	23J275/23J609	-	0	61/58	Environmental & Comprehensive Planning	\$25,000	\$0	\$0	\$0	\$25,000	\$0	\$25,000
	I-02	2011	-	-	1	48	Relocate Airport Entrance Road ²	\$367,641	\$0	\$0	\$183,821	\$183,821	\$0	\$367,641
	I-03	2011	-	-	3	19	Reconfigure Airport Parking ^{1&2}	\$432,736	\$150,000	\$0	\$141,368	\$141,368	\$0	\$432,736
	I-04	2011	-	-	4	86	Relocate Airport Fence Line ²	\$130,117	\$0	\$117,105	\$6,506	\$6,506	\$0	\$130,117
	I-05	2011	PFL0000080	-	4	53	Design/Construct 2000 x 60 foot Turf Runway (7U-25U)	\$1,046,389	\$0	\$0	\$523,195	\$523,195	\$0	\$1,046,389
	I-07	2011	PFL0000084	-	7	45	Drainage Improvements	\$197,971	\$0	\$0	\$98,986	\$98,986	\$0	\$197,971
	I-08	2011	-	-	8	62	Rehabilitate FBO Transient Apron ²	\$307,405	\$0	\$0	\$153,703	\$153,703	\$0	\$307,405
							Total 2011	\$2,507,260	\$150,000	\$117,105	\$1,107,577	\$1,132,577	\$0	\$2,507,260
	I-09	2012	23J275	-	0	61	Environmental Planning	\$12,500	\$0	\$0	\$0	\$12,500	\$0	\$12,500
	I-10	2012	PFL0000990	-	1	50	Taxiway J-Design & Construct (formerly K)	\$271,211	\$0	\$0	\$135,606	\$135,606	\$0	\$271,211
	I-11	2012	-	-	3	0	Construct 3 70' x 70' Corporate Hangars in North GA Area adjacent to relocated entrance road ²	\$2,200,841	\$0	\$0	\$0	\$0	\$2,200,841	\$2,200,841
	I-12	2012	PFL0002019	-	4	68	Overlay Taxiways C & D	\$1,696,920	\$0	\$0	\$848,460	\$848,460	\$0	\$1,696,920
	I-13	2012	23J278	-	5	56	Construct 13,424 SY Apron on East Side of North GA Area	\$1,570,582	\$0	\$0	\$785,291	\$785,291	\$0	\$1,570,582
	I-14	2012	-	-	6	46	Construct 2,106 SY Apron Adjacent to 70' x 70' Hangars In North GA Area ²	\$286,931	\$0	\$0	\$143,466	\$143,466	\$0	\$286,931
	I-15	2012	PFL0001573	-	7	45	Acquire Runway 25 Avigation Easement (1.7 Acres)	\$60,000	\$0	\$0	\$30,000	\$30,000	\$0	\$60,000
	I-16	2012	PFL0002017	-	9	68	Master Plan Update ¹	\$200,000	\$150,000	\$0	\$25,000	\$25,000	\$0	\$200,000
	I-17	2012	PFL0003129	-	10	20	South Airfield Electrical Utilities	\$600,000	\$0	\$0	\$300,000	\$300,000	\$0	\$600,000
	I-18	2012	-	-	11	0	Modify/Remove Bays from Existing 16-unit T-hangar on East Side ²	\$251,161	\$0	\$0	\$125,581	\$125,581	\$0	\$251,161
							Total 2012	\$7,150,146	\$150,000	\$0	\$2,393,403	\$2,405,903	\$2,200,841	\$7,150,146
	I-19	2013	23J275/23J609	-	0	61/58	Environmental and Comprehensive Planning	\$25,000	\$0	\$0	\$0	\$25,000	\$0	\$25,000
	I-20	2013	PFL0002037	-	1	95	Clear Obstruction Runway 25 Precision Approach	\$82,000	\$0	\$73,800	\$4,100	\$4,100	\$0	\$82,000
	I-21	2013	PFL0003224	-	2	50	Construct Taxiway Echo with lights ¹	\$271,211	\$150,000	\$0	\$60,606	\$60,606	\$0	\$271,212
	I-22	2013	-	-	2	84	Replace and Relocated existing MIRLs with HIRL on Runway 7-25 ²	\$288,482	\$0	\$259,634	\$14,424	\$14,424	\$0	\$288,482
	I-23	2013	PFL0002020	-	2	62	Overlay East Apron	\$461,292	\$0	\$0	\$230,646	\$230,646	\$0	\$461,292
	I-24	2013	PFL0004088	-	3	0	Construct 12-unit T-hangar on East Side of North GA Area (T-Hangar Construction)	\$1,202,062	\$0	\$0	\$601,031	\$601,031	\$0	\$1,202,062
	I-25	2013	-	-	4	45	Runway 7-25 - Marking Removal and Remarking ²	\$342,591	\$0	\$0	\$171,295	\$171,295	\$0	\$342,591



**TABLE 7-4A
MID-TERM PROPOSED CAPITAL IMPROVEMENT PROGRAM (2011-2015)
MAXIMUM FEASIBLE FUNDING**

Notes	¹ GA Entitlement Funding ² Not in JAA Work Program ³ Included FDOT Work Program													
	Phasing Identifier	Year	UPIN #	FDOT WP #	Sponsor Priority Ranking	FAA Feasibility	Development Item Description	Development Costs & Contingencies (2006)	Federal Funding			Total		
								GA Entitlements	Discretionary	State	Local/Other Sources	Private		
	I-26	2013	PFL0002306	-	5	50	Design/Construct REILs on Runway 7/25	\$89,604	\$0	\$0	\$44,802	\$44,802	\$0	\$89,604
	I-27	2013	-	-	6	43	Install MALS on Runway 25 ²	\$444,290	\$0	\$0	\$222,145	\$222,145	\$0	\$444,290
	I-28	2013	PFL0001572	-	7	45	Acquire Runway 7 Avigation Easement (9.7 Acres)	\$270,000	\$0	\$0	\$135,000	\$135,000	\$0	\$270,000
	I-29	2013	PFL0002031	-		62	Overlay West Apron (Transient)	\$998,613	\$0	\$0	\$499,307	\$499,307	\$0	\$998,613
	I-30	2013	PFL0003129	-	8	20	South Airfield Electrical Utilities	\$600,000	\$0	\$0	\$300,000	\$300,000	\$0	\$600,000
							Total 2013	\$5,075,144	\$150,000	\$333,434	\$2,283,355	\$2,308,356	\$0	\$5,075,144
	I-31	2014	PFL0002026	-	1	68	Rehabilitate Taxiways A and B ¹	\$1,779,347	\$150,000	\$0	\$814,673	\$814,673	\$0	\$1,779,347
	I-32	2014	-	-	2	0	Construct 100' x 170' Corporate Hangar on East Side of North GA Area, includes auto parking ²	\$2,559,735	\$0	\$0	\$0	\$0	\$2,559,735	\$2,559,735
	I-34	2014	-	-	3	0	Construct 100' x 100' Corporate Hangar in North GA Area, includes auto parking ²	\$1,563,386	\$0	\$0	\$0	\$0	\$1,563,386	\$1,563,386
	I-35	2014	PFL0002038	-	4	48	Implement Precision Approach - Runway 25	\$942,000	\$0	\$0	\$471,000	\$471,000	\$0	\$942,000
	I-36	2014	-	-	5	0	Construct 100' x 100' Corporate Hangar in North GA Area ²	\$1,563,386	\$0	\$0	\$0	\$0	\$1,563,386	\$1,563,386
	I-37	2014	-	-	6	46	Construct 3,729 SY Apron on West Side of North GA Area ¹	\$471,050	\$0	\$0	\$235,525	\$235,525	\$0	\$471,050
	I-38	2014	-	-	7	19	Construct 1,069 SY Automobile Parking Area on West Side of North GA Area ²	\$134,704	\$0	\$0	\$0	\$0	\$134,704	\$134,704
	I-39	2014	-	-	8	19	Construct 1,739 SY Automobile Parking Area on West Side of North GA Area ²	\$186,204	\$0	\$0	\$0	\$0	\$186,204	\$186,204
	I-40	2014	-	-	9	58	West Industrial Park - Preliminary Site Development ²	\$200,000	\$0	\$0	\$100,000	\$100,000	\$0	\$200,000
	I-41	2014	-	-	10	58	East Commerce Park - Preliminary Site Development ²	\$300,000	\$0	\$0	\$150,000	\$150,000	\$0	\$300,000
	I-42	2014	-	-	11	86	West Industrial Park - Fenceline Relocation ²	\$15,000	\$0	\$13,500	\$750	\$750	\$0	\$15,000
	I-43	2014	-	-	12	45	West Industrial Park - Drainage Improvements ²	\$123,500	\$0	\$0	\$61,750	\$61,750	\$0	\$123,500
							Total 2014	\$9,838,312	\$150,000	\$13,500	\$1,833,698	\$1,833,698	\$6,007,415	\$9,838,312
	I-44	2015	-	-	1	0	Closed Runways Pavement Removal (Taxiways L & M) ^{1&2}	\$181,457	\$150,000	\$0	\$15,729	\$15,729	\$0	\$181,457
	I-45	2015	-	-	2	68	Closed Runways Taxilane Overlay/Repaving (Taxiways L & M) ²	\$1,151,009	\$0	\$0	\$575,505	\$575,505	\$0	\$1,151,009
	I-46	2015	-	-	3	47	Install Markings and Lighting on Southern Taxiways (L & M) ²	\$368,522	\$0	\$0	\$184,261	\$184,261	\$0	\$368,522
	I-47	2015	-	-	4	0	Construct 100' x 170' Corporate Hangar on East Side of North GA Area ²	\$2,559,735	\$0	\$0	\$0	\$0	\$2,559,735	\$2,559,735
	I-48	2015	-	-	5	48	Midfield Access Roadway Improvements ²	\$3,014,482	\$0	\$0	\$1,507,241	\$1,507,241	\$0	\$3,014,482

TABLE 7-4A
MID-TERM PROPOSED CAPITAL IMPROVEMENT PROGRAM (2011-2015)
MAXIMUM FEASIBLE FUNDING

Notes	¹ GA Entitlement Funding ² Not in JAA Work Program ³ Included FDOT Work Program													
	Phasing Identifier	Year	UPIN #	FDOT WP #	Sponsor Priority Ranking	FAA Feasibility	Development Item Description	Development Costs & Contingencies (2006)	Federal Funding		Local/Other Sources	Private	Total	
								GA Entitlements	Discretionary	State				
	I-49	2015	-	-	7	48	East Commerce Park Access Roadway and Auto Parking ²	\$4,032,360	\$0	\$0	\$2,016,180	\$2,016,180	\$0	\$4,032,360
							Total 2015	\$11,307,565	\$150,000	\$0	\$4,298,915	\$4,298,915	\$2,559,735	\$11,307,565
							Total 2011-2015	\$35,878,426	\$750,000	\$464,039	\$11,916,948	\$11,979,449	\$10,767,991	\$35,878,427

