

WAYNE COUNTY AIRPORT AUTHORITY  
APPROVED BUDGET FISCAL YEAR

2016



WAYNE COUNTY AIRPORT AUTHORITY

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# FISCAL YEAR 2016 BUDGET

APPROVED BY THE WAYNE COUNTY AIRPORT AUTHORITY BOARD  
SEPTEMBER 16, 2015

PREPARED BY FINANCIAL PLANNING & ANALYSIS



GOVERNMENT FINANCE OFFICERS ASSOCIATION

*Distinguished  
Budget Presentation  
Award*

PRESENTED TO

**Wayne County Airport Authority  
Michigan**

For the Fiscal Year Beginning

**October 1, 2014**

Executive Director

The Government Finance Officers Association of the United States and Canada (GFOA) presented an Award for Distinguished Budget Presentation to the Wayne County Airport Authority for its annual budget for the Fiscal Year 2015 beginning October 1, 2014.

In order to receive this award, a governmental unit must publish a budget document that meets program criteria as a policy document, as an operations guide, as a financial plan and as a communications device. The award is valid for a period of one year. We believe our current budget again conforms to program requirements and we are submitting it to GFOA for review.

# FISCAL YEAR 2016 BUDGET RESOLUTION

APPROVED BY THE WAYNE COUNTY AIRPORT AUTHORITY BOARD ON SEPTEMBER 16, 2015

## RESOLUTION

No. 15 - 103

### APPROVAL OF WAYNE COUNTY AIRPORT AUTHORITY FISCAL YEAR 2016 BUDGET

By Board Member Michael Garavaglia

WHEREAS, the Wayne County Airport Authority (the "Authority"), pursuant to the Aeronautics Code of the Michigan Public Airport Authority Act, being MCL 259.108 – 259.125c, (the "Aeronautics Code") is vested with the power and authority to undertake the management and operation of the Detroit Metropolitan Wayne County Airport and Willow Run Airport (the "Airports"); and

WHEREAS, the Wayne County Airport Authority is governed by the Wayne County Airport Authority Board (the "Board"); and

WHEREAS, the Aeronautics Code requires that prior to the beginning of each fiscal year, the Board shall prepare a budget containing an itemized statement of the estimated current operational expenses and the expenses for capital outlay including funds for the operation and development of the Airports under the jurisdiction of the Board, and the amount necessary to pay the principal and interest of any outstanding bonds or other obligations of the Authority maturing during the ensuing fiscal year or which have previously matured and are unpaid, and an estimate of the revenue of the Authority from all sources for the ensuing fiscal year; and

WHEREAS, the Aeronautics Code further requires that money of the Authority be deposited, invested, and paid by the Chief Financial Officer only in accordance with policies, procedures, ordinances or resolutions adopted by the Board; and

WHEREAS, the Aeronautics Code further requires that a vote of a majority of the members of the Board serving at the time of the vote is necessary to approve or amend the annual budget; and

WHEREAS, the Board desires to, among other things, approve the annual budget for fiscal year 2016;

NOW THEREFORE, BE IT RESOLVED, that the Wayne County Airport Authority Board hereby approves:

1. The annual operating budgets for the Detroit Metropolitan Airport Fund, the Willow Run Airport Fund and the Westin Hotel Fund for the fiscal year beginning October 1, 2015 and ending September 30, 2016, as prepared by the Chief Financial

Officer of the Authority and reviewed by the Board, copies of which are attached to this Resolution;

2. The Wayne County Airport Authority Five-Year Capital Improvement Plan for Detroit Metropolitan Airport and Willow Run Airport for fiscal years 2016-2020, a copy of which is attached to this Resolution.

All prior Resolutions and parts of prior Resolutions insofar as they conflict with the provisions of this Resolution hereby are rescinded.

This Resolution was supported by Board Member Nabih Ayad and carried by the following vote:

AYES: Ayad, Garavaglia, R.Hall, S.Hall, Turner

NAYS: None

DATE: September 16, 2015

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# READER'S GUIDE

The Budget Book represents the Authority's best effort to provide a thorough summary of the financial, strategic and operational information for Fiscal Year 2016. The summary below describes each section of the book to help the reader find and understand the information contained within.

