



CHAPTER 7

IMPLEMENTATION PLAN

GENERAL

The purpose of this chapter was to schedule capital improvements related to recommendations proposed in this Master Plan Update, provide cost estimates, based upon current conditions, for their development, and develop a financially feasible cash flow analysis based upon this development. This chapter was designed to assist Airport Management in identifying projects which would maximize revenues, minimize expenses, while accommodating the needs and demands of its users.

Previous chapters evaluated airport development based upon current and projected activity, environmental and storm water requirements¹, safety, and operational efficiency. Through the application of basic economic, financial and management rationale, a responsible and efficient implementation of each development item can be achieved. The ultimate goal was to develop a realistic and cost effective program that provides the maximum benefit to the community. Funding for proposed development, however, is not exclusively dependent upon the Titusville-Cocoa Airport Authority (the Authority), the operator of Merritt Island Airport (COI), for funding. Rather through proper and timely decisions with regard to future development, the primary sources of funding associated with the capital improvement plan (CIP) will likely occur at the federal and state levels. However, the Authority is still required to cover its portion (local match) of these project costs.

Therefore, the Federal Aviation Administration (FAA) and Florida Department of Transportation (FDOT) require the submission of a financially feasible Capital Improvement Program (CIP)². While the CIP illustrates recommended improvements over a twenty-year planning period, a financial feasibility analysis was only conducted for the projects identified in the initial ten years of the CIP. Generally speaking, the financial feasibility analysis must show that the recommended improvements can be realistically afforded by the FAA, FDOT, and airport sponsor, considering the availability of funds for grant-eligible projects, as well as the anticipated financial performance of the airport sponsor.

¹ St. John River Water Management District (SJRWMD) implemented new rules in November 2008 with specific language about meeting State water quality rules requiring the removal of phosphorous and nitrogen from storm water runoff to an Outstanding Florida Waterway.

² FDOT Order 725-040-040-H, *Aviation Program Management*



Although the focus of the CIP was associated with proposed projects at Merritt Island Airport (COI), COI is one of three airports operated by the Authority. The proposed CIP was developed after evaluating the financial structure of the Authority and identifying potential sources of revenue that may be available to fund recommended capital improvement projects at COI. These funding sources were then matched with projects over an estimated phasing schedule to determine the financial implications of undertaking the recommended capital improvements. The CIP 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 was the intent of the CIP to provide general financial guidance to the Authority when making policy decisions regarding the recommended development of COI over the twenty-year planning period.

The preceding chapters of this Master Plan identified existing and future demand and associated facility requirements. As discussed in **Chapter 5, Alternatives Analysis**, major airfield improvement recommendations for COI include runway safety area and seawall improvements prior to Runway 29, a seaplane landing area within the Intracoastal Waterway (Newfound Harbor), and additional connector taxiways for improved capacity and aircraft flow. General aviation facility improvements include various T-hangars and corporate hangars, apron development, a new fuel farm, and a restaurant facility, as well as associated parking and surface access projects. Based upon projects identified in **Chapter 5**, this chapter presents a financially feasible twenty-year capital improvement program for COI.

HISTORIC AND CURRENT FUNDING

The capital improvement program (CIP), includes a development schedule and project cost summaries associated with each development phase (short, intermediate, and long-term). Improvements presented within the CIP assumes a financially feasible level of federal and state participation based upon the *FAA National Priority Rating, FDOT Aviation Project Handbook (Appendices G and H, respectfully)*, and March 2009 *FDOT Work Program (Table 7-1)*.

In addition to the projects outlined in the FDOT Work Program, the Authority has compiled a list of projects for COI based upon previous recommendations as well as existing demand. The joint automated capital improvement program (JACIP) for COI, as shown in **Table 7-2**, outlines anticipated cost estimates and funding sources for planned projects at COI through the year 2014. Both the FAA and FDOT encourage airports to use the findings outlined in their most recent master plan 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
Merritt Island Airport FDOT Work Program

Year	UPIN #	FDOT #	Project	Federal	State - DS	State - DPTO	Local	Total Cost
2008	PFL0007604	4163321	New Fuel Farm	\$0	\$266,400	\$0	\$66,600	\$333,000
2008	PFL40913	4239711	Aviation Safety Project	\$0	\$262,707	\$0	\$69,777	\$332,484
			Total 2008	\$0	\$529,107	\$0	\$136,377	\$665,484
2009	PFL0002667	409459-1	T-Hangar Construction	\$0	\$440,000	\$0	\$110,000	\$550,000
2009	PFL0002668	4097871	Rehabilitation of Airport Facilities	\$0	\$0	\$200,000	\$50,000	\$250,000
2009	PFL40913	4239711	Aviation Safety Project	\$0	\$0	\$65,007	\$16,252	\$81,259
			Total 2009	\$0	\$440,000	\$265,007	\$176,252	\$881,259
2010	PFL0003920	4182961	Land Acquisition	\$0	\$720,000	\$0	\$180,000	\$900,000
2010	PFL40913	4239711	Aviation Safety Project	\$0	\$0	\$2,770	\$2,770	\$5,540
			Total 2010	\$0	\$720,000	\$2,770	\$182,770	\$905,540
2011	PFL0004640	4208401	Rehabilitation of Airport Facilities	\$0	\$0	\$400,000	\$100,000	\$500,000
2011	PFL40913	4239711	Aviation Safety Project	\$0	\$0	\$7,990	\$7,990	\$15,980
			Total 2011	\$0	\$0	\$407,990	\$107,990	\$515,980
								\$0
2012	COI74	4144251	Land Acquisition/Airport Development	\$0	\$360,000	\$0	\$90,000	\$450,000
2012	PFL40913	4239711	Aviation Safety Project	\$0	\$0	\$316,006	\$79,002	\$395,008
			Total 2012	\$0	\$360,000	\$316,006	\$169,002	\$845,008
								\$0
2013	PFL40913	4239711	Aviation Safety Project	\$0	\$0	\$655,161	\$163,790	\$818,951
			Total 2013	\$0	\$0	\$655,161	\$163,790	\$818,951

Source: Florida Department of Transportation 6-Year Gaming Report, March 29, 2009

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**Table 7-2
Merritt Island Airport Joint Automated Capital Improvement Program**

UPIN	FDOT	Airport Priority	National Priority	Project Description	Year	Project Amount	FAA GA Entitlement	FAA Discretionary	FDOT	Local
PFL0002153		07-03S	0	Aircraft Wash Rack	2007	\$225,000	\$0	\$0	\$180,000	\$45,000
PFL0001576	409457-1	2	72	Rehabilitate Runway 11-29 and Taxiway Lighting	2007	\$293,000	\$0	\$263,700	\$14,650	\$14,650
PFL0002150		1	34	Construct Executive Hangar	2007	\$500,000	\$0	\$0	\$400,000	\$100,000
PFL0002151		06-01S	23	Access Road & Parking Lot Resurfacing project	2007	\$150,000	\$0	\$0	\$120,000	\$30,000
PFL0002152		07-01S	0	Construct T-Hangar	2007	\$450,000	\$0	\$0	\$360,000	\$90,000
Total 2007						\$1,618,000	\$0	\$263,700	\$1,074,650	\$279,650
COI74	414425-1	08-01S	41	Land Acquisition	2008	\$450,000	\$0	\$0	\$360,000	\$90,000
COI75		06-02S	45	Land Acquisition (Runway 11 Approach)	2008	\$600,000	\$0	\$0	\$480,000	\$120,000
PFL0003932		07-04S	1	CCTV & New Access Control System	2008	\$200,000	\$0	\$0	\$200,000	\$0
PFL0001644		07-01F	62	Rehabilitate South Apron	2008	\$1,200,000	\$150,000	\$990,000	\$30,000	\$30,000
155024		08-02S	0	Construct T-Hangar	2008	\$450,000	\$0	\$0	\$360,000	\$90,000
Total 2008						\$2,900,000	\$150,000	\$990,000	\$1,430,000	\$330,000
PFL0001624		08-01F	50	Restore and Stabilize Runway 11-29 Embankment	2009	\$6,200,000	\$150,000	\$5,740,000	\$155,000	\$155,000
PFL0002668	409787-1	09-02S	34	Rehabilitation of Airport Facilities	2009	\$250,000	\$0	\$0	\$200,000	\$50,000

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**Table 7-2
Merritt Island Airport Joint Automated Capital Improvement Program**

UPIN	FDOT	Airport Priority	National Priority	Project Description	Year	Project Amount	FAA GA Entitlement	FAA Discretionary	FDOT	Local
PFL0007604	416332-1	1	20	Design, Construction and Installation of a New Fuel Farm	2009	\$333,000	\$0	\$0	\$266,400	\$66,600
PFL0002669		09-03S	45	Land Acquisition	2009	\$500,000	\$0	\$0	\$400,000	\$100,000
PFL0003921		09-1F	68	Airport Master Plan & ALP Update	2009	\$257,896	\$150,000	\$95,000	\$6,448	\$6,448
PFL0002667	409459-1	09-01S	50	Construct T-Hangars	2009	\$550,000	\$0	\$0	\$440,000	\$110,000
				Total 2009		\$8,090,896	\$300,000	\$5,835,000	\$1,467,848	\$488,048
PFL0003920	418296-1	10-01S	41	Land Acquisition	2010	\$900,000	\$0	\$0	\$720,000	\$180,000
PFL0003922		10-02S	1	Airport Security Enhancements	2010	\$350,000	\$0	\$0	\$280,000	\$70,000
PFL0003938		10-03S	0	Construct T-hangars or Bulk Storage Hangars	2010	\$75,000	\$0	\$0	\$600,000	\$150,000
				Total 2010		\$1,325,000	\$0	\$0	\$1,600,000	\$400,000
PFL0002670		11-01S	0	Construct Bulk Storage Hangars	2011	\$1,000,000	\$0	\$0	\$800,000	\$200,000
PFL0004640	420840-1	11-02S	34	Rehabilitation of Airport Facilities	2011	\$500,000	\$0	\$0	\$400,000	\$100,000
				Total 2011		\$1,500,000	\$0	\$0	\$1,200,000	\$300,000
	420840-1	12-01S	34	Rehabilitation of Airport Facilities	2012	\$600,000	\$0	\$0	\$500,000	\$100,000
				Total 2012		\$600,000	\$0	\$0	\$500,000	\$100,000

Source: Titusville-Cocoa Airport Authority, 2008





Project Cost Estimates

Cost estimates were developed for each identified airport improvement from 2008 through 2028. Cost data used in this study was collected from a variety of sources, including actual project cost estimates, published engineering indices, government agency databases, and similar airport construction projects within the area. The projected costs were based on preliminary layouts developed as part of the Alternatives Analysis in **Chapter 5**. The total costs shown in the CIP, **Tables 7-5 through 7-7**, represent preliminary estimates of the probable implementation cost for each project in current year dollars (2008). In addition to the estimated construction costs, anticipated fees for design, inspection, permitting, surveying, testing and administration were included in the overall cost estimate where possible (**Table 7-3**).