Sources: JAA FDOT Work Program, JACIP (March 2007), Historical Funding, FAA Project Priority Funding and The LPA Group, 2007



**TABLE 7-5
LONG-TERM CAPITAL IMPROVEMENT PROGRAM (2016-2026)
FINANCIALLY FEASIBLE FUNDING**

Year	UPIN #	FDOT WP #	Sponsor Priority Ranking	FAA Feasibility	Development Item Description	Development Costs & Contingencies (2006)	Federal Funding			JAA (Local) Share	Total
							GA Entitlements	Discretionary	FDOT Share		
2016	PFL0002028		X	34	Renovate Terminal Building ¹	\$1,686,491.00	\$300,000.00	\$0.00	\$661,000.00	\$725,491.00	\$1,686,491.00
					Subtotal 2016	\$1,686,491.00	\$300,000.00	\$0.00	\$661,000.00	\$725,491.00	\$1,686,491.00
2017	-	-	X	0	Property Acquisition for South Aviation and Non-Aviation Development ^{1 & 2}	\$1,200,000.00	\$150,000.00	\$0.00	\$500,000.00	\$550,000.00	\$1,200,000.00
					Subtotal 2017	\$1,200,000.00	\$150,000.00	\$0.00	\$500,000.00	\$550,000.00	\$1,200,000.00
2018	PFL0002035	-	X	95	Clear Obstruction Runway 7 Precision Approach	\$82,000.00	\$0.00	\$73,800.00	\$8,200.00	\$0.00	\$82,000.00
			X	0	West Industrial Park - Roadway Improvements and Access ^{1 & 2}	\$546,000.00	\$150,000.00	\$0.00	\$396,000.00	\$0.00	\$546,000.00
					Subtotal 2018	\$628,000.00	\$150,000.00	\$73,800.00	\$404,200.00	\$0.00	\$628,000.00
2019	-	-	X	58	Midfield Pre-Development ^{1 & 2}	\$300,000.00	\$150,000.00	\$0.00	\$150,000.00	\$0.00	\$300,000.00
					Subtotal 2019	\$300,000.00	\$150,000.00	\$0.00	\$150,000.00	\$0.00	\$300,000.00
2020	-	-	X	45	North GA: Drainage Improvements ^{1 & 2}	\$450,000.00	\$150,000.00	\$0.00	\$300,000.00	\$0.00	\$450,000.00
					Subtotal 2020	\$450,000.00	\$150,000.00	\$0.00	\$300,000.00	\$0.00	\$450,000.00
2021	PFL0000089	-	4	58	South Business Park Pre-Development ¹	\$300,000.00	\$300,000.00	\$0.00	\$0.00	\$0.00	\$300,000.00
2021	PFL0000090	-	5	46	Develop Glider Area	\$686,000.00	\$0.00	\$0.00	\$500,000.00	\$186,000.00	\$686,000.00
					Subtotal 2021	\$986,000.00	\$300,000.00	\$0.00	\$500,000.00	\$186,000.00	\$986,000.00
2022					Subtotal 2022	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2023	PFL0002034	-	X	45	Drainage Improvements ¹	\$450,000.00	\$150,000.00	\$0.00	\$300,000.00	\$0.00	\$450,000.00
					Subtotal 2023	\$450,000.00	\$150,000.00	\$0.00	\$300,000.00	\$0.00	\$450,000.00
2024	-	-	X	72	Runway 7/25 Pavement Rehabilitation and Overlay ^{1 & 2}	\$2,464,611.00	\$150,000.00	\$2,218,149.90	\$96,461.10	\$0.00	\$2,464,611.00
					Subtotal 2024	\$2,464,611.00	\$150,000.00	\$2,218,149.90	\$96,461.10	\$0.00	\$2,464,611.00
2025					Subtotal 2025	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2026	-	-	X	72	Runway 11/29 Pavement Rehabilitation and Overlay ^{1 & 2}	\$2,215,388.00	\$150,000.00	\$0.00	\$1,000,000.00	\$1,065,388.00	\$2,215,388.00

TABLE 7-5
LONG-TERM CAPITAL IMPROVEMENT PROGRAM (2016-2026)
FINANCIALLY FEASIBLE FUNDING

Year	UPIN #	FDOT WP #	Sponsor Priority Ranking	FAA Feasibility	Development Item Description	Development Costs & Contingencies (2006)	Federal Funding			JAA (Local) Share	Total
							GA Entitlements	Discretionary	FDOT Share		
					Subtotal 2026	\$2,215,388.00	\$150,000.00	\$0.00	\$1,000,000.00	\$1,065,388.00	\$2,215,388.00
					Long-Term Development (2016-2026)	\$10,380,490.00	\$1,650,000.00	\$2,291,949.90	\$3,911,661.10	\$2,526,879.00	\$10,380,490.00
					Total (2006-2026)	\$29,791,651	\$3,150,000	\$3,742,619	\$10,500,000	\$12,399,031	\$29,791,651

Sources: JAA FDOT Work Program, JACIP (March 2007), Historical Funding, FAA Project Priority Funding and The LPA Group, 2007

**TABLE 7-5A
LONG-TERM CAPITAL IMPROVEMENT PROGRAM (2016-2026)
MAXIMUM ELIGIBLE FUNDING**

Notes	1 GA Entitlement Funding			2 Not in JAA Work Program		Development Item Description	Development Costs & Contingencies (2006)	Federal Funding			Local/Other Sources	Private	Total
	Year	UPIN #	FDOT WP #	Sponsor Priority Ranking	FAA Feasibility			GA Entitlements	Discretionary	State			
	-	-	-	X	48	West Industrial Park - Roadway Improvements and Access ^{1 & 2}	\$546,000	\$150,000	\$0	\$198,000	\$198,000	\$0	\$546,000
	2015	PFL0002028		2	34	Renovate Terminal Building and construct airport maintenance facility ¹	\$1,686,491	\$300,000	\$0	\$693,246	\$693,246	\$0	\$1,686,491
	-	PFL0002033	-	X	52	Construct Helicopter Landing Pads/Parking Spaces	\$650,000	\$0	\$0	\$325,000	\$325,000	\$0	\$650,000
	-	-	-	X	42	East Commerce Park: Utility Installation ²	\$1,105,050	\$0	\$0	\$552,525	\$552,525	\$0	\$1,105,050
	-	-	-	X	45	East Commerce Park: Drainage Improvements ²	\$900,000	\$0	\$0	\$450,000	\$450,000	\$0	\$900,000
	-	-	-	X	86	East Commerce Park: Fenceline Relocation ²	\$12,500	\$0	\$11,250	\$625	\$625	\$0	\$12,500
	-	-	-	X	0	East Commerce Park: Construct 20,000 SF Office Building, includes auto parking ²	\$2,470,222	\$0	\$0	\$0	\$0	\$2,470,222	\$2,470,222
	-	-	-	X	0	East Commerce Park: Construct 6 10,000 SF Office Buildings, includes parking ²	\$7,411,000	\$0	\$0	\$0	\$0	\$7,411,000	\$7,411,000
	-	-	-	X	0	East Commerce Park: Construct 20,000 SF Office Building, includes auto parking ²	\$2,470,222	\$0	\$0	\$0	\$0	\$2,470,222	\$2,470,222
	-	-	-	X	0	East Commerce Park: Construct 6 10,000 SF Office Buildings, includes parking ²	\$7,411,000	\$0	\$0	\$0	\$0	\$7,411,000	\$7,411,000
	-	-	-	X	0	East Commerce Park: Construct 20,000 SF Office Building, includes auto parking ²	\$2,470,222	\$0	\$0	\$0	\$0	\$2,470,222	\$2,470,222
	-	-	-	X	0	Construct 100' x 120' Corporate Hangar in North GA Area ²	\$1,848,057	\$0	\$0	\$0	\$0	\$1,848,057	\$1,848,057
	-	-	-	X	0	Construct 100' x 120' Corporate Hangar in North GA Area ²	\$1,848,057	\$0	\$0	\$0	\$0	\$1,848,057	\$1,848,057
	-	-	-	X	0	West Side Industrial Park: Construct Restaurant including parking ²	\$5,000,000	\$0	\$0	\$0	\$0	\$5,000,000	\$5,000,000
	-	-	-	X	58	Midfield Preliminary Development ¹	\$300,000	\$150,000	\$0	\$75,000	\$75,000	\$0	\$300,000
	-	-	-	X	61	Construct Midfield Taxilanes, Includes Lighting, Drainage, and Markings ^{1,2}	\$1,516,626	\$0	\$0	\$758,313	\$758,313	\$0	\$1,516,626
	-	-	-	X	0	Midfield: Construct 100' x 100' Corporate Hangar Alongside Closed Runway ²	\$1,563,386	\$0	\$0	\$0	\$0	\$1,563,386	\$1,563,386
	-	-	-	X	34	Midfield: Construct 100' x 150' FBO/Maintenance Hangar ²	\$2,275,064	\$0	\$0	\$1,137,532	\$1,137,532	\$0	\$2,275,064
	-	-	-	X	0	Midfield: Construct 100' x 100' Corporate Hangar Alongside Closed Runway ²	\$1,563,386	\$0	\$0	\$0	\$0	\$1,563,386	\$1,563,386
	-	-	-	X	0	Midfield: Construct 1-sided T-hangar Alongside Closed Runway ²	\$577,174	\$0	\$0	\$288,587	\$288,587	\$0	\$577,174