## ORGANIZATION OF THE BUDGET BOOK

**Executive Summary** – Summarizes the factors that influenced the preparation of the budget.

**Wayne County Airport Authority at a Glance** – Describes the organization and its leadership, includes profiles and statistical data for both airports and the hotel. Includes information about the communities the Authority serves and corresponding supplemental statistical data.

**State of the Aviation Industry** – Analyzes industry trends and profiles the travelling public, directly linking this information to the airlines activity at the Airport, including enplanement information and destinations served.

**Strategic Plan & Balanced Scorecard** – Provides a cohesive explanation of organization-wide priorities and how the Authority uses the balanced scorecard approach to measure success.

**Budget Process & Financial Policies** – Details the process for preparing, reviewing and adopting the budget along with a summary of all financial policies and guidelines.

**Budget Overview** – Presents detailed financial summaries for all budgeted funds. Revenue and expenditure profiles are illustrated for each entity along with a discussion of the assumptions used to develop the budget.

**Cost Center, Division & Department Summaries** – Detailed three-year financial schedules, including charts and lists of responsibilities for each department.

**Capital Improvement Program** – Provides a summary of the Authority's Capital Improvement Plan and a comprehensive listing of all the capital projects spanning the next five years.

**Debt Profile** – Provides an overview of the Airport's indebtedness alongside schedules of outstanding principal and debt service requirements.

**Five-Year Financial Outlook** – Discussion of the Authority's financial goal to maintain cost competitive rates. Includes financial and statistical information and forecasts through FY 2020.

## AVIATION TERMINOLOGY

Throughout the budget book is aviation industry terminology, technical information and references to organizations that may not be familiar to the lay-person. A complete glossary and list of common acronyms is located in the Appendix on page APDX-8. Here are a few that might be most helpful to know:

**Enplanements** – The total number of passengers boarding an aircraft at an airport. Includes both originating and connecting passengers.

**Landed Weights** – The weight of an aircraft on touch-down. Maximum landing weight for a specific aircraft is a fixed figure from the aircraft's limitations manual in which the aircraft manufacturer specifies the weight of the aircraft depending on build specifications. The weight also represents the aircraft's 'zero fuel weight'. Landing fees are charged to airlines for use of the airfield based on per thousand pounds of landed weight.

**Origin & Destination (O&D)** – Passengers who travel point-to-point to a destination, rather than connecting through a central hub to reach their destination.

**Residual Airport** – A rate and fee setting methodology that sets charges to the Airlines based on the net revenue an airport needs to cover expenses including debt service. At the end of the fiscal year airlines are charged for any operating shortfalls or receive a refund if there is a surplus. The Airport’s rate structure is residual.

**Federal Aviation Administration (FAA)** – The national aviation authority of the United States of America. As an agency of the US Department of Transportation, it has authority to regulate and oversee all aspects of American civil aviation. The FAA’s roles include regulating US commercial space transportation, airport facilities’ geometry and flight inspection standards, aircraft noise control and administration of the Airport Capital Improvement Plan (ACIP) grant program.

**IATA Airport Codes** – Throughout the budget book are charts and graphs that use the three-letter International Air Transport Association (IATA) Airport Codes. A comprehensive list of all IATA codes used in the document may be found in Appendix C on page APDX-7.