**Table 7-3
Construction Engineering Soft Cost Percentages**

Soft Cost	Percentage
Surveying & Design Testing	6%
Allowance for Permitting Fees (ea)	\$5,000
Engineering	14%
Inspection & Testing	10%
Airport Administration	1.5%
Total Soft Costs	31.5% + \$5000

Source: The LPA Group Incorporated, 2008

A 20 percent contingency fee was applied to all capital improvement projects with the exception of specific environmental projects to account for unknown factors including fuel costs, increases in raw materials, permitting issues, etc. The contingency factor was not applied to environmental related projects, such as wetland or sea grass mitigation, since a contingency was already built into the base price estimates. In instances where two or more of the recommended projects can be funded and scheduled for implementation simultaneously, overall project costs may be reduced by avoiding a duplication of some items, as highlighted in the airport’s CIP.

In future years, as the plan is implemented, these cost presentations can continue to serve as a management tool by adjusting the 2008 base figures for subsequent inflation. This may be accomplished by converting the interim change in the National Consumer Price Index (CPI) into a multiplier ratio through the following formula:

$$\text{CPI Multiplier Ratio} = X/\text{CPI}$$

Where: X = CPI in any given future year
CPI = National CPI in 2005



Multiplying the change ratio times any 2008 base cost or income figure presented in this study will yield adjusted dollar amounts which may be used for any future year re-evaluation. However, only National CPI data should be used since local and regional measures vary. This information is available from the research departments of most banks or through Bureau of Labor Statistics (<http://www.bls.gov/CPI/>).

For several identified projects (i.e. runway safety area improvements), a detailed environmental analyses is required to determine potential environmental and budgetary impacts that could result from the proposed development. As a result, some projects may require mitigation measures to offset impacts to environmentally sensitive areas, whereas other projects may simply require some level of environmental remediation based on unknown conditions.

As described in the sections that follow, anticipated federal (including GA Entitlement and Discretionary Funding), state, local and private/third party participation was based upon the FAA funding priority level (see **Appendix G**) and anticipated financially feasible FDOT funding participation. Further, the short, mid, and long-term CIP incorporates projects currently within the FDOT Work Program and COI's JACIP (**Tables 7-1 and 7-2, respectively**).

Project Phasing

Project phasing was prepared based upon facility requirements related to the twenty-year operational forecasts and long-term capacity and demand. Since actual activity levels realized may vary, it is important that project staging remains sensitive to such variations. The recommended project development schedule was refined through discussions with airport management, the Technical Advisory Committee and the Authority. As a result, project timelines were established in order of priority during each short-, mid-, and long-term phase.

Projects phased within the master plan CIP may differ from the March 2009 JACIP and FDOT work program due to changing needs and facility requirements which were identified in **Chapters 4 and 5** of this report. The resulting list of prioritized improvements was determined based upon the urgency of need, ease of implementation, logic of project sequencing, and Authority input. The objective was to establish an efficient order for project development and implementation that satisfied the forecast aviation activity for COI and the needs expressed by Authority staff and users alike. The development schedule was divided into three general stages: the short-term (2008-2012), the Intermediate (2013-2017) and the long-term (2018-2028).

Project Funding

Airport development is funded by a combination of public and private sources. Major sources may include the Airport Improvement Program (AIP), state and local funding



programs, airport revenue bonds, and airport user charges. Public grants and local contributions comprise most of the capital funding, while user charges generally cover an airport's operating expenses and the debt service.

Airport capital improvements are typically financed through state and federally imposed user fees and from funds generated from airport operations. Airport capital improvements are not funded from tax levies on the general public. Airports such as COI will typically 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. GA airports do not usually get discretionary funds unless the project has a very high priority number (i.e. 70 or better). 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 facility projects can proceed (such as runway improvements, taxiways, hangar construction and others).

Federal Funding (Airport Improvement Program)

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: GA entitlements and AIP discretionary.

Entitlement Funding

Entitlement funding is divided among primary airports, General Aviation, cargo service airports and state block grants based on aviation activity and service levels. 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). Although Merritt Island Airport is one of three general aviation airports within the Titusville-Cocoa Beach



Airport System, it is eligible to receive \$150,000 per year over the twenty-year planning period (approximately \$3,000,000). Further, when necessary, the FAA allows entitlement funding to be accumulated up to \$450,000 (approximately 3-years), so it may be used to offset the cost of a large project development.

Discretionary Funding

Discretionary funds are distributed based on established FAA priorities to any eligible airport and are used to assist an airport to achieve its capacity, safety and noise compatibility objectives. Representative projects eligible for discretionary funding include: new runways, taxiways and non-exclusive aprons, navigational aids, primary access roads, etc. Applying FAA National Priority Rankings, projects with a priority ranking of less than 70 would be unlikely to obtain FAA discretionary funding.

However priority (70 or greater) FAA project costs are eligible up to 95 percent with the remaining 5 percent 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. The Vision 100 program was scheduled to expire in 2008; however, to date, no agreement has been made regarding the federal match for AIP eligible projects. As a result, 95 percent was used to determine estimated federal funding on future AIP eligible projects throughout the twenty year planning period.

Facilities and Equipment Spending

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 (**Table 7-4**).

Table 7-4
FDOT's Share of Project Funding

Type of Development	If Federal Funding is Available	If Federal Funding is NOT Available
Commercial Service Airports	FDOT provides up to 50% of local share	FDOT provides up to 50% of local share
General Aviation Airports	FDOT provides up to 50% of local share	FDOT provides up to 80% of local share
Economic Development	Not applicable	FDOT provides up to 50%
Airport Loans	Not applicable	FDOT provides 75% interest free for 10 years
Security	FDOT provides up to 100% of local share	FDOT provides up to 100% of local share

Source: FDOT Aviation Project Handbook, 2002

As outlined in **Table 7-4**, additional FDOT funding sources include monies for economic development, interest free airport loans, and security improvements. FDOT typically provides up to 50 percent of the costs to build on-airport revenue producing capital improvements, including industrial park development at GA airports. The FDOT also provides interest free loans up to 75 percent of the cost of airport land purchases for both commercial and GA airports. Loans are to be repaid to the Florida Airport Improvement Program funding ratio when federal funds become available or over 10-years, whichever comes first. 100 percent FDOT funding related to security improvements was initiated after the September 11, 2001 terrorist attacks. Initially the program was to have expired in 2004; however, to date, the FDOT, based upon review of historic and future participation at COI on security related projects, continues to participate up to 100 percent on required airport security improvements, including CCTV systems and perimeter fencing.

Since COI is part of an Airport System, which consists of three GA airports, it is eligible to obtain state funding for one-half of the local share when federal funding is available or up to 80 percent of project costs, unless related to economic development, when federal funding is not available. Typically, projects funded through this aviation development program are developed on a pay-as-you-go basis. However, funding availability and associated shares of project costs are "limited by the Florida Legislature and allocations to each Department district office"³.

³ FDOT Aviation Project Handbook, July 2002

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Because of funding availability limitations, FDOT has developed a computer program in conjunction with the FAA, the Joint Automated Capital Improvement Program (JACIP), as a tool to assist airports in coordinating their capital improvement program with the FAA and FDOT. Neither FAA nor FDOT have available resources to fund every project in the JACIP.

FDOT uses the projects included in the JACIP in conjunction with input from airport staff/management to prioritize projects within the FDOT Work Program. The Work Program includes five years of projects that have been approved for funding if funds are approved by the Legislature for the current year. FDOT also includes projects that are proposed for funding for the sixth year. Project funding is locked for projects in the current year and the next year. Changes to the FDOT Work Program for projects in this period require special approval by the Governor's Office and are difficult to execute. Changes to projects in years Three – Five are allowed if the new projects are in the JACIP and are coordinated with FDOT staff. New projects are usually added to the Work Program in the new sixth year from projects listed in the JACIP.

When projects are eligible for FAA funding, FDOT will program design funds in year one then program the remaining 80 percent of the project without FAA funds in year three. This allows the third year funds to be reprogrammed if full FAA funding was received in year two.

The FDOT funding schedule is less responsive to emerging market needs in Years One and Two but more responsive in years Three to Six. The current six year FDOT work Program is illustrated in **Table 7-1**. Although some state funding is anticipated for projects shown in the COI JACIP (**Table 7-2**), funding may be greater or lesser than currently shown based on project priority and FAA funding received.

Local (Sponsor) Funding

The Authority is anticipated to fund the local match of the project costs through the airport general fund/net revenues or through alternative funding sources. Since the Authority operates the three airports as one, the local share is contributed to projects at any of the three airports by using revenues from any of the three airports.

The Authority's share of funding is anticipated to come from two sources: annual net remaining revenues and unrestricted cash flow. Net remaining revenues refers to revenues produced from leases; whereas, unrestricted cash flow refers to funding from alternate sources, such as loans, grants and other investment mechanisms. In addition, revenues obtained from airport improvements will also be used to facilitate the capital improvements at the airport.

Revenues that COI generates now and in the future are anticipated to be obtained primarily from lease agreements (land and building) and fuel flowage fees associated



with the Fixed Based Operator. Additional revenues come from miscellaneous revenues and charges, including warehouse leases and other sources. Land leases associated with planned corporate, box and T-hangar development is anticipated to provide a portion of the local revenue necessary to implement the overall Master Plan development program. Further, currently undeveloped property and existing lease parcels designated for aviation and non-aviation use are likely to provide additional sources of revenue while increasing the sustainability of the airport over the long-term.

Any anticipated funding shortfalls specifically within the short to Intermediate will require the Authority to provide additional funding or to find alternative funding sources (i.e. loans, lines of credit, revenue bonds, etc).

Further, the portion of FAA Discretionary funding available will depend upon the priority rating of the project (70 or higher). 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 the Authority for COI development. 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, Inc. 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 amounts available to airports and specific funding requirements that may limit their usefulness to most airport development projects.

Third Party/Private Development

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 in the development of the capital improvement plan, and many projects, especially large hangar development on the airfield, could be funded by private entities.

The Safe, Accountable, Flexible, Efficient Transportation Equity Act (SAFETEA-LU), governs United States federal surface transportation spending through 2010, and was signed into law by President George W. Bush in Montgomery, Illinois on August 10, 2005. The \$286.4 billion measure contains a host of provisions designed to improve and maintain the transportation infrastructure in the United States, especially the highway and



interstate road system. It also contained funding for over six thousand earmarks for home-district projects through 2009.

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. Yet, the potential for private funding was considered within this implementation plan, and many projects, especially commercial development on the airfield, are likely to be funded by private entities. However, some large private hangar development was also considered to include private funding as well.

Capital Improvement Program

The Florida Department of Transportation in conjunction with the FAA requires that a financially (or cost) feasible plan be developed in relation to proposed airport development. The cost-feasible financial plan shall realistically assess project phasing and funding considering available state and local funding as well as the likelihood of federal participation using the FAA's project priority system.