**TABLE 7-5A
LONG-TERM CAPITAL IMPROVEMENT PROGRAM (2016-2026)
MAXIMUM ELIGIBLE FUNDING**

Notes	¹ GA Entitlement Funding ² Not in JAA Work Program ³ Included FDOT Work Program			Sponsor Priority Ranking	FAA Feasibility	Development Item Description	Development Costs & Contingencies (2006)	Federal Funding			Local/Other Sources	Private	Total
	Year	UPIN #	FDOT WP #					GA Entitlements	Discretionary	State			
	-	-	-	X	0	Midfield: Construct 100' x 100' Corporate Hangar Alongside Closed Runway ²	\$1,563,386	\$0	\$0	\$0	\$0	\$1,563,386	\$1,563,386
	-	-	-	X	0	Midfield: Construct 100' x 100' Corporate Hangar Alongside Closed Runway ²	\$1,563,386	\$0	\$0	\$0	\$0	\$1,563,386	\$1,563,386
	-	-	-	X	0	Midfield: Construct 100' x 100' Corporate Hangar Alongside Closed Runway ²	\$1,563,386	\$0	\$0	\$0	\$0	\$1,563,386	\$1,563,386
	-	-	-	X	56	Midfield: Construct New FBO/Maintenance Apron, lighting/markings ^{1,2}	\$3,430,855	\$0	\$0	\$1,715,428	\$1,715,428	\$0	\$3,430,855
	-	-	-	X	0	Midfield: Construct 1-sided T-hangar Alongside Closed Runway ²	\$577,174	\$0	\$0	\$288,587	\$288,587	\$0	\$577,174
	-	PFL0002035	-	X	95	Clear Obstruction Runway 7 Precision Approach ¹	\$82,000	\$0	\$73,800	\$4,100	\$4,100	\$0	\$82,000
	-	-	-	X	19	Midfield: Construct 1,470 SY Automobile Parking Area ²	\$165,521	\$0	\$0	\$82,761	\$82,761	\$0	\$165,521
	-	-	-	X	0	Midfield: Construct 100' x 150' Corporate Hangar ²	\$2,275,064	\$0	\$0	\$0	\$0	\$2,275,064	\$2,275,064
	-	PFL0002036	-	X	48	Implement Precision Approach to Runway 7 including MALSR ¹	\$922,000	\$0	\$0	\$461,000	\$461,000	\$0	\$922,000
	-	-	-	X	0	North GA: Construct 12-unit T-hangar ²	\$1,045,840	\$0	\$0	\$522,920	\$522,920	\$0	\$1,045,840
	-	-	-	X	19	North GA: Construct 1,470 SY Automobile Parking Area ²	\$165,521	\$0	\$0	\$82,761	\$82,761	\$0	\$165,521
	-	-	-	X	45	North GA: Construct Drainage Improvements ¹	\$450,000	\$150,000	\$0	\$150,000	\$150,000	\$0	\$450,000
	-	-	-	X	0	North GA: Construct 100' x 120' Corporate Hangar ²	\$1,848,057	\$0	\$0	\$0	\$0	\$1,848,057	\$1,848,057
	-	-	-	X	0	North GA: 8-unit T-Hangar ²	\$697,227	\$0	\$0	\$348,614	\$348,614	\$0	\$697,227
	2011	-	-	6	61	Construct Taxilanes adjacent to T-Hangars ⁽²⁾	\$263,530	\$0	\$0	\$131,765	\$131,765	\$0	\$263,530
	-	-	-	X	0	Midfield: Construct 12-unit T-hangar ²	\$1,045,840	\$0	\$0	\$522,920	\$522,920	\$0	\$1,045,840
	-	-	-	X	0	Midfield: Construct 50' x 50' Box Hangars ²	\$1,563,386	\$0	\$0	\$781,693	\$781,693	\$0	\$1,563,386
	-	-	-	X	19	Midfield: Construct 1,470 SY Automobile Parking Area ²	\$165,521	\$0	\$0	\$82,761	\$82,761	\$0	\$165,521
	-	-	-	X	0	Midfield: Construct 100' x 120' Corporate Hangar ²	\$1,848,057	\$0	\$0	\$0	\$0	\$1,848,057	\$1,848,057
	-	-	-	X	0	Midfield: Construct 50' x 50' Box Hangars ²	\$1,563,386	\$0	\$0	\$781,693	\$781,693	\$0	\$1,563,386
	-	PFL0000090	-	X	46	Develop Glider Area	\$686,000	\$0	\$0	\$343,000	\$343,000	\$0	\$686,000
	-	PFL0000089	-	X	58	South Business Park/Residential Fly-In Community Pre-Development ¹	\$300,000	\$300,000	\$0	\$0	\$0	\$0	\$300,000
	-	-	-	X	19	North GA: Construct 1,470 SY Automobile Parking Area ²	\$165,521	\$0	\$0	\$82,761	\$82,761	\$0	\$165,521
	-	-	-	X	0	North GA: Construct 100' x 120' Corporate Hangar ²	\$1,848,057	\$0	\$0	\$0	\$0	\$1,848,057	\$1,848,057
	-	-	-	X	0	Midfield: Construct 50' x 50' Box Hangars ²	\$1,563,386	\$0	\$0	\$781,693	\$781,693	\$0	\$1,563,386



**TABLE 7-5A
LONG-TERM CAPITAL IMPROVEMENT PROGRAM (2016-2026)
MAXIMUM ELIGIBLE FUNDING**

Notes	¹ GA Entitlement Funding ² Not in JAA Work Program ³ Included FDOT Work Program			Sponsor Priority Ranking	FAA Feasibility	Development Item Description	Development Costs & Contingencies (2006)	Federal Funding			Local/Other Sources	Private	Total
	Year	UPIN #	FDOT WP #					GA Entitlements	Discretionary	State			
	-	-	-	X	0	Midfield: Construct 12-unit T-hangar ²	\$1,045,840	\$0	\$0	\$522,920	\$522,920	\$0	\$1,045,840
	-	-	-	X	19	Midfield: Construct 1,470 SY Automobile Parking Area ²	\$165,521	\$0	\$0	\$82,761	\$82,761	\$0	\$165,521
	-	-	-	X	0	Midfield: Construct 100' x 120' Corporate Hangar ²	\$1,848,057	\$0	\$0	\$0	\$0	\$1,848,057	\$1,848,057
	-	-	-	X	0	Midfield: Construct 50' x 50' Box Hangars ²	\$1,563,386	\$0	\$0	\$781,693	\$781,693	\$0	\$1,563,386
	-	-	-	X	72	Runway 7-25 Pavement Rehabilitation and Overlay ^{1&2}	\$2,464,611	\$150,000	\$2,068,150	\$123,231	\$123,231	\$0	\$2,464,611
	-	-	-	X	72	Runway 11-29 Pavement Rehabilitation and Overlay ^{1&2}	\$2,215,388	\$150,000	\$0	\$1,032,694	\$1,032,694	\$0	\$2,215,388
	-	PFL0002034	-	X	45	Construct Drainage Improvements ¹	\$450,000	\$150,000	\$0	\$150,000	\$150,000	\$0	\$450,000
	-	-	-	X	61	South Development: Construct Taxilanes in Southside Industrial/Commerce Park ^{1,2}	\$1,020,654	\$0	\$0	\$510,327	\$510,327	\$0	\$1,020,654
	-	-	-	X	48	South Development: South Access Road Extension and Auto Parking ²	\$2,395,688	\$0	\$0	\$1,197,844	\$1,197,844	\$0	\$2,395,688
	-	-	-	X	41	Property Acquisition for South Aviation and Non-Aviation Development ^{1&2}	\$1,200,000	\$150,000	\$0	\$525,000	\$525,000	\$0	\$1,200,000
						Total (2016-2026)	\$86,401,542	\$1,650,000	\$2,153,200	\$17,092,670	\$17,092,670	\$48,413,002	\$86,401,542
						Total (2006-2026)	\$144,021,600	\$3,150,000	\$4,088,907	\$32,866,146	\$38,430,650	\$65,485,898	\$144,021,600

Sources: JAA FDOT Work Program, JACIP (March 2007), Historical Funding, FAA Project Priority Funding and The LPA Group, 2007

CIP Summary

Because both AIP and FDOT funding for Herlong Airport will most likely be limited, the Master Plan provides a financially feasible plan based upon probable FAA, FDOT and JAA funding as shown in **Table 7-6**. The difference between the eligible project funding as shown in **Table 7-6A** and the financially feasible project funding is an indication of the private outside funding that Herlong must identify if all projects identified in the Master Plan are to be undertaken.

TABLE 7-6
20-YEAR CAPITAL IMPROVEMENT PROGRAM SUMMARY
FEASIBLE PROJECT FUNDING

Development Period	Total Project Costs	FAA Entitlement ¹	FAA Discretionary ²	State Share ³	JAA Share ⁴
Short-Term	\$11,065,135	\$750,000	\$1,073,931	\$2,300,000	\$6,941,205
Intermediate-Term	\$8,346,025	\$750,000	\$376,739	\$4,288,339	\$2,930,948
Long-Term	\$10,380,490	\$1,650,000	\$2,291,950	\$3,911,661	\$2,526,879
Total 20-Year Period	\$29,791,651	\$3,150,000	\$3,742,619	\$10,500,000	\$12,399,031

Notes:

¹FAA Entitlement typically equals \$150,000 per year for GA airports

²FAA Discretionary Funding equals approximately 90 percent of funding on projects with FAA Priority Scores of 70 or greater.

³FDOT Funding typically equals \$500,000 per year.

⁴JAA Funding typically equals \$500,000 per year unless there is a high priority project.

Source: The LPA Group, Inc. 2007

TABLE 7-6A
20-YEAR CAPITAL IMPROVEMENT PROGRAM SUMMARY
MAXIMUM ELIGIBLE FUNDING

Development Period	Total Project Cost	FAA Entitlement	FAA Discretionary	State Share	Local/Other* Share	Private Share
Short-Term	\$21,741,631	\$750,000	\$1,471,668	\$3,856,527	\$9,358,531	\$6,304,905
Mid-Term	\$35,878,426	\$750,000	\$464,039	\$11,916,948	\$11,979,449	\$10,767,991
Long-Term	\$86,401,542	\$1,650,000	\$2,153,200	\$17,092,670	\$17,092,670	\$48,413,002
Total for 20-Year CIP	\$144,021,600	\$3,150,000	\$4,088,907	\$32,866,146	\$38,430,650	\$65,485,898

Notes: *Other Funding Sources includes operating revenues generated by the airport as well as loans, bonds and other funding sources

Source: The LPA Group, Inc. 2007

In identifying additional projects related to forecast demand, changes to the Herlong Airport JACIP are required. **Table 7-7** identifies existing projects within the March 2007 JACIP as well as new projects recommended within this master plan update for the twenty-year planning period.