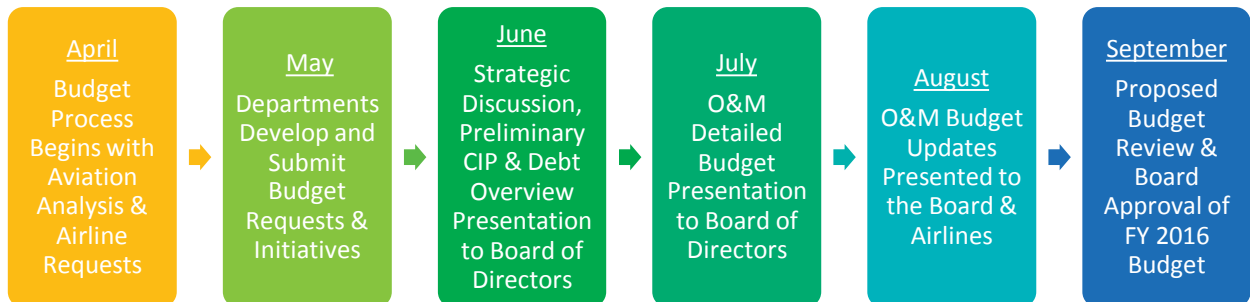
# EXECUTIVE SUMMARY

On September 16, 2015 the Wayne County Airport Authority Board of Director's approved the Fiscal Year 2016 Budget for Detroit Metropolitan Airport (the Airport), Willow Run Airport and the Airport Westin Hotel. The \$350 million budget is the financial plan for the Authority and focuses on operational excellence and investment for future growth.

## INTRODUCTION

In any great organization, reengineering efficiencies paves the way for reinvestment and the ability to achieve the organization's highest priorities. The Authority's goals will be achieved through implementing process improvements, enhancing the customer experience, focusing on economic growth and professional development of employees, all while maintaining the safety and security of the Airport.

The following represents the Authority's budget process for FY 2016.



## AVIATION INDUSTRY SUMMARY

As the Airport benefits from stability in the aviation industry, it is important to analyze the industry to understand how current macroeconomic trends could impact the organization. There continues to be significant change in airlines' business strategies that directly and indirectly impact the business of the Authority and these trends provide the basis for the fiscal outlook. Airlines have returned to profitability following a period of consolidation and mergers, bolstering a positive outlook for the aviation industry. Growth in the global and US economies has fueled an increased demand for travel, allowing for year-over-year airline profitability.

The following outlines key factors used in developing the FY 2016 Budget:

- ➔ **The outlook for the US airport sector is positive** – In December 2014, Moody's Investor Services upgraded its outlook for the US airport industry to "positive" from "stable" citing the fundamental business conditions of economic growth and seat capacity discussed above. They write:  
"We expect airports will report higher revenue in 2014-15, given that enplanements will surpass the expectations built into their budgets. The increased revenue will lead to stronger debt service coverage and liquidity, while lowering airport-related cost to airlines per enplaned passenger."
- ➔ **Increased airline capacity is creating additional need for capital investments at airports** – To take advantage of growing demand for air travel, domestic air carriers are adding seat capacity that was trimmed over the past decade, following a series of mergers and economic recession. The capacity growth is a result of additional seats on fewer flights, accomplished by retiring smaller aircraft and moving to larger aircraft. The airlines' fleet reconfigurations de-emphasize the need for airports to add airfield capacity, instead

focusing capital improvement plans on terminal re-development. The switch to larger aircraft for increased seat capacity and fewer flights relieves runway and taxiway congestion. Larger planes may require larger hold rooms than residing in existing terminal areas that are designed for small regional jets. Further, larger aircraft may require some airports to add or reconfigure apron space to accommodate parking for larger jets.

- **The Airport’s role in Delta Air Lines’ system** – The Airport is one of Delta’s eight US hubs. Delta considers the Airport a key connecting hub and a primary international gateway with an emphasis on Asia. Because of the Airport’s mid-continent location, Delta is able to effectively route passengers (local and connecting) to various international destinations, as well as move passengers travelling from the US East Coast to US West Coast. Delta currently provides non-stop service to 138 non-stop destinations from the Airport including more seats to Asia than any of its other hubs, heralding the Airport as Delta’s Asian Gateway.

STRATEGIC FOCUS FOR FISCAL YEAR 2016

Additional routes and increased passenger traffic generates additional revenues in parking and concessions allowing for reinvestment in the Authority and funding for the CEO’s FY 2016 goals. The Authority’s long term strategy focuses on five perspectives.