The FDOT recommends that individual projects within the JACIP reflect a best estimate of appropriate funding levels and sources on a year-to-year basis. This determination of anticipated funding should be based upon state and federal funding available, the individual airport's historical funding and ability to produce the local share, and federal entitlement funds that can be reasonably expected.

According to **FDOT Procedure 725-040-040, *Funding Airport Projects***, "Projects considered to be a high priority by individual airport's planners that cannot be adequately accommodated in the immediate five-year planning window may be recommended for movement to a medium or long-range planning window within the JACIP. In that way, those projects can remain more visible and readily accessible to District and FAA planners should state and/or federal funding levels/priorities change improving the projects' competitiveness for discretionary funds".

Historically, COI has received annual funding, on average, in the amounts of \$150,000 from GA Entitlement funding and \$700,000 from FDOT funding. In order to develop the financially feasible capital improvement program for COI over the twenty-year planning period, this funding was applied to identify high-priority and cost-effective projects. Therefore, feasible funding sources were based upon the historic and current COI FDOT Work Programs and historic FAA GA entitlement funding. FAA Discretionary funding was based upon the FAA Priority Funding system (**Appendix G**) and historic participation on similar projects. However, it is important to note that funding for operating and capital projects at COI must compete with projects at Space Coast Regional Airport and Arthur Dunn Airpark.



As mentioned, project funding is locked for projects in the current year (2009) and the next year (2010). Changes to the FDOT work program for projects in this period require special approval by the Governor's Office and are difficult to execute. Therefore, projects which are shown in these years but are not included in the FDOT Work Program are shown as funded with federal funds, if eligible, or local funding only. Projects without probable FAA or FDOT funding were deferred to the long-term. Therefore, based upon historic and programmed federal, state and local funding, a financially feasible capital improvement program was developed for the short, mid and long-term planning periods as shown in **Tables 7-5, 7-6 and 7-7**, respectively.

Due to continued erosion of the Runway 29 safety area and the adjacent airport property, short-term projects included design and reconstruction of the runway safety area and airport seawall. Additional improvements included the construction of the new fuel farm, T-Hangar construction, security improvements and planned pavement rehabilitation (South Apron, Airport Entrance Road and Parking).

Intermediate improvements include projects currently included in the FDOT Work Program and Airport JACIP in addition to new drainage and revenue producing projects, such as T-hangars, box hangars and corporate hangar development. Additional Intermediate projects include implementation of a seaplane landing area, seaplane ramp, apron access and the installation of a washrack facility. Because of recent changes to the St. John's Water Management District's stormwater and drainage requirements, permitting and additional drainage was planned to occur prior to both hangar and apron development.

Long-term development was primarily focused on revenue generation through additional hangar development, pavement construction and rehabilitation, and aviation and non-aviation land leases (i.e. restaurant). Three separate phasing plans were developed to graphically depict proposed development during each of the three planning periods. **Figure 7-1** illustrates the short-term phasing, **Figure 7-2** illustrates the Intermediate term phasing, and **Figure 7-3** denotes the long-term phasing. Proposed projects are initially shown in color during their development term.

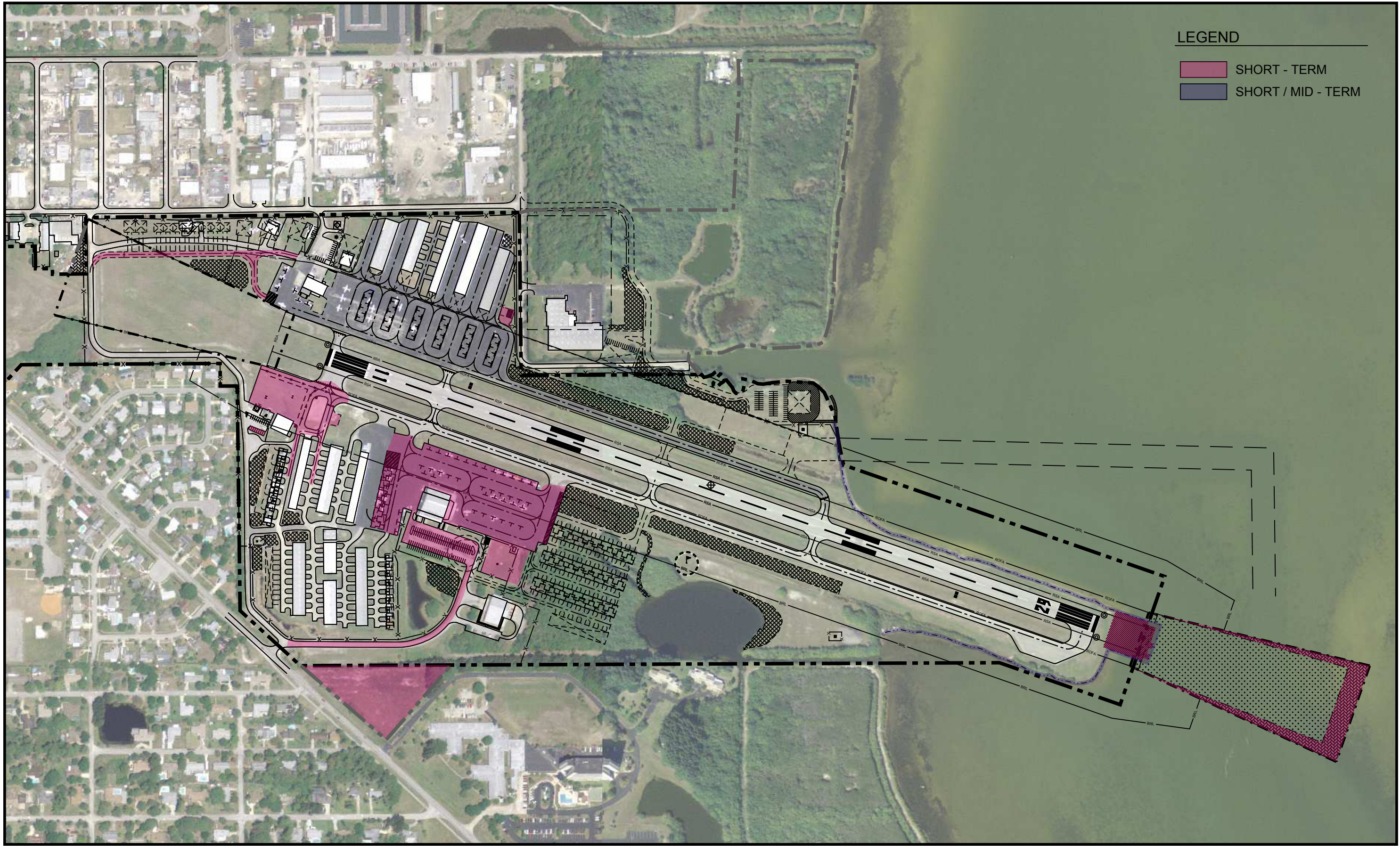


**Table 7-5
Merritt Island Airport
Short-Term Capital Improvement Program**

Phase	Year	UPIN #	FDOT WP #	Sponsor Priority Ranking	FAA Feasibility (Numerical Ranking)	Development Item Description	Development Costs & Contingencies (2009)	Total Federal	Total FDOT	Total Local	Third Party	FDOT Loan
1	2008	PFL0002151	-	06-01S	23	Access Road & Parking Lot Resurfacing project	\$150,000	\$0	\$120,000	\$30,000	\$0	\$0
1	2008	PFL0003921	-	09-1F	68	2008 Airport Master Plan Update	\$165,770	\$157,482	\$4,144	\$4,144	\$0	\$0
						Total 2008	\$315,770	\$157,482	\$124,144	\$34,144	\$0	\$0
1	2009	-	-	-	68	RSA and Seawall Improvement Environmental Assessment & Wetland Permitting	\$273,936	\$260,239	\$6,848	\$6,848	\$0	\$0
1	2009	-	-	-	97	RSA and Seawall Design (Structural and Aviation)	\$278,580	\$264,651	\$6,965	\$6,965	\$0	\$0
1	2009	-	-	-	97	CA, RPR and QCX Testing	\$180,000	\$171,000	\$4,500	\$4,500	\$0	\$0
1	2009	PFL0003932	-	07-04S	100	CCTV & New Access Control System	\$200,000	\$0	\$185,794	\$14,206	\$0	\$0
						Total 2009	\$932,516	\$695,890	\$204,107	\$32,519	\$0	\$0
1	2010	-	-	-	45	Northwest Roadway Relocation	\$479,917	\$0	\$383,933	\$95,983	\$0	\$0
1	2010	-	-	-	100	Dual Card Security Gate - Northwest Hangar Development	\$47,250	\$0	\$37,800	\$9,450	\$0	\$0
1	2010	-	-	-	45	Stormwater Drainage Area F	\$18,053	\$0	\$14,442	\$3,611	\$0	\$0
1	2010	-	-	-	0	Land Acquisition - Parcel D	\$213,000	\$0	\$0	\$53,250	\$0	\$159,750
1	2010	-	-	-	76	Environmental Mitigation (Seagrass Mitigation)	\$600,000	\$570,000	\$0	\$30,000	\$0	\$0
1	2010	-	-	-	68	RSA Property Easement Acquisition	\$3,600	\$3,420	\$0	\$180	\$0	\$0
1	2010	-	-	-	80	Sheriff's Apron Marking and hold bars	\$1,354	\$1,286	\$0	\$68	\$0	\$0
1	2010	-	-	-	80	Taxiway Marking Removal adjacent to Sheriff's Hangar	\$2,568	\$2,440	\$0	\$128	\$0	\$0
1	2010	-	-	-	0	Construct 11-unit T-Hangar on south apron (on former tie-downs)	\$1,407,617	\$0	\$440,000	\$241,917	\$0	\$725,700
1	2010	PFL0003922	-	10-02S	100	Airport Security Enhancements	\$350,000	\$0	\$265,007	\$84,993	\$0	\$0
						Total 2010	\$3,123,358	\$577,146	\$1,141,182	\$519,580	\$0	\$885,450
1	2011	-	-	-	100	Dual Card Security Gate - Fuel Farm Northside	\$47,250	\$0	\$37,800	\$9,450	\$0	\$0
1	2011	PFL0003920	418296-1	10-01S	68	Land Acquisition (Runway 29)	\$900,000	\$0	\$720,000	\$180,000	\$0	\$0
1	2011	-	423971-1	-	97	RSA and Seawall Construction	\$1,794,854	\$1,705,112	\$2,770	\$86,972	\$0	\$0
						Total 2011	\$2,742,104	\$1,705,112	\$760,570	\$276,422	\$0	\$0
1	2012	-	-	-	100	Construct Run-up pad adjacent to Taxiway A-1	\$213,000	\$202,350	\$5,325	\$5,325	\$0	\$0
1	2012	-	-	-	45	Expand County Clearzone Easement to encompass entire RPZ	\$27,600	\$0	\$22,080	\$5,520	\$0	\$0
1	2012	PFL0001644	-	07-01F	62	Rehabilitate South Apron Pavement	\$1,155,000	\$1,097,250	\$28,875	\$28,875	\$0	\$0
1	2012	-	-	-	47	Sheriff's Signage Improvement (lighted signage)	\$12,600	\$0	\$0	\$12,600	\$0	\$0
1	2012	-	-	-	86	Relocate Fenceline	\$34,929	\$0	\$0	\$34,929	\$0	\$0
1	2012	-	-	-	97	RSA and Seawall Construction	\$1,794,854	\$1,705,112	\$44,871	\$44,871	\$0	\$0
1	2012	-	-	-	20	Fuel Farm Removal - Underground Tanks	\$360,000	\$0	\$288,000	\$72,000	\$0	\$0
1	2012	-	-	-	45	New Stormwater Pond - North of T-Hangar 5	\$21,156	\$0	\$16,925	\$4,231	\$0	\$0
1	2012	-	-	-	20	Fuel Tank Install - two 10,000-Gallon Tank (North Apron)	\$616,400	\$0	\$493,120	\$123,280	\$0	\$0
1	2012	-	-	-	20	Fuel Farm Concrete Slap - North Side	\$159,099	\$151,144	\$3,977	\$3,977	\$0	\$0
						Total 2012	\$4,394,639	\$3,155,856	\$903,174	\$335,609	\$0	\$0
						Short-Term Development	\$11,508,387	\$6,291,485	\$3,133,178	\$1,198,275	\$0	\$885,450