TABLE 7-7
CHANGES TO JAA WORK PROGRAM AND 2006 FDOT JACIP (2006-2026)

UPIN #	FDOT WP#	Project Description	JAA Work Program and JACIP		2006 Master Plan Update	
			Year	Amount	Year	Amount
Notes: ¹ GA Entitlement Funding ² Not in JAA Work Program ³ Included FDOT Work Program						
PFL0001571	217015 1	Design & Construct New Fuel Farm	2006	\$500,000.00	2006	\$486,422.10
PFL0001568	217013 2	Rehabilitate Runway 7/25 & Signage	2006	\$140,593.00	2006	\$0.00
PFL0001575	409970 1	Expand Terminal Vehicular Parking	2006	\$100,000.00	2006	\$100,000.00
23J277	409968 1	West and South Access Road Improvements	2006	\$200,000.00	2006	\$200,000.00
23J609	-	Comprehensive Planning	2006	\$12,500.00	2006	\$12,500.00
FL0000083	5	Airport Master Plan Update	2006	\$0.00	2006	\$20,000.00
Yearly Total				\$953,093.00		\$818,922.10
PFL0000991	216990 1	T-Hangar Development	2007	\$800,000.00	2007	\$802,061.67
PFL0001568	217013 2	Rehabilitate Runway 7/25 & Signage	2007	\$157,750.00	2007	\$147,250.00
23J275	-	Environmental Planning	2007	\$12,500.00	2007	\$12,500.00
23J609	-	Comprehensive Planning	2007	\$12,500.00	2007	\$12,500.00
-	-	Conduct Cost-Benefit Feasibility Study for Runway 7-25 Extension	2007	\$0.00	2007	\$35,000.00
-	-	Signage Plan/Design ²	2007	\$0.00	2007	\$29,000.00
-	-	Expand Royal Atlantic Facilities ²	2007	\$0.00	2007	\$728,865.00
Yearly Total				\$982,750.00		\$1,767,176.67
PFL0000079	-	EA for Turf Runway & Runway 7/25 Extension	2008	\$160,000.00	2008	\$350,800.00
PFL0001568	217013 2	Rehabilitate Runway 7/25 & Signage	2008	\$50,000.00	2008	\$1,076,500.00
PFL0001619	-	Replace AWOS	2008	\$206,000.00	2008	\$189,000.00
23J275	-	Environmental Planning	2008	\$12,500.00	2008	\$12,500.00
23J609	-	Comprehensive Planning	2008	\$12,500.00	2008	\$12,500.00
PFL0001574	-	Runway 7 Extension Design ²	2008	\$0.00	2008	\$147,434.24
PFL0001574	-	Runway 7 Extension - Construction including 20% contingency ¹	2008	\$0.00	2008	\$572,093.48
-	-	Runway 7-25 Stopways and Markings Design ²	2008	\$0.00	2008	\$127,237.64
-	-	Pavement Condition Report ²	2008	\$0.00	2008	\$30,000.00
Yearly Total				\$441,000.00		\$2,518,065.36
PFL0001568	217013 2	Rehab Runway 7/25 & Signage	2009	\$851,657.00	2009	\$1,076,500.00
23J280	-	Open Bay Hangar	2009	\$1,000,000.00	2009	\$1,848,057.00
PFL0000091	409969 2	Relocate Electrical Vault & Design/Construct T-Hangars	2009	\$1,000,000.00	2009	\$1,532,302.00
-	-	Extend access road to T-Hangars 1, 2 & 3 ²	2009	\$0.00	2009	\$115,204.00
-	-	Relocate Fence Line associated with T-Hangar Development ²	2009	\$0.00	2009	\$87,756.18
23J275	-	Environmental Planning	2009	\$12,500.00	2009	\$12,500.00
23J609	-	Comprehensive Planning	2009	\$12,500.00	2009	\$12,500.00
PFL0001574	-	Design/Construct Runway Extension (Stopways and	2009	\$0.00	2009	\$491,114.73

TABLE 7-7
CHANGES TO JAA WORK PROGRAM AND 2006 FDOT JACIP (2006-2026)

UPIN #	FDOT WP#	Project Description	JAA Work Program and JACIP		2006 Master Plan Update	
			Year	Amount	Year	Amount
Notes: ¹ GA Entitlement Funding ² Not in JAA Work Program ³ Included FDOT Work Program						
-	-	Markings)				
-	-	Taxiway A Extension with Markings and Lighting ²	2009	\$0.00	2009	\$535,395.48
-	-	Runway 7 PAPI Relocation ²	2009	\$0.00	2009	\$32,210.58
23J276	-	REILs Runway 7/25	2009	\$0.00	2009	\$89,604.00
Yearly Total				\$2,876,657.00		\$5,833,143.97
PFL0001574	-	Design & Construct Runway 7 Extension	2010	\$300,000.00	2010	\$0.00
PFL0002304	217013 3	Rehabilitate Runway 11/29	2010	\$1,000,000.00	2010	\$2,215,387.92
23J275	-	Environmental Planning	2010	\$12,500.00	2010	\$12,500.00
23J609	-	Comprehensive Planning	2010	\$12,500.00	2010	\$12,500.00
PFL0004048	-	West Apron Expansion Phase 2 ^{1&2}	2010	\$0.00	2010	\$1,357,208.23
-	-	Airfield Sign System Upgrades including new Signage ²	2010	\$0.00	2010	\$463,904.04
-	-	Construct 1,069 SY of Automobile Parking ²	2010	\$0.00	2010	\$134,704.20
-	-	Construct 150' x 100' Corporate Hangar in North GA Area ²	2010	\$0.00	2010	\$2,275,064.00
-	-	Construct Blimp Hangar and Apron ²	2010	\$0.00	2010	\$3,300,975.58
Yearly Total				\$1,325,000.00		\$9,772,243.96
PFL0000080	-	Design & Construct Turf Runway & Taxiway System	2011	\$2,027,624.00	2011	\$1,046,389.00
PFL0001574	-	Design & Construct Runway 7 Extension	2011	\$1,000,000.00	2011	\$0.00
23J276	-	REILs Runway 7/25	2011	\$50,000.00	2011	\$0.00
PFL0000084	-	Drainage Improvements	2011	\$200,000.00	2011	\$197,971.00
23J275	-	Environmental Planning	2011	\$12,500.00	2011	\$12,500.00
23J609	-	Comprehensive Planning	2011	\$12,500.00	2011	\$12,500.00
-	-	Relocate Airport Entrance Road ²	2011	\$0.00	2011	\$367,641.43
-	-	Reconfigure Airport Parking ²	2011	\$0.00	2011	\$432,735.75
-	-	Relocate Airport Fence Line ²	2011	\$0.00	2011	\$130,116.64
-	-	Construct Taxilanes adjacent to T-Hangars ²	2011	\$0.00	2011	\$263,529.66
-	-	Rehabilitate FBO Transient Apron ^{1&2}	2011	\$0.00	2011	\$307,405.34
Yearly Total				\$3,302,624.00		\$2,770,788.82
PFL0003129	-	South Airfield Electrical Utilities	2012	\$200,000.00	2012	\$600,000.00
PFL0002019	-	Overlay Taxiways C & D	2012	\$1,000,000.00	2012	\$1,696,920.00
PFL0001573	-	Acquire Runway 25 Avigation Easement	2012	\$60,000.00	2012	\$60,000.00
PFL0000990	-	Taxiway K - Design/Construct	2012	\$300,000.00	2012	\$271,211.00
PFL0001570	-	East Airfield Access Road	2012	\$1,265,000.00	2012	\$0.00
PFL0002017	-	Master Plan Update	2012	\$200,000.00	2012	\$200,000.00
23J275	-	Environmental Planning	2012	\$12,500.00	2012	\$12,500.00
-	-	Construct 3 70' x 70' Corporate Hangars in North GA Area adjacent to relocated entrance road ²	2012	\$0.00	2012	\$2,200,841.00
23J278	-	Construct 13,424 SY Apron on East Side of North GA Area ²	2012	\$0.00	2012	\$1,570,582.00
-	-	Construct 2,106 SY Apron Adjacent to 70' x 70' Hangars In North GA Area ²	2012	\$0.00	2012	\$286,931.00
-	-	Modify/Remove Bays from Existing 16-unit T-hangar on East Side ²	2012	\$0.00	2012	\$251,161.00



**TABLE 7-7
CHANGES TO JAA WORK PROGRAM AND 2006 FDOT JACIP (2006-2026)**

UPIN #	FDOT WP#	Project Description	JAA Work Program and JACIP		2006 Master Plan Update	
			Year	Amount	Year	Amount
Yearly Total				\$3,037,500.00		\$7,150,146.00
PFL0003129	-	South Airfield Electrical Utilities	2013	\$600,000.00	2013	\$600,000.00
PFL0002020	-	Overlay East Apron	2013	\$750,000.00	2013	\$461,292.00
PFL0001572	-	Acquire Runway 7 Avigation Easement	2013	\$60,000.00	2013	\$270,000.00
PFL0002031	-	Overlay West Apron (Transient)	2013	\$180,000.00	2013	\$998,613.00
PFL0002021	-	Install Localizer Runway 25	2013	\$300,000.00	2013	\$0.00
PFL0002037	-	Clear Obstruction Runway 25 Precision Approach	2013	\$82,000.00	2013	\$82,000.00
PFL0002306	-	Design/Construct REILS & ODALS on Rwy 7/25	2013	\$166,666.00	2013	\$89,604.00
PFL0003224	-	Construct Taxiway Echo	2013	\$350,000.00	2013	\$271,211.00
PFL0004088	-	T-Hangar Construction	2013	\$1,000,000.00	2013	\$1,202,062.00
23J275	-	Environmental Planning	2013	\$12,500.00	2013	\$12,500.00
23J609	-	Comprehensive Planning	2013	\$12,500.00	2013	\$12,500.00
-	-	Replace and Relocated existing MIRLS with HIRL on Runway 7-25 ²	2013	\$0.00	2013	\$288,481.92
-	-	Runway 7-25 - Marking Removal and Remarking ²	2013	\$0.00	2013	\$342,590.56
-	-	Install MALSR on Runway 25 ²	2013	\$0.00	2013	\$444,289.50
Yearly Total				\$3,513,666.00		\$5,075,143.98
PFL0004048	-	Construct 3,729 SY Apron on West Side of North GA Area ¹	2014	\$300,000.00	2014	\$471,050.00
23J278	-	North Apron Expansion	2014	\$1,000,000.00	2014	\$0.00
PFL0002026	-	Rehabilitate Taxiways A & B	2014	\$681,000.00	2014	\$1,779,346.80
PFL0002038	-	Implement Precision Instrument Approach Rwy 25	2014	\$942,000.00	2014	\$942,000.00
-	-	Construct 100' x 170' Corporate Hangar on East Side of North GA Area, includes auto parking ²	2014	\$0.00	2014	\$2,559,735.00
-	-	Construct 100' x 100' Corporate Hangar in North GA Area, includes auto parking ²	2014	\$0.00	2014	\$1,563,386.00
-	-	Construct 100' x 100' Corporate Hangar in North GA Area ²	2014	\$0.00	2014	\$1,563,386.00
-	-	Construct 1,069 SY Automobile Parking Area on West Side of North GA Area ²	2014	\$0.00	2014	\$134,704.00
-	-	Construct 1,739 SY Automobile Parking Area on West Side of North GA Area ²	2014	\$0.00	2014	\$186,204.00
-	-	West Industrial Park - Preliminary Site Development ²	2014	\$0.00	2014	\$200,000.00
-	-	East Commerce Park - Preliminary Site Development ²	2014	\$0.00	2014	\$300,000.00
-	-	West Industrial Park - Fenceline Relocation ²	2014	\$0.00	2014	\$15,000.00
-	-	West Industrial Park - Drainage Improvements ²	2014	\$0.00	2014	\$123,500.00
Yearly Total				\$2,923,000.00		\$9,838,311.80
PFL0002028	-	Renovate Terminal Building	2015	\$400,000.00	2015	\$0.00
-	-	Closed Runways Pavement Removal (Taxiways L & M) ^{1&2}	2015	\$0.00	2015	\$181,457.00
-	-	Closed Runways Taxilane Overlay/Repaving (Taxiways L & M) ²	2015	\$0.00	2015	\$1,151,009.00