**Customer Satisfaction** – The Authority is committed to providing excellent customer service. Passengers appreciate the Airport’s modern terminal facilities as evidenced by strong Airport Service Quality Survey (ASQ) scores. An initiative for FY 2016 is to develop airport campus design criteria and standards to create a cohesive and welcoming Airport campus. There will be a focus on enhancing the overall landscaping, evaluating wayfinding and implementing traffic flow solutions to allow ease of movement across the campus. In order to enhance the customer experience within the terminals, additional funds are budgeted to refresh the public areas within the terminals and implement new terminal events and programs.

**Financial Competitiveness & Stability** – The Airport’s cost per enplanement (CPE) is competitive among peer airports and sustaining that position is important to the Airport. Implementing process improvements, efficiencies and airport development initiatives listed in this section along with budget discipline, is the first part of the equation. The second component is debt management and long-term financial planning to manage where the Authority is heading, so leadership can continue to steer the organization toward the Authority’s goals.

**Operational Excellence** – Operating safe and secure airports is the Authority’s highest priority. Safe airfields, a safe workplace and the safety of the public, are Authority focal points. The Police and Fire departments are accredited by the Commission on Accreditation for Law Enforcement Agencies (CALEA) and Commission on Fire Accreditation International (CFAI), respectively. To sustain a strong track record in safety and security, the Authority is focused on promoting a culture of continuous process improvement across the organization. The Authority’s OSHA incident rating (2.8) is lower than most peer-airports and our staff continues to refine our processes to improve that rating. Sustainability continues to be a key focus area for the Authority and the FY 2016 Budget continues to fund cost-effective sustainability projects that are coordinated with our business partners, such as a joint recycling program. The Airport is also applying to the Airport Council International (ACI)’s Airport Carbon Accreditation Program to become a certified airport at the carbon mapping level.

**Regional Development and Growth** – In FY 2016, the Authority will be enlisting the support of regional organizations and entities to foster opportunities for Small Business Enterprises (SBE) and Disadvantaged Business Enterprises (DBE). There is also an initiative to identify and enhance development ready sites for Airport growth. The FY 2016 – FY 2020 Capital Improvement Plan (CIP) includes multiple projects that promote future growth including demolitions to clear additional sites for potential development. Further, both airports’ O&M budgets include funding for marketing and attracting new routes. In addition to implementing approved CIP projects, the Authority is updating the Master Plans for both DTW and YIP. The projects, which create broad development plans over a 20-year planning horizon, will engage stakeholders and local residents throughout the process.

**People** – Human capital is the Authority’s greatest asset and the foundation for achieving all objectives. Dedicated employees drive operational excellence and customer satisfaction. The focus is to continue to equip employees with critical skills and develop the next generation of leadership through professional development and training. This upcoming year, the Authority is expanding employee recruitment and dedicated to focusing on attracting talented people who support the Authority’s values of teamwork, accountability, integrity, customer service, employee respect and diversity.

#### FY 2016 DETROIT METROPOLITAN AIRPORT OPERATING BUDGET

Aviation activity and passenger traffic create a starting point for developing the Operating & Maintenance (O&M) budget. Enplanements and landed weights have stayed relatively flat since 2009. For FY 2016, enplanements and landed weights are forecasted to be 16.6 million and 20.9 millions of thousands of pounds, respectively. Both are estimated to be slightly higher than FY 2015 due to airline fleet changes and higher load factors which offsets an overall reduction in aircraft operations.

Despite the modest growth in enplaned passengers, non-airline revenue is budgeted to increase by 7.2 percent from \$135.8 million in FY 2015 to \$145.6 million in FY 2016. The majority of the increase in non-airline revenue is attributable to upward revenue trends in parking and concessions.

The budget’s focus is to remain cost competitive among peer airports while sustaining operational excellence and achieving the Authority’s initiatives. The O&M budget for the Airport is \$317.8 million as compared to \$305.8 million in FY 2015 (3.9 percent) increase. The three largest components of the budget are salaries and benefits (24.5 percent), contractual services (16.0 percent) and debt service (29.0 percent) which together, comprise 69.5 percent of the total. With the debt service component being the largest expense, during the past five years, the Authority has been aggressive in managing debt costs through strategic debt management which is discussed in detail in the Debt Profile chapter.