Sources: FAA Project Priority Guidebook, FDOT Work Program, TICO Airport Authority, and The LPA Group Incorporated, 2009

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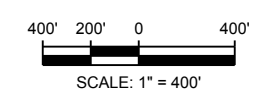
LEGEND

- SHORT - TERM
- SHORT / MID - TERM



Brevard County - Merritt Island Airport
Master Plan Update

CONSTRUCTION
PHASING PLAN
(SHORT TERM)



DATE
04/27/2009

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FIGURE NO.

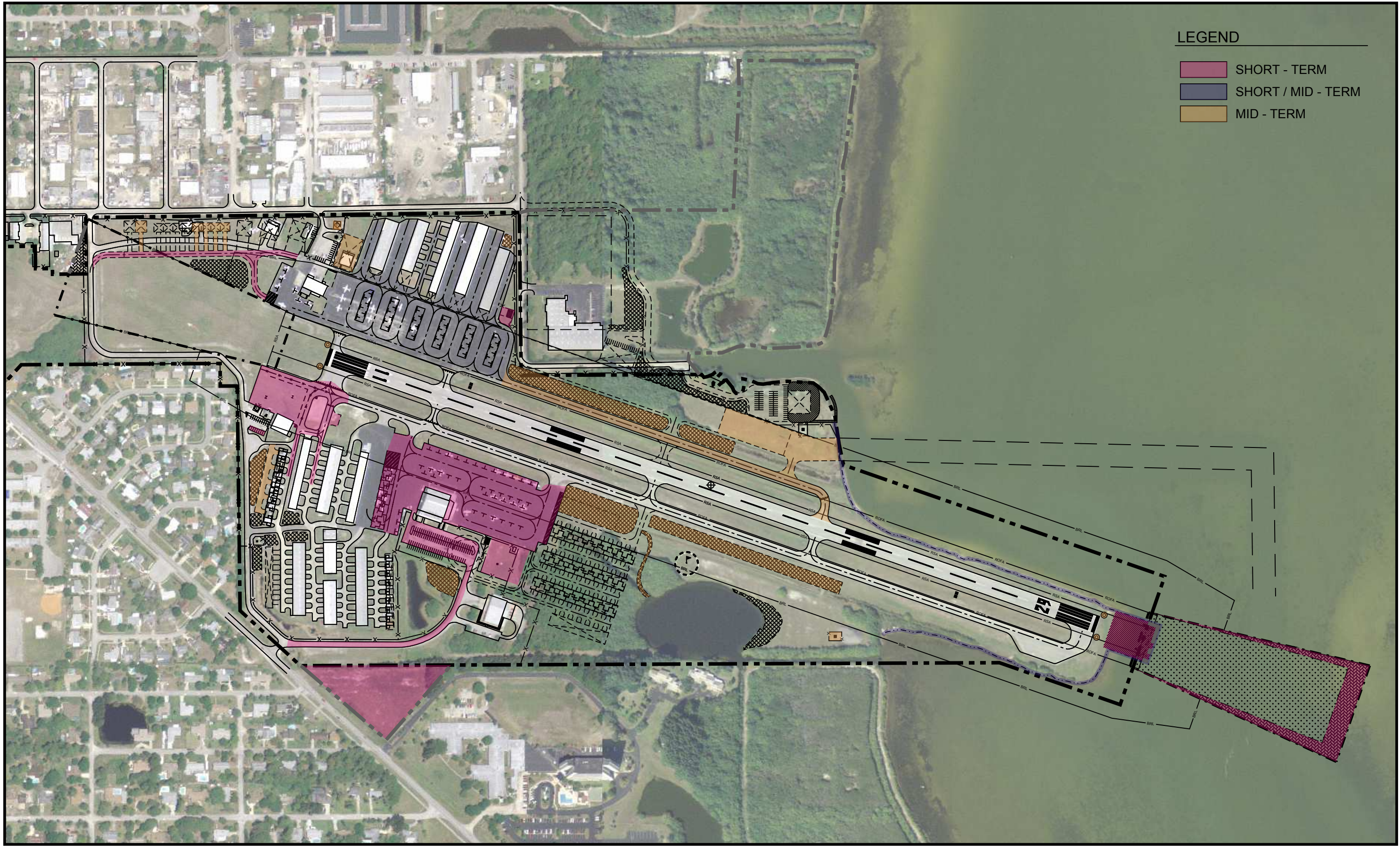


**Table 7-6
Merritt Island Airport
Intermediate Capital Improvement Program**

Phase	Year	UPIN #	FDOT WP #	Sponsor Priority Ranking	FAA Feasibility (Numerical Ranking)	Development Item Description	Development Costs & Contingencies (2009)	Total Federal	Total FDOT	Total Local	Third Party	FDOT Loan
2	2013	-	-	-	19	Expand Auto Parking Adjacent to Sheriff's Hangar and Civil Air Patrol	\$79,884	\$0	\$63,907	\$15,977	\$0	\$0
2	2013	-	-	-	86	Relocate Fenceline	\$1,155,000	\$1,097,250	\$28,875	\$28,875	\$0	\$0
2	2013	-	-	-	97	RSA and Seawall Construction	\$1,794,854	\$1,705,112	\$44,871	\$44,871	\$0	\$0
2	2013	-	-	-	64	Construct Seaplane Ramp	\$240,000	\$228,000	\$6,000	\$6,000	\$0	\$0
2	2013	-	-	-	0	Mosquito Control Demolition (Hazmat Permitting)	\$83,200	\$0	\$0	\$83,200	\$0	\$0
2	2013	-	-	-	0	50 x 50 Box Hangar	\$594,425	\$0	\$297,213	\$297,213	\$0	\$0
2	2013	-	-	-	32	Asphalt Drive to Box Hangar - (50 x 50 Hgr)	\$22,446	\$0	\$17,957	\$4,489	\$0	\$0
Total 2013							\$3,969,809	\$3,030,362	\$458,823	\$480,625	\$0	\$0
2	2014	-	-	-	86	Alternative B Drainage - North Apron Development	\$71,875	\$0	\$57,500	\$14,375	\$0	\$0
2	2014	-	-	-	68	Rehabilitate Taxiway B	\$574,740	\$546,003	\$14,369	\$14,369	\$0	\$0
2	2014	-	-	-	86	New Fenceline North Apron and Sea Plane Ramp	\$218,308	\$0	\$174,647	\$43,662	\$0	\$0
2	2014	-	-	-	86	Fenceline Removal North Apron/Sea Plane Ramp	\$3,840	\$0	\$3,072	\$768	\$0	\$0
2	2014	-	-	-	84	Runway End Identifier Lights (Both Runway Ends)	\$3,600	\$3,420	\$90	\$90	\$0	\$0
2	2014	-	-	-	0	2 38 x 42 Box Hangars	\$758,962	\$0	\$607,169	\$151,792	\$0	\$0
2	2014	-	-	-	32	Asphalt Drives to Box Hangars (38 x 42)	\$44,892	\$0	\$35,914	\$8,978	\$0	\$0
2	2014	PFL0002153	-	07-03S	0	Construct Seaplane Wash Down Area	\$360,000	\$0	\$288,000	\$72,000	\$0	\$0
2	2014	-	-	-	74	Install New AWOS	\$206,000	\$206,000	\$0	\$0	\$0	\$0
Total 2014							\$2,242,217	\$755,423	\$1,180,760	\$306,034	\$0	\$0
2	2015	-	-	-	45	Expand Existing Drainage Pond (Drainage Area G)	\$15,398	\$0	\$12,318	\$3,080	\$0	\$0
2	2015	-	-	-	56	North Apron Phase I with Taxiway	\$640,839	\$608,797	\$16,021	\$16,021	\$0	\$0
2	2015	PFL0001576	409457-1	2	72	Rehabilitate Runway 11-29, including markings	\$1,216,600	\$1,155,770	\$30,415	\$30,415	\$0	\$0
2	2015	-	-	-	0	Demolish Port-A-Ports (south of Sheriff's Hangar)	\$187,500	\$0	\$0	\$46,875	\$0	\$140,625
2	2015	-	-	-	86	Relocate Fence south of Sheriff's Hangar	\$87,323	\$0	\$69,859	\$17,465	\$0	\$0
2	2015	-	-	-	0	Voyager Aviation International Demolition	\$108,745	\$0	\$0	\$27,186	\$0	\$81,559
Total 2015							\$2,256,405	\$1,764,567	\$128,613	\$141,041	\$0	\$222,184
2	2016	-	-	-	0	2 38 x 42 Box Hangars	\$758,962	\$0	\$607,169	\$151,792	\$0	\$0
2	2016	-	-	-	32	Asphalt Drives to Box Hangars (38 x 42)	\$44,892	\$0	\$35,914	\$8,978	\$0	\$0
2	2016	PFL0001576	409457-1	2	72	Rehabilitate Runway 11-29, including markings	\$1,216,600	\$1,155,770	\$30,415	\$30,415	\$0	\$0
2	2016	-	-	-	0	90 x 150 Corporate Hangar (New Voyager Building)	\$3,159,000	\$0	\$0	\$0	\$3,159,000	\$0
2	2016	-	-	-	68	Airport Master Plan Update - 2016	\$150,000	\$142,500	\$3,750	\$3,750	\$0	\$0
Total 2016							\$5,329,454	\$1,298,270	\$677,248	\$194,936	\$3,159,000	\$0
2	2017	-	-	-	86	Dual Card Security Gate - South T-Hangar Development	\$47,250	\$0	\$24,164	\$23,086	\$0	\$0
2	2017	-	-	-	45	Alternative A Drainage - South T-Hangar Development	\$46,653	\$0	\$37,322	\$9,331	\$0	\$0
2	2017	-	-	-	32	Construct Taxilane west of fenceline	\$192,905	\$0	\$154,324	\$38,581	\$0	\$0
2	2017	-	-	-	45	Alternative C Drainage - Proposed T-Hangars south of Sheriff's Facilities	\$19,966	\$0	\$15,973	\$3,993	\$0	\$0
Total 2017							\$306,774	\$0	\$231,783	\$74,991	\$0	\$0
Total Mid-Term Development							\$14,104,660	\$6,848,622	\$2,677,228	\$1,197,627	\$3,159,000	\$222,184

Sources: FAA Project Priority Guidebook, FDOT Work Program, TICo Airport Authority, and The LPA Group Incorporated, 2009

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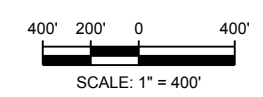
LEGEND

- SHORT - TERM
- SHORT / MID - TERM
- MID - TERM



Brevard County - Merritt Island Airport
Master Plan Update

CONSTRUCTION
PHASING PLAN
(MID TERM)



DATE
04/27/2009

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FIGURE NO.