**TABLE 7-7
CHANGES TO JAA WORK PROGRAM AND 2006 FDOT JACIP (2006-2026)**

UPIN #	FDOT WP#	Project Description	JAA Work Program and JACIP		2006 Master Plan Update	
			Year	Amount	Year	Amount
-	-	Install Markings and Lighting on Southern Taxiways (L & M) ²	2015	\$0.00	2015	\$368,522.00
-	-	Construct 100' x 170' Corporate Hangar on East Side of North GA Area ²	2015	\$0.00	2015	\$2,559,735.00
-	-	Midfield Access Roadway Improvements ²	2015	\$0.00	2015	\$3,014,482.00
-	-	East Commerce Park Access Roadway and Auto Parking ²	2015	\$0.00	2015	\$4,032,360.00
Yearly Total				\$400,000.00		\$11,307,565.00
PFL0002033	-	Construct Helicopter Landing Pads/Parking	2016	\$650,000.00	2016-2026	\$650,000.00
PFL0002035	-	Clear Obstruction Rwy 7 Precision Approach	2017	\$82,000.00	2016-2026	\$82,000.00
PFL0002036	-	Implement Precision Approach to Runway 7	2018	\$922,000.00	2016-2026	\$922,000.00
PFL0002034	-	Construct Drainage Improvements	2019	\$450,000.00	2016-2026	\$450,000.00
PFL0000089	-	Residential Fly-In Community Pre-Development	2020	\$300,000.00	2016-2026	\$300,000.00
PFL0000090	-	Develop Glider Area	2021	\$686,000.00	2016-2026	\$686,000.00
PFL0002028	-	Renovate Terminal Building	2016	\$0.00	2016-2026	\$1,686,491.00
-	-	West Industrial Park - Roadway Improvements and Access ²	-	\$0.00	2016-2026	\$546,000.00
-	-	East Commerce Park: Utility Installation ²	-	\$0.00	2016-2026	\$1,105,050.00
-	-	East Commerce Park: Drainage Improvements ²	-	\$0.00	2016-2026	\$900,000.00
-	-	East Commerce Park: Fenceline Relocation ²	-	\$0.00	2016-2026	\$12,500.00
-	-	East Commerce Park: Construct 20,000 SF Office Building, includes auto parking ²	-	\$0.00	2016-2026	\$2,470,222.00
-	-	East Commerce Park: Construct 6 10,000 SF Office Buildings, includes parking ²	-	\$0.00	2016-2026	\$7,411,000.00
-	-	East Commerce Park: Construct 20,000 SF Office Building, includes auto parking ²	-	\$0.00	2016-2026	\$2,470,222.00
-	-	East Commerce Park: Construct 6 10,000 SF Office Buildings, includes parking ²	-	\$0.00	2016-2026	\$7,411,000.00
-	-	East Commerce Park: Construct 20,000 SF Office Building, includes auto parking ²	-	\$0.00	2016-2026	\$2,470,222.00
-	-	Construct 100' x 120' Corporate Hangar in North GA Area ²	-	\$0.00	2016-2026	\$1,848,057.00
-	-	Construct 100' x 120' Corporate Hangar in North GA Area ²	-	\$0.00	2016-2026	\$1,848,057.00
-	-	West Side Industrial Park: Construct Restaurant including parking ²	-	\$0.00	2016-2026	\$5,000,000.00
-	-	Construct Midfield Taxiways, Includes Lighting,	-	\$0.00	2016-	\$1,516,626.00

**TABLE 7-7
CHANGES TO JAA WORK PROGRAM AND 2006 FDOT JACIP (2006-2026)**

UPIN #	FDOT WP#	Project Description	JAA Work Program and JACIP		2006 Master Plan Update	
			Year	Amount	Year	Amount
		Drainage, and Markings ^{1&2}			2026	
-	-	Midfield: Construct 100' x 100' Corporate Hangar Alongside Closed Runway ²	-	\$0.00	2016-2026	\$1,563,386.00
-	-	Midfield: Construct 100' x 150' FBO/Maintenance Hangar ²	-	\$0.00	2016-2026	\$2,275,064.00
-	-	Midfield: Construct 100' x 100' Corporate Hangar Alongside Closed Runway ²		\$0.00	2016-2026	\$1,563,386.00
-	-	Midfield: Construct 1-sided T-hangar Alongside Closed Runway ²		\$0.00	2016-2026	\$577,174.00
-	-	Midfield: Construct 100' x 100' Corporate Hangar Alongside Closed Runway ²		\$0.00	2016-2026	\$1,563,386.00
-	-	Midfield: Construct 100' x 100' Corporate Hangar Alongside Closed Runway ²		\$0.00	2016-2026	\$1,563,386.00
-	-	Midfield: Construct 100' x 100' Corporate Hangar Alongside Closed Runway ²		\$0.00	2016-2026	\$1,563,386.00
-	-	Midfield: Construct New FBO/Maintenance Apron, lighting/markings ^{1&2}		\$0.00	2016-2026	\$3,430,855.00
-	-	Midfield: Construct 1-sided T-hangar Alongside Closed Runway ²		\$0.00	2016-2026	\$577,174.00
-	-	Midfield: Construct 1,470 SY Automobile Parking Area ²		\$0.00	2016-2026	\$165,521.00
-	-	Midfield: Construct 100' x 150' Corporate Hangar ²		\$0.00	2016-2026	\$2,275,064.00
-	-	North GA: Construct 12-unit T-hangar ²		\$0.00	2016-2026	\$1,045,840.00
-	-	North GA: Construct 1,470 SY Automobile Parking Area ²		\$0.00	2016-2026	\$165,521.00
-	-	North GA: Construct Drainage Improvements ¹		\$0.00	2016-2026	\$450,000.00
-	-	North GA: Construct 100' x 120' Corporate Hangar ²		\$0.00	2016-2026	\$1,848,057.00
-	-	North GA: 8-unit T-Hangar ²		\$0.00	2016-2026	\$697,227.00
-	-	Midfield: Construct 12-unit T-hangar ²		\$0.00	2016-2026	\$1,045,840.00
-	-	Midfield: Construct 50' x 50' Box Hangars ²		\$0.00	2016-2026	\$1,563,385.80
-	-	Midfield: Construct 1,470 SY Automobile Parking Area ²		\$0.00	2016-2026	\$165,521.00
-	-	Midfield: Construct 100' x 120' Corporate Hangar ²		\$0.00	2016-2026	\$1,848,057.00
-	-	Midfield: Construct 50' x 50' Box Hangars ²		\$0.00	2016-2026	\$1,563,386.00
-	-	Midfield: Construct 12-unit T-hangar ²		\$0.00	2016-2026	\$1,045,840.00
-	-	North GA: Construct 1,470 SY Automobile Parking Area ²		\$0.00	2016-2026	\$165,521.00
-	-	North GA: Construct 100' x 120' Corporate Hangar ²		\$0.00	2016-	\$1,848,057.00

**TABLE 7-7
CHANGES TO JAA WORK PROGRAM AND 2006 FDOT JACIP (2006-2026)**

UPIN #	FDOT WP#	Project Description	JAA Work Program and JACIP		2006 Master Plan Update	
			Year	Amount	Year	Amount
-	-	Midfield: Construct 50' x 50' Box Hangars ²		\$0.00	2016-2026	\$1,563,386.00
-	-	Midfield: Construct 12-unit T-hangar ²		\$0.00	2016-2026	\$1,045,840.00
-	-	Midfield: Construct 1,470 SY Automobile Parking Area ²		\$0.00	2016-2026	\$165,521.00
-	-	Midfield: Construct 100' x 120' Corporate Hangar ²		\$0.00	2016-2026	\$1,848,057.00
-	-	Midfield: Construct 50' x 50' Box Hangars ²		\$0.00	2016-2026	\$1,563,386.00
-	-	Runway 7-25 Pavement Rehabilitation and Overlay ^{1 & 2}		\$0.00	2016-2026	\$2,464,611.00
-	-	Runway 11-29 Pavement Rehabilitation and Overlay ^{1 & 2}		\$0.00	2016-2026	\$2,215,388.00
-	-	South Development: Construct Taxiways in Southside Industrial/Commerce Park ^{1 & 2}		\$0.00	2016-2026	\$1,020,654.00
-	-	South Development: South Access Road Extension and Auto Parking ²		\$0.00	2016-2026	\$2,395,688.00
-	-	Property Acquisition for South Aviation and Non-Aviation Development ^{1 & 2}		\$0.00	2016-2026	\$1,200,000.00

Source: Jacksonville Aviation Authority Work Program and JACIP, February 2007 and The LPA Group Incorporated, March 2007

CASH FLOW ANALYSIS

In addition to future capital improvements, consideration also must be given to maintaining the airport's continued operation. In an effort to maintain a safe and efficient airfield, JAA will continue to assist HEG in meeting the needs of its users over the long-term period. As noted, major structural projects, including runways, taxiways, aprons, and other improvements could include federal funding provided the project scores high enough in the FAA NPIAS priority system to gain limited FAA discretionary funding. The FAA's GA Entitlement funding per year provides \$150,000 per year for capital improvement projects.