As a residual airport, revenues and expenses must balance. The FY 2016 Budget for revenues generated directly from the airlines increases by 1.3 percent as compared to 3.9 percent growth in total expenses. As illustrated in Figure A

Figure A - 1: FY 2016 Airport O&amp;M Budget

(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
Airline Revenues	\$ 169,057	\$ 169,112	\$ 171,303	\$ 2,191	1.3%
Non-Airline Revenues	134,177	135,768	145,584	9,816	7.2%
Non-Operating Revenues	1,387	965	919	(46)	- 4.8%
<b>Total Revenues</b>	<b>304,621</b>	<b>305,845</b>	<b>317,806</b>	<b>11,961</b>	<b>3.9%</b>
Operating Expenses	203,619	200,149	211,093	10,943	5.5%
Non-Operating Expenses	101,002	105,696	106,714	1,018	1.0%
<b>Total Expenses</b>	<b>\$ 304,621</b>	<b>\$ 305,845</b>	<b>\$ 317,806</b>	<b>\$ 11,961</b>	<b>3.9%</b>

May not sum to total due to rounding

#### FY 2016 WILLOW RUN AIRPORT OPERATING BUDGET

While the passenger airline activity is stable, general aviation and air cargo originating to and destined from Southeast Michigan continues to decline. This creates a considerable financial challenge for Willow Run Airport. In 2013, Willow Run lost its second largest rent tenant, National Airlines, who relocated out-of-state resulting in a decline in revenue for the airport of \$0.3 million (10.0 percent of total revenue in FY 2012). While maintaining operational excellence and safety, operating expenses were responsibly reduced to compensate for revenue losses. The FY 2016 Budget forecasts revenues to be \$3.0 million compared to operating expenses of \$4.2 million. Financial sustainability is Willow Run's long-term goal; cost containment, business development and airfield "rightsizing" is the three-pronged strategy to achieving it.

Figure A - 2: FY 2016 Willow Run O&amp;M Budget

(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
Airline Revenues	\$ 1,128	\$ 1,129	\$ 1,205	\$ 76	6.7%
Non-Airline Revenues	1,805	1,661	1,769	108	6.5%
Non-Operating Revenues	0	2	23	21	>100%
<b>Total Revenues</b>	<b>2,933</b>	<b>2,792</b>	<b>2,996</b>	<b>204</b>	<b>7.3%</b>
Operating Expenses	4,298	3,805	4,244	440	11.6%
Non-Operating Expenses	(2,239)	(1,013)	(1,248)	(236)	23.3%
<b>Total Expenses</b>	<b>\$ 2,058</b>	<b>\$ 2,792</b>	<b>\$ 2,996</b>	<b>\$ 204</b>	<b>7.3%</b>

May not sum to total due to rounding

#### FY 2016 WESTIN HOTEL OPERATING BUDGET

The Airport Westin Hotel's focus is maintaining its award-winning service among regional and national luxury hotels. The Hotel's FY 2016 Budget for operating revenues is \$31.1 million, offset by operating expenses of \$20.0 million, forecasting an operating margin of \$11.1 million. Taking into account non-operating expenses, which primarily include debt service and fund transfers, the budgeted net position for FY 2016 is \$1.9 million.

Figure A - 3: FY 2016 Westin Hotel Operating Budget

(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
Operating Revenues	\$ 29,620	\$ 27,745	\$ 31,078	\$ 3,333	12.0%
Non-Operating Revenues	16	47	26	(21)	- 44.0%
<b>Total Revenues</b>	<b>29,636</b>	<b>27,792</b>	<b>31,104</b>	<b>3,312</b>	<b>11.9%</b>
Operating Expenses	19,006	18,930	20,001	1,071	5.7%
Non-Operating Expenses	8,539	9,258	9,166	(92)	- 1.0%
<b>Total Expenses</b>	<b>27,545</b>	<b>28,187</b>	<b>29,167</b>	<b>980</b>	<b>3.5%</b>
<b>Change in Net Assets</b>	<b>\$ 2,091</b>	<b>\$ (396)</b>	<b>\$ 1,936</b>	<b>\$ 2,332</b>	<b>&lt;-100%</b>