**Table 7-7
Merritt Island Airport
Long-Term Capital Improvement Program**

Phase	Year	UPIN #	FDOT WP #	Sponsor Priority Ranking	FAA Feasibility (Numerical Ranking)	Development Item Description	Development Costs & Contingencies (2009)	Total Federal	Total FDOT	Total Local	Third Party	FDOT Loan
3	2018	-	-	-	0	Construct 10-Unit T-Hangar (south of sheriff's Hangar)	\$1,279,652	\$0	\$639,826	\$639,826	\$0	\$0
3	2018	-	-	-	0	50 x 50 Box Hangar	\$594,425	\$0	\$297,213	\$297,213	\$0	\$0
3	2018	-	-	-	32	Asphalt Drive (50 x 50)	\$22,446	\$0	\$17,957	\$4,489	\$0	\$0
3	2018	-	-	-	32	Taxilanes adjacent to 18-Unit T-Hangar	\$398,671	\$0	\$318,937	\$79,734	\$0	\$0
3	2018	-	-	-	0	2 38 x 42 Box Hangars	\$758,962	\$0	\$379,481	\$379,481	\$0	\$0
3	2018	-	-	-	32	Asphalt Drives to Box Hangars (38 x 42)	\$44,892	\$0	\$35,914	\$8,978	\$0	\$0
3	2018	-	-	-	68	Rehabilitate Taxiway A	\$965,340	\$917,073	\$24,134	\$24,134	\$0	\$0
3	2018	-	-	-	62	Rehabilitate North Apron Pavement	\$693,000	\$658,350	\$17,325	\$17,325	\$0	\$0
3	2018	PFL0002152	-	07-01S	0	Construct South Side T-Hangar Development (18-Unit) - Phase I	\$2,303,374	\$0	\$1,151,687	\$1,151,687	\$0	\$0
3	2018	-	-	-	32	Taxilanes adjacent to 18-Unit T-Hangar	\$475,833	\$0	\$380,666	\$95,167	\$0	\$0
3	2018	-	-	-	79	Expand Electrical Vault and Upgrade Taxiway Lighting (LED)	\$1,020,000	\$969,000	\$25,500	\$25,500	\$0	\$0
						Total 2018	\$8,556,595	\$2,544,423	\$3,288,639	\$2,723,533	\$0	\$0
3	2019	COI75	-	06-02S	45	Land Acquisition (Runway 11 Approach)	\$600,000	\$0	\$480,000	\$120,000	\$0	\$0
3	2019	-	-	-	56	Install pavement fillet (South Apron and Taxiway A-2 Capacity Improvement)	\$10,499	\$9,974	\$262	\$262	\$0	\$0
3	2019	-	-	-	41	North Property Acquisition	\$7,000,000	\$0	\$0	\$1,750,000	\$0	\$5,250,000
3	2019	-	-	-	97	Rehabilitate North Apron Pavement - Phase II	\$693,000	\$658,350	\$17,325	\$17,325	\$0	\$0
3	2019	-	-	-	0	80 x 80 Corporate Hangar	\$1,497,600	\$0	\$0	\$0	\$1,497,600	\$0
3	2019	-	-	-	32	Corporate Hangar Asphalt Drive	\$58,050	\$0	\$0	\$0	\$58,050	\$0
3	2019	-	-	-	86	Fenceline Removal Associated with street relocation	\$6,000	\$0	\$4,800	\$1,200	\$0	\$0
3	2019	-	-	-	61	Permitting	\$5,000	\$4,750	\$125	\$125	\$0	\$0
						Total 2019	\$9,870,149	\$673,074	\$502,512	\$1,888,912	\$1,555,650	\$5,250,000
3	2020	-	-	-	0	2 38 x 42 Box Hangars	\$758,962	\$0	\$379,481	\$379,481	\$0	\$0
3	2020	-	-	-	32	Asphalt Drive to Box Hangar - (38 x 42)	\$44,892	\$0	\$35,914	\$8,978	\$0	\$0
3	2020	-	-	-	47	Expand South Apron	\$461,942	\$438,845	\$11,549	\$11,549	\$0	\$0
3	2020	-	-	-	0	Construct South Side T-Hangar Development (18-Unit) - Phase II	\$2,303,374	\$0	\$1,151,687	\$1,151,687	\$0	\$0
3	2020	-	-	-	0	Sebastian Communications Demolition	\$249,795	\$0	\$0	\$249,795	\$0	\$0
3	2020	-	-	-	56	Phase II North Apron Construction and Taxiway Connector	\$881,889	\$837,794	\$22,047	\$22,047	\$0	\$0
3	2020	-	-	-	0	Construct 6-Box Hangars south of T-hangar development (west side of airport)	\$3,460,088	\$0	\$1,730,044	\$1,730,044	\$0	\$0
3	2020	-	-	-	0	Asphalt Drives to Box Hangars (Alternative E)	\$42,000	\$0	\$33,600	\$8,400	\$0	\$0
						Total 2020	\$8,202,941	\$1,276,639	\$3,364,321	\$3,561,981	\$0	\$0
3	2021	-	-	-	0	65 x 65 Corporate Hangar	\$1,005,550	\$0	\$0	\$0	\$1,005,550	\$0
3	2021	-	-	-	32	Construct Asphalt Drive	\$46,354	\$0	\$0	\$0	\$46,354	\$0
3	2021	-	-	-	47	Expand North Apron adjacent to Voyager	\$544,000	\$516,800	\$13,600	\$13,600	\$0	\$0
						Total 2021	\$1,595,904	\$516,800	\$13,600	\$13,600	\$1,051,904	\$0
3	2023	-	-	-	23	Relocate Wall Street and Kemp Street	\$529,085	\$0	\$423,268	\$105,817	\$0	\$0
3	2023	-	-	-	86	New Fenceline along relocated Wall and Kemp Street	\$348,800	\$0	\$279,040	\$69,760	\$0	\$0
3	2023	-	-	-	45	Alternative E Drainage - Proposed Box Hangars South of Sheriff's Facilities	\$9,247	\$0	\$7,398	\$1,849	\$0	\$0
3	2023	-	-	-	0	Demolish Port-A-Ports (southwest of Spacecoast Aviation Facilities)	\$236,574	\$0	\$0	\$236,574	\$0	\$0
3	2023	-	-	-	0	Construct 8 Box Hangars on former Port-A-Port Location	\$2,796,175	\$0	\$1,398,088	\$1,398,088	\$0	\$0
						Total 2023	\$3,919,881	\$0	\$2,107,793	\$1,812,088	\$0	\$0
3	2024	-	-	-	32	Taxilanes adjacent to 18 unit T-Hangars - Phase III	\$1,916,193	\$0	\$1,532,954	\$383,239	\$0	\$0
3	2024	-	-	-	19	Expand FBO parking lot	\$278,350	\$0	\$222,680	\$55,670	\$0	\$0
3	2024	-	-	-	86	Relocate Fenceline south of Parking Lot	\$78,591	\$0	\$62,873	\$15,718	\$0	\$0
						Total 2024	\$2,273,134	\$0	\$1,818,507	\$454,627	\$0	\$0
3	2025	-	-	-	0	Construct South Side T-Hangar Development (18-Units) - Phase III	\$2,303,374	\$0	\$1,151,687	\$1,151,687	\$0	\$0
3	2025	-	-	-	23	Construct Parking Facilities and Entrance Road	\$186,736	\$0	\$0	\$0	\$186,736	\$0