A stipulation for federal funding requires that the airport sponsor keep the airport facilities in operation for at least 20 years from the date of the last federal grant. Therefore, in addition to projected capital improvements, airport maintenance and operating costs must be considered in determining available funding for the local share of the proposed development. Ideally, the airport's revenues should be structured to reduce the burden of operating expenses on the airport sponsor as well as fund a portion of the capital plan.



Based upon operating revenues and expenses obtained from JAA, a projected cash flow analysis was developed which included the cost of capital improvements as well as anticipated revenue associated with such development (i.e. additional revenues associated with hangar development). The financial feasibility assessment focused on the initial ten years of the planning period. The overall purpose was to assess JAA's ability to fund the previously recommended capital development plans through the year 2016. This assessment assumes the maximum discretionary AIP funding is received for those projects meeting AIP eligibility and priority requirements of 50 or higher. As part of the cash flow analysis, historic funding participation from FDOT and JAA's General Fund were applied. Based upon historic data, the average annual breakdown of funding for projects at HEG is as follows:

FAA GA Entitlement:	\$150,000
FDOT:	\$500,000
JAA General Fund:	\$500,000

Source: JAA Management, 2006

As a result, JAA is responsible for finding other funding sources, including FDOT, to fund proposed projects through the planning period.

Projected Operating Revenues and Expenses

The financial analysis was based upon assumptions and forecasts already contained in the master plan update. However, based upon the current situation facing the aviation industry, including increased fuel costs, security requirements, and the impact of new technology (i.e. LAAS and WAAS systems), some modifications were made. Most revenue and expense categories are assumed to increase from the base year. Growth estimates are based upon the relationships between existing and programmed facilities and operational forecasts. For instance, while hangar rental revenues were exclusively linked to hangar space available, fuel sales were directly related to a factor that combines growth rates for airport operations and aircraft size.

In addition fuel flowage fees and other income and all expense categories were directly related to the growth in airport operations. Further, additional revenue associated with the development of non-aviation facilities were also included in the cash flow analysis.

Airport Rates and Charges

Using the methodology outlined in the FDOT Florida Airport Financial Resource Guide and Master Plan Guidebook, leases, rates and charges at HEG were established in accordance with aviation and non-aviation categories as follows:

- Aviation - The aviation category includes full service FBOs, specialty FBOs, non-FBOs (e.g. corporate hangars), and any other commercial and non-commercial aeronautical aviation activity.



- Non-aviation - the non-aviation category includes all non-aeronautical uses of the airport land including restaurants, non-aviation related storage, offices, commercial/industrial parks, and other related facilities.

By establishing a base rental and other fees at HEG, the consultant can ensure that revenues will be available to offset the cost of maintaining, operating and developing the airport over the proposed twenty year planning period. Although it is unlikely and unnecessary that HEG will become totally self-sufficient, it is recommended that aviation and non-aviation revenue improvements to increase the utility of the airfield to paying customers will likely cover at the least operating expenses and a portion of airport capital improvements in the future. The types of improvements, including necessary land acquisitions, via purchase, easements or other means, were conceived to assist JAA to achieve this goal within the planning period.

Operating Revenues and Expenses

Operating revenues at HEG are derived from a variety of sources including: lease revenues from the rent of hangars/aviation leases, storage/warehouse buildings and land leases; forestry revenues resulting from the harvesting of timber; and aviation related revenues including fuel flowage and tie-downs. Operating Revenues for 2006, as shown in **Table 7-8**, was obtained from JAA staff. This information was used as a baseline for future operating revenue at HEG through the twenty year planning period as shown in **Table 7-10**, *Forecast Operating Revenues and Expenses*.

**TABLE 7-8
EXISTING OPERATING REVENUES AND EXPENSES**

	October - July 2006	10/01/05-09/30/06	Percent of Total
Operating Revenues			
Concessions	\$1,180.44	\$1,416.53	0.09%
Fees & Charges	\$1,450.39	\$1,740.47	0.14%
Space & Facility Rentals	\$460,262.40	\$552,314.88	43.16%
Sale of Utilities*	\$251,048.52	\$301,258.22	19.35%
Sale of Fuel	\$583,243.71	\$699,892.45	44.96%
Total Operating Revenues	\$1,297,185.46	\$1,556,622.55	
Operating Expenses			
Wages & Benefits	\$338,479.62	\$406,175.54	34.29%
Services & Supplies	\$50,527.73	\$60,633.28	5.12%
Repairs & Maintenance	\$42,604.53	\$51,125.44	4.32%
Promotion & Advertising	\$2,020.30	\$2,424.36	0.20%
Training	\$1,270.50	\$1,524.60	0.13%
Cost of Goods - Fuel	\$486,663.07	\$583,995.68	49.31%
Utilities	\$65,456.97	\$78,548.36	6.63%
Taxes	\$-	\$-	0.00%
Total Operating Expenses	\$987,022.72	\$1,184,427.26	
Net Income (Loss)	\$ 310,162.74	\$ 372,195.29	
*Note: Sale of Utilities is electricity Source: Jacksonville Aviation Authority Finance Department, March 2007			

In order to forecast future revenues and expenses related to not only increased operations but also anticipated revenues and expenses related to projected building and hangar development as outlined in the CIP, the following assumptions as shown in **Table 7-9** were developed based upon data obtained from airport management and similarly sized airports in the region:

**TABLE 7-9
FORECAST ASSUMPTIONS**

Notes	¹ Represents Industry Standard based upon similarly sized airports	
		2006 Dollars
REVENUES:		
Use of Money & Property		
	Land Leases includes parking and apron (if required)	\$0.05 ¹ per square foot per month
	Office Buildings	
	20,000 SF Office Building (43,220 SF w/Parking)	\$25,932 annually
	10,000 SF Office Building (21,610 SF w/Parking)	\$12,966 annually
	Restaurant (41,220 SF w/Parking)	\$24,732 annually
	Hangars	
	100 x 100 Hangar (22,000 SF)	\$13,200 annually
	100 x 120 Hangar (25,000 SF)	\$15,000 annually
	100 x 150 Hangar (33,000 SF)	\$19,800 annually
	100 x 170 Hangar (25,000 SF)	\$21,000 annually
	Royal Atlantic New Lease	\$192,000 annually with 5% increase every five (5) years
	Blimp Hangar Land Lease (~25,000 SF)	\$15,000 annually
	Glider Area (Cost x .07 ¹)	\$48,020 with 5% increase every five (5) years
	Existing Space and Facilities Rentals (JAA)	Assumes 5% increase in revenues every five years
	Hangar/Building Lease Revenues	
	T-1 -- Large	\$270.00 per bay monthly
	T-2 and T-3 -- Small	\$250 per bay monthly
	T-4 and T-5 -- Small (New)	\$300 per bay monthly
	T-6 -- Large (New)	\$350 per bay monthly
	New Large (14-Unit)	\$58,800 annually
	New Small (12-Unit)	\$
	New Small (8-Unit One Sided)	\$330.00 per bay monthly; \$31,680 annually
	FBO/Maintenance Hangar (Cost x .07 ¹)	\$159,294 annually
	4 Box Hangars (Cost x .07 ¹)	\$109,437 annually
	Corporate Hangar (60 x 60 foot) (Cost x .07 ¹)	\$79,333 annually
	Corporate Hangar (70 x 70 foot) and associate apron (Cost x .07 ¹)	\$97,489 annually
	Open Bay Hangar (Cost x .07 ¹)	\$70,000 annually
	Tie-Down Revenues	
	Based Aircraft	\$80.00 Monthly
	Transient Aircraft	\$10.00 per aircraft
	Helipad Parking	\$110.00 Monthly
	Note: Assumed 5 percent increase in land and hangar leases every five (5) years	
Current Service Charges		
	Airport Fuel Flowage Fees (Utilities), includes Self Fuel	\$3.00 per gallon

TABLE 7-9
FORECAST ASSUMPTIONS

Notes	¹ Represents Industry Standard based upon similarly sized airports	
		2006 Dollars
	Concessions	\$0.02 per GA Operation
	Fees and Charges	\$0.03 per GA Operation
EXPENSES:		
	Wages & Benefits	~\$40,288 per employee annually
	Services & Supplies	\$0.95 per operation
	Repairs & Maintenance	Assumes 5% annually increase
	Promotion & Advertising	Remains the same
	Training	\$152.46
	Cost of Goods - Fuel	\$9.12 per GA operation
	Utilities	\$455.22
<i>Source: The LPA Group, Inc. 2007</i>		

Concessions

Projections of revenues associated with concessions through the year 2026 was based upon existing concession revenues divided by 2006 GA operations to provide a ratio of \$0.02. Applying this ratio to forecast GA operations through the year 2025 resulted in \$1,753 or 0.03 percent of total anticipated revenues.

Fees and Charges

In 2006, revenues associated with fees and charges were estimated to represent .14% of total revenues in 2006. Using the projection of \$0.03 per general aviation operation resulted in a projection of \$2,154 or 0.04 percent of total projected revenues in 2025.

Fuel Flowage Fees (also known as Sale of Utilities)

In fiscal year 2006 (October 2005 through September 2006), fuel sales represented \$583,995.68 of total utility revenues with the remaining \$78,000 associated with the sale of utilities. Projections of fuel flowage revenues were determined by obtaining a ratio of fuel flowage revenue to operation for the year 2006. Based upon this information, \$3.00 a gallon was applied to the fuel demand forecast over the twenty-year planning period to determine fuel flowage revenue through the year 2025.

Wages and Benefits

Wages and benefits are directly related to the number of employees currently assigned to the airport. Increases in wages and benefits were attributed to an increase in the number of employees to keep pace with planned development.



Services and Supplies

Projections of services and supplies through the twenty year planning period is based upon the ratio of existing services and supplies as shown in 2006 to general aviation operations. Using a rate of \$0.95 per general aviation operation has resulted in a growth of expenses from \$60,633 in 2006 to \$67,086 in 2015.

Repairs and Maintenance

Based upon anticipated growth, \$2,500.00 dollars per year was added to the repairs and maintenance budget through the year 2025 to cover on-airport maintenance.

Promotions and Advertising

Promotions and advertising were maintained throughout the year 2025 since it is provided in year 2006 dollars. It is anticipated that promotions and advertising will increase by the CPI.

Training

Training costs are directly related to the ratio of existing expenses for 2006 to the number of HEG employees. Using a ratio of \$152.46 per employee resulted in a training expense of \$1,932 in 2015.