May not sum to total due to rounding

#### FY 2016 – FY 2020 CAPITAL IMPROVEMENT PLAN

Projects intended to sustain and improve operations comprise the majority of the CIP. The FY 2016 – FY 2020 CIP includes \$321.1 million (53 percent) for airfield improvement projects. Projects aimed at creating opportunities to generate additional revenue and help cultivate economic development total \$9.8 million for cargo, hangar and commercial development with an additional \$27.8 million for demolitions and site redevelopment.

Willow Run's \$183.4 million CIP is separate from the Airport. It is primarily composed of reconstructing runways and taxiways and updating facilities and infrastructure to attract new tenants.

Below is the approved FY 2016 – FY 2020 Five Year Plan for both airports.

Figure A - 4: FY 2016 - FY 2020 Capital Improvement Plan

(\$ in thousands)	Total Cost	Estimate to 9/30/15	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020 to Completion
Detroit Metropolitan Airport	\$ 598,963	\$ 96,153	\$ 256,061	\$ 75,636	\$ 63,078	\$ 71,731	\$ 36,304
Willow Run Airport	183,400	-	2,481	15,942	36,419	30,923	97,635
<b>Wayne County Airport Authority Total</b>	<b>\$ 782,363</b>	<b>\$ 96,153</b>	<b>\$ 258,542</b>	<b>\$ 91,578</b>	<b>\$ 99,497</b>	<b>\$ 102,654</b>	<b>\$ 133,939</b>

May not sum to total due to rounding

#### DEBT SERVICE

The Airport funds the majority of its capital improvements through the issuance of General Airport Revenue Bonds (GARBS). The total principal amount of outstanding GARBS is approximately \$2.3 billion. The Airport's gross debt service obligation for FY 2016 is \$170.9 million which is primarily funded through two sources: (1) airline rates and charges and (2) Passenger Facility Charges (PFCs) – a \$4.50 fee charge to each eligible enplaned passenger. The forecast for enplanement growth in FY 2016 drives an increase in PFC revenue which in helps to mitigate an increase in net debt service charged to the airlines. The FY 2016 budget for net debt service (charged through airline rates and charges) is \$92.1 million as compared to \$89.5 million budgeted in FY 2015.

During 2015, the Authority was successful in issuing \$780.7 million in bonds, which encompassed 8 different series in order to refund the Authority's 2005 Series, refund the 2001A Airport Hotel Series and issue new money. The complex issuance included combinations of:

- Direct placements and public offerings
- Fixed and Variable rate debt
- Alternative Minimum Tax (AMT) and Non-AMT Debt

The new money issuance funds the majority of the FY 2016 – FY 2020 CIP for the next two years. At time of issuance, Standard & Poor’s, Fitch and Moody’s affirmed the Airport’s credit ratings of A, A- and A2, respectively. Stability in the aviation industry combined with the Airport’s recent track record of growing non-airline revenues and cost containment continues to put the organization in a favorable position to finance current and future capital needs.

## CONCLUSION

In light of the numerous economic and industry specific challenges that have occurred over the past few years, the Authority has taken these headwinds in stride and improved its financial position. Through fiscal responsibility, the Authority has managed operating expenses and achieved an extremely conservative compounded annual growth rate of 2.2 percent since FY 2007.

By maintaining focus on long-term strategies in conjunction with impacts of the economy and industry, the Authority has developed the budget in an informed environment. The budget is the tactical roadmap and tool that defines funding for the Authority’s most important goals. Supporting and accomplishing these annual goals helps achieve the Authority’s highest priorities and sets the foundation for long-term success of the organization.