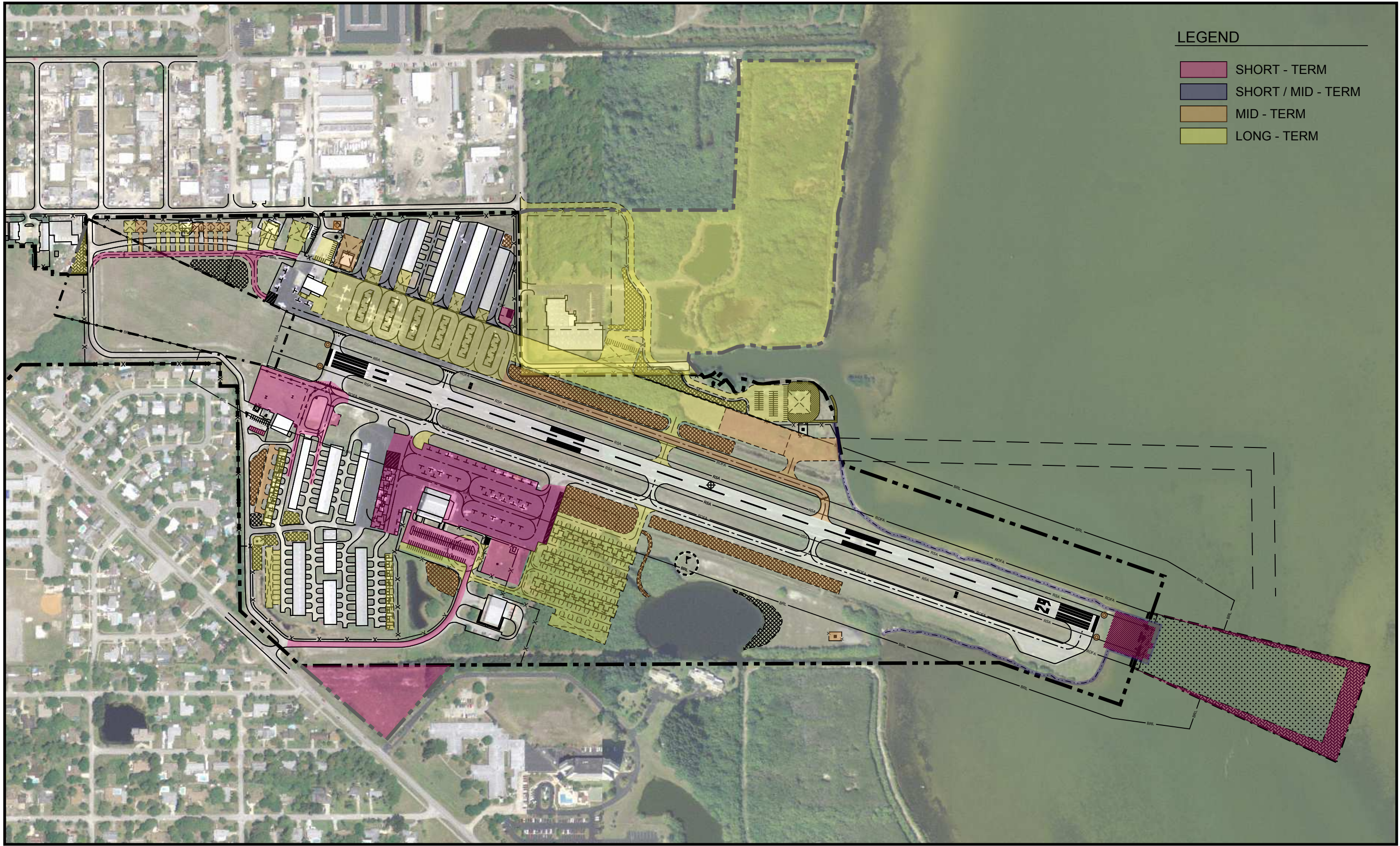


**Table 7-7
Merritt Island Airport
Long-Term Capital Improvement Program**

Phase	Year	UPIN #	FDOT WP #	Sponsor Priority Ranking	FAA Feasibility (Numerical Ranking)	Development Item Description	Development Costs & Contingencies (2009)	Total Federal	Total FDOT	Total Local	Third Party	FDOT Loan
3	2025	-	-	-	19	Construct Restaurant Parking and Access Road to Wall Street Road	\$1,406,250	\$0	\$0	\$0	\$1,406,250	\$0
3	2025	-	-	-	86	Relocate Fenceline associated with Restaurant Development	\$981,000	\$0	\$784,800	\$196,200	\$0	\$0
3	2025	-	-	-	45	Alternative D Drainage - Port-a-Ports south of FBO Parking	\$7,046	\$0	\$5,637	\$1,409	\$0	\$0
						Total 2025	\$4,884,406	\$0	\$1,942,124	\$1,349,296	\$1,592,986	\$0
3	2026	-	-	-	20	Concrete Roundabout for Fuel Farm Delivery	\$73,250	\$0	\$58,600	\$14,650	\$0	\$0
3	2026	-	-	-	20	Fuel Farm Install - Two 10,000-Gallon Tanks (Space Coast)	\$616,400	\$0	\$266,400	\$350,000	\$0	\$0
3	2026	-	-	-	0	Construct two-story Restaurant (75 x 150)	\$10,935,000	\$0	\$0	\$0	\$10,935,000	\$0
3	2026	-	-	-	0	Permitting for Boat Dock	\$5,000	\$0	\$0	\$0	\$5,000	\$0
3	2026	-	-	-	68	Airport Master Plan Update - 2026	\$150,000	\$142,500	\$3,750	\$3,750	\$0	\$0
						Total 2026	\$11,779,650	\$142,500	\$328,750	\$368,400	\$10,940,000	\$0
3	2027	-	-	-	100	Dual Card Security Gate - Fuel Farm Southside	\$47,250	\$0	\$37,800	\$9,450	\$0	\$0
3	2027	-	-	-	0	Construct boat dock	\$120,000	\$0	\$0	\$0	\$120,000	\$0
3	2027	-	-	-	0	75 x 150 Seaplane Hangar (Top Flight)	\$2,677,500	\$0	\$0	\$2,677,500	\$0	\$0
3	2027	-	-	-	47	North Apron Expansion - Phase III	\$3,200,000	\$3,040,000	\$80,000	\$80,000	\$0	\$0
3	2027	-	-	-	61	Construct Connector Taxiway (Taxiway B and Runway 29)	\$39,900	\$37,905	\$998	\$998	\$0	\$0
						Total 2027	\$6,084,650	\$3,077,905	\$118,798	\$2,767,948	\$120,000	\$0
3	2028	-	-	-	0	Top Flight Services Demolition (Hazmat Permitting)	\$141,900	\$0	\$0	\$141,900	\$0	\$0
3	2028	PFL0004640	420840-1	11-02S	34	Rehabilitation of Airport Facilities	\$1,100,000	\$1,045,000	\$27,500	\$27,500	\$0	\$0
3	2028	-	-	-	0	Construct South Side Box Hangar Development (6 units) - Phase III	\$2,118,200	\$0	\$1,059,100	\$1,059,100	\$0	\$0
3	2028	-	-	-	56	Drives related to Box Hangars - Phase III	\$51,600	\$49,020	\$1,290	\$1,290	\$0	\$0
3	2028	-	-	-	0	Expand T-Hangars On North Side (13 Bays)	\$1,663,548	\$0	\$831,774	\$831,774	\$0	\$0
						Total 2028	\$5,075,248	\$1,094,020	\$1,919,664	\$2,061,564	\$0	\$0
						Total Long-Term Development	\$62,242,557	\$9,325,361	\$15,404,707	\$17,001,949	\$15,260,540	\$5,250,000

Sources: FAA Project Priority Guidebook, FDOT Work Program, TICo Airport Authority, and The LPA Group Incorporated, 2009

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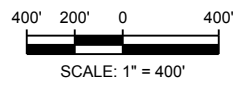
LEGEND

- SHORT - TERM
- SHORT / MID - TERM
- MID - TERM
- LONG - TERM



Brevard County - Merritt Island Airport
Master Plan Update

CONSTRUCTION
PHASING PLAN
(LONG TERM)



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FIGURE NO.

Merritt Island Airport

Master Plan Update



As part of the Titusville-Cocoa Aviation System, COI is eligible for funding through the TICO general fund. This eligibility is in accordance with the Authority’s own determination of project priority among all airports within the system. Because AIP and FDOT funding for COI would be limited, a summary of the financially feasible development plan is illustrated in **Table 7-8**.

**Table 7-8
20-Year Capital Improvement Program Summary
Financially Feasible Funding**

Development Period	Total Project Cost	FAA Entitlement ¹	FAA Discretionary ²	FDOT GA Airport Funding	FDOT Interest Free Loan	TICO Share	Third Party
Short-Term	\$11,508,387	\$750,000	\$2,405,856	\$3,133,178	\$885,450	\$1,198,275	\$0
Intermediate	\$14,104,660	\$600,000	\$6,248,622	\$2,677,228	\$222,184	\$1,197,627	\$3,159,000
Long-Term	\$62,242,557	\$1,650,000	\$7,675,361	\$15,404,707	\$5,250,000	\$17,001,949	\$15,260,540
Total for 20-Year CIP	\$87,855,604	\$3,000,000	\$16,329,838	\$21,215,112	\$6,357,634	\$19,397,851	\$18,419,540

Notes:

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

²FAA Discretionary Funding equals approximately 95 percent of funding on projects with FAA Priority Scores of 70 or greater.

³FDOT Funding averages approximately \$500,000 annually through 2017.

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

Source: The LPA Group Incorporated 2009

Other Airports

Since COI is one of three airports that compose the Titusville-Cocoa Beach Aviation System and the local share of planned project development for all three airports come from the same source, planned projects as outlined in the FDOT Work Program were identified for both Space Coast Regional Airport and Arthur Dunn Airpark. The FDOT program covered projects from the years 2009 through 2013. The average over the time period of 2009 through 2013 was used to estimate funding through 2017. The estimated total and local share for the other airports within the system is illustrated in **Table 7-9**.



**Table 7-9
Other Airport Development – FDOT Work Program**

Year	Space Coast Regional Airport (TIX)		Arthur Dunn Airpark (X21)	
	Total	Estimated Local Share	Total	Estimated Local Share
2009	\$1,585,226	\$419,631	\$367,924	\$9,198
2010	\$1,020,235	\$286,756	\$256,395	\$6,410
2011	\$472,545	\$27,564	\$1,000,000	\$381,250
2012	\$896,490	\$74,912	\$1,205,696	\$600,142
2013	\$1,816,058	\$360,401	\$858,291	\$21,457
2014	\$1,866,216	\$46,655	\$358,291	\$8,957
2015	\$1,276,128	\$202,653	\$674,433	\$171,236
2016	\$1,276,128	\$202,653	\$674,433	\$171,236
2017	\$1,276,128	\$202,653	\$674,433	\$171,236

Sources: Florida Department of Aviation Work Program, 2009-13, March 2009 and The LPA Group Incorporated, 2009

The project phasing provided in this section was designed to accommodate both forecast activity while also maintaining financial feasibility. Project development at COI is not only dependent upon available Federal, State and local funding but also on the project’s priority within the overall TICO system. Although many of these projects (i.e. hangar development) would be beneficial to the Authority if they could be implemented sooner, current funding levels as well as operational, safety, environmental and security requirements established the recommended COI Capital Improvement Plan. Still, financial progress, demand and funding availability should continue to be monitored to identify and implement opportunities to complete projects earlier if favorable conditions arise or to delay if funding and other resources became scarce.

CASH FLOW FORECAST

The cash flow forecast for COI is based on the annual forecasts for general aviation operations and based aircraft as described in **Chapters 3 and 4** and the requirements of the financially feasible capital improvement program as outlined by FDOT. The cash flow forecast addresses in general terms the financial feasibility of the first 10 years of proposed development. Cost projections are based on constant 2008 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.

For projects where federal funding is unavailable and/or the type of project (economic development, security, etc) FDOT may provide up to 80 percent funding. The remaining



20 percent of the project cost must be provided by the Airport Sponsor or from another funding source including private investment. While proposed projects at COI may be eligible for the maximum FAA and/or FDOT funds based upon the FAA project priority rates, historically General Aviation (GA) airports tend to receive lower priority for these funds compared to commercial airports, which limits projects that can be feasibly developed.

In addition to future capital improvements, projects required to maintain safe and efficient airside and landside facilities must also be considered. Therefore, the Authority should continue to assist COI 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. In addition 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.

Airport Authority Financial Structure

The Titusville-Cocoa Airport Authority operates three airports: Space Coast Regional Airport (TIX), COI, and Arthur Dunn Airpark (X21). However, the airport authority operates all three airports as one system. As a result, historic financial data is recorded as pooled information. Based upon budgetary information provided within the *Titusville-Cocoa Airport Authority Financial Statements and Supplementary Information for Fiscal Years 2002 through 2008*, expenses associated with COI historically represent 35 percent of total Authority expenses. However, it is difficult to single out historic revenue for one particular airport. As a result, COI historical operations and based aircraft were compared to the other airports within the system in an effort to estimate COI's share of historic revenues and expenses with regard to the entire airport system.