Cost of Goods - Fuel

Projection of Fuel Flowage costs were determined by obtaining a ratio of fuel flowage expenses for 2006 divided by general aviation operations. This resulted in a rate of \$9.12 per general aviation operation, which provides a projection of \$646,149 by the year 2015.

Most of the improvements included in the short-term plan are airside related, specifically focusing on aviation related development along the north side of the airfield. This development is expected to enhance revenue collection. Thus, it is anticipated that revenues will increase in constant dollars from \$1.6 million in 2006 to \$2.7 million in 2015. Long-term development is clearly focused on revenue generating projects including non-aviation land leases and aviation related storage facilities. Based upon anticipated increases in operations and demand, aircraft and non-aviation lease revenues are expected to represent approximately 44 percent of total airport revenues.

Cash Flow Assessment

The first step in this financial assessment was to compile information related to historical income and expenditures at HEG. Using this data as a starting point, future revenue and expenditures were then estimated through 2016. Historically, FDOT and JAA have each provided only \$500,000 per year to development projects at HEG. Thus, applying the GA Entitlement Funding of \$150,000, FDOT and JAA historical funding, anticipated Federal Discretionary, in addition to private funding, JAA will require alternative funding sources to accommodate proposed development. These funding short-falls are outlined in **Table 7-10**, *Twenty Year Financial Forecast*.



Table 7-10 presents the projected net operating surplus/(deficit) for HEG. The data is based upon HEG's calendar year, and starting values were obtained from the Jacksonville Aviation Authority Finance Department. In addition to the funding obtained from day-to-day operations, the Airport is currently using three (federal grants, state grants, and loans) other sources of funding that allow it to finance the current Capital Improvement Program.

**TABLE 7-10
CASH FLOW ANALYSIS
(2007-2026)**

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Total Military Operations	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Total GA Operations	64,535	65,265	66,002	66,748	67,502	68,265	69,036	69,816	70,605	71,403	72,210	73,026	73,851	74,686	75,530	76,383	77,246	78,119	79,002	79,895
Total Operations	66,535	67,265	68,002	68,748	69,502	70,265	71,036	71,816	72,605	73,403	74,210	75,026	75,851	76,686	77,530	78,383	79,246	80,119	81,002	81,895
Estimated Number of Employees	10	11	11	11	11	12	12	12	13	13	13	14	14	14	14	15	15	15	15	15
Based AC stored on Ramp	49	50	50	51	52	53	54	55	56	57	59	60	62	63	64	66	67	69	70	71
Transient Aircraft Parking	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	2,160	2,160	2,160	2,160	2,160	2,520	2,520	2,520	2,520	2,520	2,520	2,520
Helipad Parking - Based	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1
REVENUES																				
Use of Money & Property																				
<i>Commercial Realty Land Lease (Non-Aviation)</i>																				
20,000 SF Office Building Land Lease - East Commerce Park	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$25,932	\$25,932	\$25,932	\$51,864	\$51,864	\$51,864	\$77,796	\$77,796	\$77,796	\$81,686
10,000 SF Office Building Land Lease - East Commerce Park	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$77,796	\$77,796	\$155,592	\$155,592	\$181,524	\$181,524	\$207,456	\$207,456	\$233,388	\$233,388	\$259,320
Restaurant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$24,732	\$24,732	\$24,732	\$24,732	\$24,732	\$24,732	\$24,732	\$24,732	\$24,732	\$25,969	\$25,969
SUBTOTAL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$102,528	\$128,460	\$206,256	\$206,256	\$258,120	\$258,120	\$284,052	\$309,984	\$337,153	\$337,153	\$366,974
<i>Aviation Related Land Lease, includes auto parking</i>																				
Corporate Unit - 100 x 100	\$0	\$0	\$0	\$0	\$13,200	\$13,200	\$13,200	\$13,200	\$39,600	\$39,600	\$39,600	\$52,800	\$52,800	\$66,000	\$66,000	\$79,200	\$79,200	\$92,400	\$92,400	\$97,020
Corporate Unit - 100 x 120	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$15,000	\$15,000	\$30,000	\$30,000	\$45,000	\$45,000	\$60,000	\$60,000	\$75,000	\$78,750	\$78,750
Corporate Hangar - 100 x 150	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$19,800	\$19,800	\$19,800	\$19,800	\$20,790	\$20,790	\$20,790
Corporate Hangar - 100 x 170, including parking	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$21,000	\$42,000	\$42,000	\$42,000	\$42,000	\$42,000	\$42,000	\$42,000	\$42,000	\$42,000	\$42,000	\$42,000
New Lease Royal Atlantic	\$0	\$192,000	\$192,000	\$192,000	\$192,000	\$201,600	\$201,600	\$201,600	\$201,600	\$211,680	\$211,680	\$211,680	\$211,680	\$222,264	\$222,264	\$222,264	\$222,264	\$233,377	\$233,377	\$233,377
Blimp Hangar Ground Lease (25000 SF)	\$0	\$0	\$0	\$0	\$15,000	\$15,000	\$15,000	\$15,000	\$15,750	\$15,750	\$15,750	\$15,750	\$16,538	\$16,538	\$16,538	\$16,538	\$17,364	\$17,364	\$17,364	\$17,364
Glider Area	\$0	\$0	\$0	\$0	\$0	\$48,020	\$48,020	\$48,020	\$48,020	\$50,421	\$50,421	\$50,421	\$50,421	\$52,942	\$52,942	\$52,942	\$52,942	\$55,589	\$55,589	\$55,589
SUBTOTAL	\$0	\$192,000	\$192,000	\$192,000	\$220,200	\$277,820	\$277,820	\$277,820	\$325,970	\$374,451	\$374,451	\$402,651	\$403,439	\$464,544	\$464,544	\$492,744	\$493,570	\$536,521	\$540,271	\$544,891
<i>Existing Space and</i>	\$611,115	\$611,115	\$611,115	\$641,671	\$641,671	\$641,671	\$641,671	\$673,754	\$673,754	\$673,754	\$673,754	\$707,442	\$707,442	\$707,442	\$707,442	\$742,814	\$742,814	\$742,814	\$742,814	\$779,955

TABLE 7-10
CASH FLOW ANALYSIS
(2007-2026)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
<i>Facilities Rentals (2005 JAA Financials)</i>																				
<i>Hangar/Building Rentals</i>																				
FBO/Maintenance Building	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$159,254	\$159,254	\$159,254	\$159,254	\$159,254	\$159,254	\$159,254	\$167,217	\$167,217	\$167,217	\$167,217
T-Hangar Revenue	\$58,800	\$117,600	\$117,600	\$134,400	\$134,400	\$177,600	\$177,600	\$220,800	\$220,800	\$252,480	\$284,160	\$284,160	\$331,680	\$379,200	\$410,880	\$505,920	\$553,440	\$600,960	\$600,960	\$600,960
Box Hangar (50 x 50 foot)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$109,437	\$109,437	\$109,437	\$218,874	\$218,874	\$328,311	\$328,311	\$437,748	\$437,748	\$437,748	\$437,748
Corporate Hangar (60 x 60 foot)	\$0	\$0	\$0	\$0	\$0	\$0	\$79,333	\$79,333	\$79,333	\$79,333	\$83,299	\$83,299	\$166,599	\$166,599	\$249,898	\$249,898	\$437,748	\$437,748	\$459,635	\$459,635
Corporate Hangar (70 x 70 foot)	\$0	\$0	\$0	\$0	\$0	\$0	\$174,144	\$174,144	\$174,144	\$174,144	\$182,851	\$182,851	\$182,851	\$182,851	\$191,994	\$191,994	\$191,994	\$191,994	\$191,994	\$201,593
Open Bay Hangar	\$0	\$0	\$0	\$70,000	\$70,000	\$70,000	\$70,000	\$70,000	\$73,500	\$73,500	\$73,500	\$73,500	\$77,175	\$77,175	\$77,175	\$77,175	\$81,034	\$81,034	\$81,034	\$81,034
SUBTOTAL	\$58,800	\$117,600	\$117,600	\$204,400	\$204,400	\$247,600	\$501,077	\$544,277	\$547,777	\$848,148	\$892,502	\$892,502	\$1,136,433	\$1,183,953	\$1,417,512	\$1,512,552	\$1,869,181	\$1,916,701	\$1,948,188	\$1,948,188
<i>Aircraft Tie-Down Revenues</i>																				
Based Aircraft Tie-Down Revenues	\$45,197	\$43,656	\$42,629	\$41,679	\$40,574	\$39,547	\$38,520	\$37,493	\$37,102	\$35,952	\$34,925	\$33,898	\$32,870	\$32,688	\$31,843	\$30,816	\$29,789	\$28,762	\$26,512	\$27,077
Transient Aircraft Tie-Down Revenues	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000	\$21,600	\$21,600	\$21,600	\$21,600	\$21,600	\$25,200	\$25,200	\$25,200	\$25,200	\$25,200	\$25,200	\$25,200
Helipad Tie-Down Revenues	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,320	\$1,320	\$1,320	\$1,320	\$1,320	\$1,320	\$1,320
SUBTOTAL	\$63,197	\$61,656	\$60,629	\$59,679	\$58,574	\$57,547	\$56,520	\$55,493	\$58,702	\$57,552	\$56,525	\$55,498	\$54,470	\$59,208	\$58,363	\$57,336	\$56,309	\$55,282	\$53,032	\$53,597
Total Use of Money & Property	\$733,112	\$982,371	\$981,344	\$1,097,749	\$1,124,845	\$1,224,638	\$1,477,087	\$1,551,344	\$1,606,203	\$2,056,433	\$2,125,692	\$2,264,349	\$2,508,040	\$2,673,267	\$2,905,981	\$3,089,498	\$3,471,858	\$3,588,470	\$3,621,457	\$3,693,604
<i>Current Service Charges</i>																				
Concessions	\$1,432	\$1,447	\$1,463	\$1,478	\$1,494	\$1,510	\$1,526	\$1,543	\$1,559	\$1,576	\$1,593	\$1,610	\$1,627	\$1,645	\$1,663	\$1,680	\$1,698	\$1,717	\$1,735	\$1,754
Fees & Charges	\$1,759	\$1,778	\$1,797	\$1,816	\$1,836	\$1,856	\$1,876	\$1,896	\$1,916	\$1,937	\$1,957	\$1,978	\$2,000	\$2,021	\$2,043	\$2,065	\$2,087	\$2,109	\$2,132	\$2,155
Electric Usage	\$304,873	\$308,532	\$312,234	\$315,981	\$319,773	\$323,610	\$327,493	\$331,423	\$335,400	\$339,425	\$343,498	\$347,620	\$351,792	\$356,013	\$360,285	\$364,609	\$368,984	\$373,412	\$377,893	\$382,428
Sale of Fuel	\$714,717	\$730,355	\$746,856	\$764,272	\$776,137	\$788,276	\$800,697	\$813,408	\$826,417	\$837,551	\$848,861	\$860,350	\$872,021	\$883,878	\$895,762	\$907,833	\$920,093	\$932,545	\$945,193	\$0
Total Service Charges	\$1,022,781	\$1,042,112	\$1,062,350	\$1,083,548	\$1,099,240	\$1,115,252	\$1,131,592	\$1,148,270	\$1,165,293	\$1,180,489	\$1,195,910	\$1,211,558	\$1,227,440	\$1,243,557	\$1,259,753	\$1,276,187	\$1,292,862	\$1,309,783	\$1,326,953	\$386,336
<i>Miscellaneous Income</i>																				
Miscellaneous Income	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Misc. Income	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Yearly Revenue	\$1,755,893	\$2,024,483	\$2,043,693	\$2,181,297	\$2,224,085	\$2,339,889	\$2,608,679	\$2,699,613	\$2,771,496	\$3,236,922	\$3,321,602	\$3,475,907	\$3,735,480	\$3,916,824	\$4,165,734	\$4,365,684	\$4,764,720	\$4,898,253	\$4,948,410	\$4,079,940
Transfers In (Rollover from prior year)	\$726,811	\$1,073,796	\$1,190,937	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$196,639	\$538,535	\$1,266,804	\$2,115,830	\$3,000,670