Based upon information provided in **Tables 7-10 and 7-11** and **Figure 7-4**, COI's share of historic revenues and expenses was established at approximately 38 percent and 35 percent, respectively, based upon the Authority's financial records (FY 2002 – FY 2008). This information was used to estimate future financial data for COI.



**Table 7-10
Estimated COI Share of TICO Budget**

Year	Total Based Aircraft	COI Based Aircraft	COI Percentage Based Aircraft	Total Operations	COI Operations	COI Percentage Operations	Overall COI Percentage
2002	533	225	42.21%	340,082	113,500	33.37%	37.79%
2003	535	225	42.06%	317,647	113,500	35.73%	38.89%
2004	547	225	41.13%	330,070	113,500	34.39%	37.76%
2005	553	225	40.69%	335,705	113,500	33.81%	37.25%
2006	553	225	40.69%	332,718	113,500	34.11%	37.40%
2007	545	217	39.82%	309,956	113,500	36.62%	38.22%
2008	548	217	39.60%	299,504	114,976	38.39%	38.99%
Average	545	223	40.88%	323,669	113,711	35.20%	38.04%

Sources: TICO Financial Data, 2002 through 2008, FAA Terminal Area Forecast, 2009, and The LPA Group Incorporated



**Table 7-11
Titusville-Cocoa Airport Authority
Historic Operating Revenues and Expenses**

	Total 2002	COI 2002	Total 2003	COI 2003	Total 2004	COI 2004	Total 2005	COI 2005	Total 2006	COI 2006	Total 2007	COI 2007	Total Est. 2008	COI Est. 2008
Based AC (TAF)	533	225	535	225	547	225	553	225	553	225	545	217	548	217
Operations (TAF)	340,082	113,500	317,647	113,500	330,070	113,500	335,705	113,500	332,718	113,500	309,956	113,500	299,504	114,976
Operating Revenues														
T-hangars	\$630,473.00	\$238,281.56	\$649,433.00	\$252,589.05	\$710,546.00	\$268,302.53	\$715,595.00	\$266,547.00	\$653,818.00	\$244,528.37	\$760,268.00	\$266,093.80	\$790,090.70	\$323,026.09
Fixed Base Operations	\$242,582.00	\$91,681.67	\$287,656.00	\$111,880.30	\$300,695.00	\$113,542.58	\$326,427.00	\$121,588.52	\$380,655.00	\$142,365.22	\$393,333.00	\$137,666.55	\$426,480.67	\$150,134.39
Other sales, houses, and mini warehouses	\$557,056.00	\$210,534.27	\$559,369.00	\$217,559.76	\$568,046.00	\$214,494.45	\$658,434.00	\$245,255.49	\$681,655.00	\$254,939.42	\$696,424.00	\$243,748.40	\$716,848.38	\$252,352.81
Other Revenues	\$46,754.00	\$17,670.25	\$38,787.00	\$15,085.73	\$19,276.00	\$7,278.63	\$15,575.00	\$5,801.42	\$54,812.00	\$20,499.72	\$23,450.00	\$8,207.50	\$20,107.88	\$7,078.60
Total Operating Revenues	\$1,476,865.00	\$558,167.74	\$1,535,245.00	\$597,114.83	\$1,598,563.00	\$603,618.19	\$1,716,031.00	\$639,192.43	\$1,770,940.00	\$662,332.74	\$1,873,475.00	\$655,716.25	\$1,953,527.63	\$732,591.89
Operating Expenses														
Wages and Benefits	\$667,493.00	\$252,272.93	\$675,338.00	\$262,664.49	\$713,743.00	\$269,509.72	\$665,175.00	\$247,766.40	\$786,612.00	\$294,193.41	\$723,713.00	\$253,299.55	\$724,017.24	\$256,800.99
Repairs, Maintenance, and Other Services	\$471,110.00	\$178,051.76	\$547,001.00	\$212,749.37	\$479,619.00	\$181,104.38	\$540,080.00	\$201,170.64	\$557,388.00	\$208,463.48	\$560,205.00	\$196,071.75	\$570,887.48	\$202,487.54
Materials and Supplies	\$38,862.00	\$14,687.54	\$45,996.00	\$17,889.58	\$48,558.00	\$18,335.53	\$57,260.00	\$21,328.38	\$56,270.00	\$21,045.02	\$65,589.00	\$22,956.15	\$71,688.71	\$25,427.20
Bad Debt	\$41,708.00	\$15,763.16	\$315.00	\$122.52	\$6,562.00	\$2,477.81	\$6,861.00	\$2,555.61	\$2,796.00	\$1,045.71	\$9,764.00	\$3,417.40	\$7,188.99	\$2,549.86
Total Operating Expenses	\$1,219,173.00	\$460,775.39	\$1,268,650.00	\$493,425.96	\$1,248,482.00	\$471,427.43	\$1,269,376.00	\$472,821.02	\$1,403,066.00	\$524,747.62	\$1,359,271.00	\$475,744.85	\$1,373,782.43	\$487,265.59
Operating Gain/(Loss)	\$257,692.00	\$97,392.36	\$266,595.00	\$103,688.88	\$350,081.00	\$132,190.76	\$446,655.00	\$166,371.41	\$367,874.00	\$137,585.12	\$514,204.00	\$179,971.40	\$579,745.21	\$245,326.30

Sources: Titusville-Cocoa Airport Authority Financial Statements and Supplementary Information As of and For Years Ending 2002 through 2008, FAA Terminal Area Forecast, 2009 and The LPA Group Incorporated, 2009



Forecast Methodology

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, some modifications were made. Growth estimates were based upon the relationships between existing and programmed facilities and operational forecasts. Operating revenue and expense categories were directly related to growth in airport operations and based aircraft. Further, additional revenue associated with the development of non-aviation facilities was 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 COI 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 base rental and other fees at COI, 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 COI 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 the Authority to achieve this goal within the planning period.

Operating Revenues and Expenses

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 **Tables 7-12 and 7-13**, respectively, were developed based upon Fair Market Value Rates for existing and future facilities at the airport⁴ and similar airport rates within the area.

⁴ Slack Johnston Magenheimer Accountants, Summary of Salient Facts and Conclusions, Merritt Island Airport (COI), October 2007.



**Table 7-12
Fair Market Values and Assumptions
Future Operating Revenues**

Use of Money and Property:		Annual Rent/Sq Ft.
<i>Land Leases:</i>	<i>Aeronautical Land Lease</i>	\$0.12
	<i>Commercial Leasehold</i>	\$0.20
	<i>Aeronautical Pavement</i>	\$0.05
<i>Aeronautical Buildings</i>	<i>COI Building 2</i>	\$2.50
	<i>COI Building 4</i>	\$2.75
	<i>COI Building 5</i>	\$1.00
	<i>COI Building 21</i>	\$5.50
	<i>COI Building 25</i>	\$3.50
	<i>New Buildings</i>	\$3.50
<i>T-Hangar Buildings</i>		Rent/Unit/Month
	<i>COI Building T1 (A & E)</i>	\$625.00
	<i>COI Building T1-B,C,F & G</i>	\$465.00
	<i>COI Building T1-D & H</i>	\$520.00
	<i>COI Building T2</i>	\$270.00
	<i>COI Building T3</i>	\$260.00
	<i>COI Building T4</i>	\$280.00
	<i>COI Building T5</i>	\$280.00
	<i>COI Building T6</i>	\$260.00
	<i>COI Building T7</i>	\$270.00
	<i>COI Building T8</i>	\$260.00
	<i>COI Building T9</i>	\$270.00
	<i>COI Building T10</i>	\$280.00
	<i>COI Building T10 - D</i>	\$625.00
	<i>COI Building T11</i>	\$270.00
	<i>COI Building T12</i>	\$270.00
	<i>New T-Hangars</i>	\$300.00
<i>Port-A-Port Buildings</i>		Rent/Unit/Month
	<i>COI Building P31-38</i>	\$215.00
	<i>COI Building P40-43</i>	\$215.00
	<i>COI Building P46-49</i>	\$215.00
<i>New Hangars/Buildings</i>		Annual Rent/ Sq. Ft.
	<i>Box Hangar</i>	\$3.50
	<i>Corporate Hangar</i>	\$3.50
<i>Existing Hangar and Building Revenue</i>		<i>~\$1488.60 per based aircraft (2007 historic data)</i>
<i>Existing Hangar and Building Demolition - Revenue lost</i>		<i>Based upon fair market value of building (SF)</i>
<i>Fixed Based Operator Revenue</i>		<i>~\$1.31 per operation (2007 historic data)</i>
Miscellaneous Revenue:		
<i>Other sales, houses, and mini warehouses</i>		<i>~\$2.19 per operation</i>
<i>Other Revenues</i>		<i>~\$0.06 per operation</i>

Sources: Summary of Salient Facts and Conclusions, Merritt Island Airport – Fair Market Value, Slack Johnston and Magenheimer, and The LPA Group Incorporated, 2009



**Table 7-13
Future Operating Expenses**

Wages and Benefits	\$2.23 per GA Operation
Repairs, Maintenance, and Other Services	\$1.76 per GA Operation
Materials and Supplies	\$0.22 per GA Operation
Loans/Debt Repayment*	\$0.02 per GA Operation
Bad Debt	\$2.23 per GA Operation

Note: *Loans/Debt Repayment also includes planned interest free FDOT loans for capital improvements paid over a 10-year period.

Sources: Titusville-Cocoa Beach Financial Statements, FY 2007/2008, and The LPA Group Incorporated, 2009

Cash Flow Assessment

The purpose of the cash flow analysis worksheet is to show how various projects listed within the CIP will ultimately reflect on the airport’s finances. Generally speaking, most projects will initially reflect as a loss (investment) and later as revenue (income). This is not necessarily true when dealing with airfield improvements, runway safety area, navigational aid installation and other non-revenue generating airfield maintenance and improvement projects. Although these projects may provide indirect future revenues, the returns are not as easily visible as compared to hangar rentals or to land leases. As with any business, the airport will have to invest money initially in order to make money in the future.

Based upon operating revenues and expenses obtained from the Authority, a projected cash flow analysis specifically for COI was developed which includes the cost of capital improvements and anticipated revenues associated with such development (i.e. hangar and land lease revenues). The financial feasibility assessment focused on the initial ten years of the planning period. The overall purpose was to assess the Authority's ability to fund recommended capital development plans through the year 2017 based upon anticipated operating revenues and expenses. This assessment assumed that the maximum discretionary AIP funding was received for those projects with AIP eligibility and priority requirements of 70 or higher.