TABLE 7-10
CASH FLOW ANALYSIS
(2007-2026)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Total Operating Revenues	\$2,482,704	\$3,098,279	\$3,234,630	\$2,181,297	\$2,224,085	\$2,339,889	\$2,608,679	\$2,699,613	\$2,771,496	\$3,236,922	\$3,321,602	\$3,475,907	\$3,735,480	\$3,916,824	\$4,165,734	\$4,562,323	\$5,303,255	\$6,165,056	\$7,064,241	\$7,080,610
EXPENSES																				
Wages & Benefits	\$406,176	\$443,176	\$443,176	\$443,176	\$443,176	\$480,176	\$480,176	\$480,176	\$520,176	\$520,176	\$520,176	\$562,176	\$562,176	\$562,176	\$562,176	\$604,176	\$604,176	\$604,176	\$604,176	\$614,416
Services & Supplies	\$61,319	\$62,011	\$62,712	\$63,421	\$64,138	\$64,862	\$65,596	\$66,336	\$67,086	\$67,844	\$68,611	\$69,386	\$70,170	\$70,963	\$71,765	\$72,576	\$73,396	\$74,225	\$75,064	\$76,337
Repairs & Maintenance	\$53,625	\$56,125	\$58,625	\$61,125	\$71,125	\$73,625	\$76,125	\$78,625	\$81,125	\$91,125	\$93,625	\$96,125	\$98,625	\$101,125	\$111,125	\$113,625	\$116,125	\$118,625	\$121,125	\$123,178
Promotion & Advertising	\$2,424	\$2,424	\$2,424	\$2,424	\$2,424	\$2,424	\$2,424	\$2,424	\$2,424	\$2,424	\$2,424	\$2,424	\$2,424	\$2,424	\$2,424	\$2,424	\$2,424	\$2,424	\$2,424	\$2,465
Training	\$1,525	\$1,677	\$1,677	\$1,677	\$1,677	\$1,830	\$1,830	\$1,830	\$1,982	\$1,982	\$1,982	\$2,134	\$2,134	\$2,134	\$2,134	\$2,287	\$2,287	\$2,287	\$2,287	\$2,326
Cost of Goods - Fuel	\$590,601	\$597,269	\$604,020	\$610,844	\$617,750	\$624,729	\$631,790	\$638,924	\$646,149	\$653,448	\$660,837	\$668,299	\$675,853	\$683,489	\$691,216	\$699,025	\$706,925	\$714,908	\$722,991	\$735,245
Utilities	\$79,727	\$80,922	\$82,136	\$82,395	\$82,707	\$83,947	\$85,207	\$86,485	\$86,492	\$87,789	\$89,106	\$90,443	\$91,799	\$93,320	\$94,720	\$96,141	\$97,583	\$99,047	\$101,969	\$103,698
Taxes	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Operating Expenses	\$1,195,396	\$1,243,606	\$1,254,771	\$1,265,062	\$1,282,997	\$1,331,594	\$1,343,147	\$1,354,800	\$1,405,435	\$1,424,788	\$1,436,762	\$1,490,988	\$1,503,183	\$1,515,632	\$1,535,561	\$1,590,254	\$1,602,917	\$1,615,692	\$1,630,037	\$1,657,665
Yearly Net Balance / (Loss)	\$1,287,308	\$1,854,673	\$1,979,859	\$916,235	\$941,088	\$1,008,296	\$1,265,532	\$1,344,814	\$1,366,061	\$1,812,134	\$1,884,840	\$1,984,919	\$2,232,297	\$2,401,191	\$2,630,173	\$2,972,069	\$3,700,338	\$4,549,364	\$5,434,204	\$5,422,945
CAPITAL IMPROVEMENT PROGRAM (CIP)																				
Transfers In																				
FAA Entitlement Grant Draws (AIP)	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000
FAA Discretionary Grants	\$0	\$27,550	\$391,900	\$1,052,218	\$0	\$117,105	\$0	\$333,434	\$13,500	\$0	\$215,320	\$215,320	\$215,320	\$215,320	\$215,320	\$215,320	\$215,320	\$215,320	\$215,320	\$215,320
FDOT / State Grant Draws	\$400,000	\$400,000	\$25,000	\$500,000	\$975,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
Private Investment	\$0	\$728,865	\$0	\$0	\$5,576,040	\$0	\$2,200,841	\$0	\$6,007,415	\$2,559,735	\$4,841,300	\$4,841,300	\$4,841,300	\$4,841,300	\$4,841,300	\$4,841,300	\$4,841,300	\$4,841,300	\$4,841,300	\$4,841,300
JAA Participation from General Fund	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
Operating Balance (if any)	\$495,733	\$1,287,308	\$1,854,673	\$1,957,319	\$916,235	\$941,088	\$1,008,296	\$1,265,532	\$1,344,814	\$1,366,061	\$1,812,134	\$1,884,840	\$1,984,919	\$2,232,297	\$2,401,191	\$2,630,173	\$2,972,069	\$3,700,338	\$4,549,364	\$5,434,204
Total CIP Transfers	\$1,545,733	\$3,093,723	\$2,921,573	\$4,159,537	\$8,117,275	\$2,208,193	\$4,359,137	\$2,748,966	\$8,515,729	\$5,075,796	\$8,018,754	\$8,091,460	\$8,191,539	\$8,438,917	\$8,607,812	\$8,836,793	\$9,178,689	\$9,906,958	\$10,755,984	\$11,640,824
Other Funding Participation Required	\$0	\$0	\$0	\$2,141,325	\$2,731,469	\$299,067	\$2,791,009	\$2,326,178	\$1,322,583	\$6,231,769	\$621,400	\$548,694	\$448,615	\$201,237	\$32,343	\$0	\$0	\$0	\$0	\$0
Total CIP Funds Available	\$1,545,733	\$3,093,723	\$2,921,573	\$6,300,862	\$10,848,744	\$2,507,260	\$7,150,146	\$5,075,144	\$9,838,312	\$11,307,565	\$8,640,154	\$8,640,154	\$8,640,154	\$8,640,154	\$8,640,154	\$8,836,793	\$9,178,689	\$9,906,958	\$10,755,984	\$11,640,824

**TABLE 7-10
CASH FLOW ANALYSIS
(2007-2026)**

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Total CIP Project Costs	\$818,922	\$2,019,927	\$1,753,176	\$6,300,862	\$10,848,744	\$2,507,260	\$7,150,146	\$5,075,144	\$9,838,312	\$11,307,565	\$8,640,154	\$8,640,154	\$8,640,154	\$8,640,154	\$8,640,154	\$8,640,154	\$8,640,154	\$8,640,154	\$8,640,154	\$8,640,154
End Balance	\$726,811	\$1,073,796	\$1,168,397	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$196,639	\$538,535	\$1,266,804	\$2,115,830	\$3,000,670
<i>Legend:</i>	¹ Space & Facility Rentals - refers to T-hangar, Box, Corporate and Conventional Hangars built by the Airport, Tie-downs and Land Leases.																			
	² Sale of Utilities - refers to fuel sales																			
<i>Sources:</i>	JAA and The LPA Group, Inc. 2007																			

CONCLUSIONS

HEG is an economic catalyst for the City of Jacksonville, Duval County and surrounding areas and provides essential aviation services to meet community demand; therefore, it is important that the Airport be able to undertake the CIP discussed herein so that it can continue to provide these necessary services to the community. Based on the general financial assessment presented in this section, the JAA will need to consider all potential funding sources in order to undertake the identified projects throughout the planning period. Based upon anticipated development over the twenty year planning period, a summary of projected funding is provided in **Table 7-11**.

TABLE 7-11 PROJECTED FUNDING							
Development Period	Project Costs	Federal Funding		FDOT Share	JAA Share	Private Funding	Other Funding Sources*
		Entitlement	Discretionary				
Short-Term	\$21,741,631	\$750,000	\$1,471,668	\$2,300,000	\$2,500,000	\$6,304,905	\$8,415,058
Intermediate-Term	\$35,878,426	\$750,000	\$464,039	\$2,500,000	\$2,500,000	\$10,767,991	\$18,896,397
Long-Term	\$86,401,542	\$1,650,000	\$2,153,200	\$5,500,000	\$5,500,000	\$48,413,002	\$23,185,341
Total 20-Year Period	\$144,021,600	\$3,150,000	\$4,088,907	\$10,300,000	\$10,500,000	\$65,485,898	\$50,496,795

Notes: *Other Funding Sources includes operating revenues generated by the airport as well as loans, bonds and other funding sources
Source: The LPA Group, Inc. 2007

As discussed earlier, the actual implementation schedule for the capital projects identified in the CIP may need to be adjusted according to development triggers and the actual demand experienced. As JAA seeks to move forward with these developments, more detailed financial analyses will be required to take into account the actual financial situation at that time. The actual funding for specific projects will be determined as implementation becomes more imminent, and will depend on JAA's development schedule, availability of funding, its financial health, and the overall local economic conditions.