The first step in this financial assessment was to compile information related to historical income and expenditures at COI. Using this data as a starting point, future revenue and expenditures were then estimated through the year 2028. Historically, FDOT annual participation has ranged from \$500,000 to \$1,000,000. Based upon the March 2009 FDOT 6-Year Work Program (2009-2014), COI is scheduled to obtain an average of \$772,037 annually. As previously mentioned, the first two years of the FDOT work program are locked. Therefore additional FDOT funding for short-term projects within this timeframe is difficult to obtain. Therefore, anticipated FDOT funding for the years 2008-2012 was conservatively limited to planned FDOT funding as shown in the March 2009 Work Program. Therefore, projects which are shown in the short-term but are not included in the FDOT Work Program are shown as funded with federal funds, if eligible, or local funding only.



Table 7-14 presents the projected net operating surplus/(deficit) for COI. The data is based upon COI's calendar year, and starting values were obtained from the TICO Finance Department. In addition to the funding obtained from day-to-day operations, the Authority is currently using three (federal grants, state grants, and loans) other sources of funding that allow it to finance the current Capital Improvement Program. Based upon forecast operating revenues, expenses and planned projects, the Authority will not require alternative funding sources to accommodate proposed development at COI through the year 2017.

SUMMARY AND RECOMMENDATIONS

Based on the operating revenue and expense assumptions described herein, the financial model of COI shows that investments made for the capital improvement plan produce a net positive return and the capital improvements should be possible to finance based upon the financially feasible CIP forecast.

Although the COI Cash Flow analysis produces a net positive return, the Authority could consider implementing the following measures, which have been successful at other GA airports, to support the sustainability of COI beyond the twenty-year planning period.

- Land leasing – The leasing of airport land requires little to no investment by the Authority and therefore provides a very positive return. Private developers of airport property typically require long-term leases that may extend more than 30 years in order for the developer to recover his investment costs. Improvements made by private developers typically revert to the airport at the end of the lease term. Since the average lifespan of a building is often more than 40 years, the reverted facilities could potentially generate years of airport revenues.
- Grant funding – There are a number of federal and state grant programs for transportation improvements, economic development, historic preservation, etc. that the Authority can take advantage of and use to pay for various maintenance and construction improvements.
- Marketing – The Authority should continue to market all three airports and their surrounding properties by using all available methods and resources. The effective marketing of airport property could potentially attract new airport tenants and ultimately lead to additional revenues for the Authority.
- Leases – Leases should be written responsibly with the airport's best interest in mind and should include escalation clauses to allow the airport recover cost of living and maintenance expenses. Furthermore, leases should require tenants to possess insurances to prevent the airport from any product or service liability. In addition, developers and on-airport investors should be required to have insurance to cover their payments should they become incapable of making them.
- Non-aviation development / Industrial Park – Many financially successful general aviation airports have achieved their profitability from non-aviation related development revenues. It is becoming increasingly common to see industrial/



- business parks, restaurants, gas stations, and retail outlets located within airport property boundaries. However, non-aviation development should not occur at the expense of aviation related development. Land located adjacent to taxiways, runways, and apron areas should be preserved for future aviation use.
- Expand on existing aviation opportunities – COI is currently home to a seaplane manufacturer and maintenance facility. Due to existing demand and limited seaplane facilities within the region, development of a seaplane base and associated facilities is anticipated to attract additional traffic as well as hangar, tie-down and fuel demand at COI.
 - New and recently identified aviation opportunities – Every so often a new type of aviation related business exposes itself and creates opportunities for airports throughout the country. The FAA’s passage of the light sport aircraft license opened up a new market of pilots and aircraft manufacturers and thus required new maintenance and sales facilities located onto or adjacent airport property. Similarly, the FAA’s certification of Very Light Jets (VLJs) has spawned a number of new air taxi service providers throughout the country. The new VLJ air taxi and on-demand charter operations are expected to become a billion dollar industry in a very short time. In such cases, it is important for Authority officials to evaluate the viability of attracting such a business to Space Coast Regional and/or Merritt Island Airports.

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



**Table 7-14
Merritt Island Airport
Cash Flow Analysis**

	Base Year 2007	Year 1 2008	Year 2 2009	Year 3 2010	Year 4 2011	Year 5 2012	Year 6 2013	Year 7 2014	Year 8 2015	Year 9 2016	Year 10 2017	Average Long- Term 2018-28
Based Aircraft	217	217	220	230	240	242	245	247	250	252	255	
General Aviation Operations	113,500	114,976	116,470	117,984	119,518	121,072	122,646	124,240	125,855	127,492	129,149	
Estimated Fuel Demand Jet A (gals)	5,492	79,636	82,600	85,674	88,863	92,171	95,676	99,314	103,091	107,011	111,081	
Estimated Fuel Demand 100LL (gals)	127,402	128,892.66	130,400.77	131,926.52	133,470.13	135,032	136,580.79	138,147.55	139,732.29	141,335.20	142,957	
OPERATING REVENUES												
Use of Money and Property:												
Existing Hangar Revenues (includes demo)	\$266,094	\$323,026	\$327,492	\$342,378	\$357,264	\$360,820	\$363,011	\$366,638	\$335,911	\$339,611	\$343,348	\$358,577
New Hangar Revenues	\$0	\$0	\$0	\$0	\$39,600	\$39,600	\$39,600	\$39,600	\$39,600	\$39,600	\$39,600	\$200,007
New Aeronautical Building Revenues	\$0	\$0	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000
New Box Hangar Revenue	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$43,966
New Corporate Hangar Revenue	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,172	\$19,922	\$31,094	\$58,602
Non-Aviation Commercial Land Leases	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,018
Aviation Commercial Land Leases	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,704	\$2,609
Aeronautical Pavement/Tie-Downs	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$810
Fixed Base Operations	\$137,667	\$150,134	\$152,086	\$154,063	\$156,066	\$158,095	\$160,150	\$162,232	\$164,341	\$166,478	\$168,642	\$182,383
Total Use of Money and Property	\$403,760	\$473,160	\$486,578	\$503,441	\$559,930	\$565,515	\$569,762	\$575,471	\$558,025	\$572,611	\$591,388	\$856,973
Miscellaneous Revenue:												
Other sales, houses, and mini warehouses	\$243,748	\$252,353	\$255,633	\$258,957	\$262,323	\$265,733	\$269,188	\$272,688	\$276,233	\$279,824	\$283,461	\$306,558
Other Revenues	\$8,208	\$7,079	\$7,171	\$7,264	\$7,358	\$7,454	\$7,551	\$7,649	\$7,748	\$7,849	\$7,951	\$8,599
Total Miscellaneous Revenue	\$251,956	\$259,431	\$262,804	\$266,221	\$269,681	\$273,187	\$276,739	\$280,337	\$283,981	\$287,673	\$291,413	\$315,157
Transfers In (Rollover from Prior Year)	\$137,585	\$317,557	\$528,739	\$752,002	\$502,066	\$460,193	\$361,639	\$119,197	\$53,895	\$132,940	\$147,216	\$31,123
TOTAL OPERATING REVENUE	\$793,301	\$1,050,148	\$1,278,121	\$1,521,663	\$1,331,678	\$1,298,895	\$1,208,139	\$975,004	\$895,901	\$993,224	\$1,030,016	\$1,203,254



**Table 7-14
Merritt Island Airport
Cash Flow Analysis**

	Base Year 2007	Year 1 2008	Year 2 2009	Year 3 2010	Year 4 2011	Year 5 2012	Year 6 2013	Year 7 2014	Year 8 2015	Year 9 2016	Year 10 2017	Average Long- Term 2018-28
OPERATING EXPENSES												
Wages and Benefits	\$253,300	\$256,801	\$260,139	\$263,521	\$266,947	\$270,417	\$273,933	\$277,494	\$281,102	\$284,756	\$288,458	\$311,962
Repairs, Maintenance, and Other Services	\$196,072	\$202,488	\$205,120	\$207,787	\$210,488	\$213,224	\$215,996	\$218,804	\$221,649	\$224,530	\$227,449	\$245,982
Materials and Supplies	\$22,956	\$25,427	\$25,758	\$26,093	\$26,432	\$26,775	\$27,124	\$27,476	\$27,833	\$28,195	\$28,562	\$30,889
Loans/Debt Repayment*	\$0	\$0	\$0	\$0	\$88,545	\$88,545	\$88,545	\$88,545	\$88,545	\$110,763	\$110,763	\$422,126
Bad Debt	\$3,417	\$2,550	\$2,583	\$2,617	\$2,651	\$2,685	\$2,720	\$2,755	\$2,791	\$2,827	\$2,864	\$3,098
TOTAL OPERATING EXPENSES	\$475,745	\$487,266	\$493,600	\$500,017	\$595,062	\$601,647	\$608,318	\$615,075	\$621,920	\$651,072	\$658,096	\$1,014,056
YEARLY NET BALANCE/(LOSS)	\$317,557	\$562,883	\$784,521	\$1,021,646	\$736,615	\$697,248	\$599,822	\$359,929	\$273,981	\$342,151	\$371,920	\$189,197
CAPITAL IMPROVEMENT PROGRAM (CIP)												
Transfers In:												
FAA Entitlement	\$0	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000
FAA Discretionary Grant	\$0	\$7,482	\$545,890	\$427,146	\$1,555,112	\$3,005,856	\$2,880,362	\$605,423	\$1,614,567	\$1,148,270	\$0	\$725,033
FDOT / State Grant Draws	\$0	\$124,144	\$204,107	\$1,141,182	\$760,570	\$903,174	\$458,823	\$1,180,760	\$128,613	\$677,248	\$231,783	\$1,386,792
FDOT Loan*	\$0	\$0	\$0	\$885,450	\$0	\$0	\$0	\$0	\$222,184	\$0	\$0	\$477,273
Private or Third Party Investment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,159,000	\$0	\$1,387,322
Total Capital Development Transfers	\$0	\$281,626	\$899,997	\$2,603,778	\$2,465,682	\$4,059,029	\$3,489,184	\$1,936,183	\$2,115,364	\$5,134,518	\$231,783	\$4,126,419
Local Capital Investment	\$0	\$34,144	\$32,519	\$519,580	\$276,422	\$335,609	\$480,625	\$306,034	\$141,041	\$194,936	\$74,991	\$1,531,995
Total Capital Development Funds Available	\$0	\$315,770	\$932,516	\$3,123,358	\$2,742,104	\$4,394,639	\$3,969,809	\$2,242,217	\$2,256,405	\$5,329,454	\$306,774	\$5,658,414
Total Capital Development Project Costs	\$0	\$315,770	\$932,516	\$3,123,358	\$2,742,104	\$4,394,639	\$3,969,809	\$2,242,217	\$2,256,405	\$5,329,454	\$306,774	\$5,658,414
End Balance	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Yearly Net Balance/(Loss) – Local Capital Investments	\$317,557	\$528,739	\$752,002	\$502,066	\$460,193	\$361,639	\$119,197	\$53,895	\$132,940	\$147,216	\$296,929	(\$1,342,798)
Additional Funding Required	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,342,798

Notes: *Refers to existing Loans and New FDOT Interest Free Loans (10-Year Payback Period)
Sources: Titusville-Cocoa Beach Financial Statements and The LPA Group Incorporated, 2009