## AIRPORT AUTHORITY CONSOLIDATED BUDGET

(\$ in thousands)	Detroit Metropolitan Airport	Willow Run Airport	Westin Hotel	Authority Total
<b>Airline Revenues</b>				
Landing Fees	\$ 76,795	\$ 642	\$ -	\$ 77,436
Rent	86,726	267	-	86,993
Facility Use Fees	7,782	297	-	8,078
<b>Total Airline Revenues</b>	<b>171,303</b>	<b>1,205</b>	<b>-</b>	<b>172,507</b>
<b>Non-Airline Revenues</b>				
Parking	68,887	-	-	68,887
Car Rental	22,700	-	-	22,700
Concessions	35,000	-	-	35,000
Ground Transportation	5,149	-	-	5,149
Shuttle Bus	2,150	-	-	2,150
Utility Service Fee	5,151	126	-	5,277
Rent	3,304	937	-	4,241
Other Revenue	1,280	19	-	1,299
Charges For Services	1,964	687	31,078	33,728
<b>Total Non-Airline Revenues</b>	<b>145,584</b>	<b>1,769</b>	<b>31,078</b>	<b>178,431</b>
<b>Non-Operating Revenues</b>				
Grants	819	21	-	840
Interest Income	100	1	26	127
<b>Total Non-Operating Revenues</b>	<b>919</b>	<b>23</b>	<b>26</b>	<b>968</b>
<b>Total Revenues</b>	<b>\$ 317,806</b>	<b>\$ 2,996</b>	<b>\$ 31,104</b>	<b>\$ 351,906</b>
<b>Operating Expenses</b>				
Salaries & Wages	\$ 48,191	\$ 908	\$ -	\$ 49,099
Employee Benefits	29,644	497	-	30,141
Materials & Supplies	9,206	174	-	9,380
Parking Management	7,193	-	-	7,193
Shuttle Bus	6,839	-	-	6,839
Janitorial	12,125	45	-	12,170
Security	2,793	-	-	2,793
Contractual Services	21,815	811	-	22,626
Hotel Expenses	-	-	20,001	20,001
Insurance	2,184	34	-	2,218
Utilities	26,465	710	-	27,175
Buildings & Grounds	17,265	314	-	17,579
Equipment Repair	19,158	279	-	19,437
Other Operating Expense	4,066	450	-	4,516
O&M Capital	4,148	22	-	4,170
<b>Total Operating Expenses</b>	<b>211,093</b>	<b>4,244</b>	<b>20,001</b>	<b>235,338</b>
<b>Non-Operating Expenses</b>				
Interest & Financing	-	-	-	-
Debt Service & Coverage	92,101	-	7,146	99,247
Funding Requirements	14,613	(1,248)	2,020	15,385
<b>Total Non-Operating Expenses</b>	<b>106,714</b>	<b>(1,248)</b>	<b>9,166</b>	<b>114,631</b>
<b>Total Expenses</b>	<b>\$ 317,806</b>	<b>\$ 2,996</b>	<b>\$ 29,167</b>	<b>\$ 349,970</b>
<b>Change in Net Assets</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,936</b>	<b>\$ 1,936</b>

May not sum to total due to rounding

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# THE WAYNE COUNTY AIRPORT AUTHORITY

## AT A GLANCE

The Wayne County Airport Authority (the Authority) is an independent public benefit agency and considered an agency of the Charter County of Wayne, Michigan (Wayne County) for the purposes of federal and state laws, but is not subject to any county charter requirements or the direction or control of either the Wayne County Executive or Commission. Pursuant to Public Act 90 (the Authority Act), Michigan Public Acts of 2002 (effective March 26, 2002), the Authority has operational jurisdiction of Detroit Metropolitan Wayne County Airport, Willow Run Airport and the Airport Westin Hotel, with the exclusive right, responsibility and authority to occupy, operate, control and use them. The Authority is included in the County's Comprehensive Annual Financial Report (CAFR) as a discretely presented component unit, in accordance with the provisions of Governmental Accounting Standards Board (GASB) Statement No. 14, the Reporting Entity.

### WAYNE COUNTY AIRPORT AUTHORITY BOARD

The Authority is managed by an independent, seven-member Board of Directors. Four members are appointed by the Wayne County Executive, two members are appointed by the Governor and one member is appointed by the Wayne County Commission. Profiles for the Board Members who participated in the development and approval of the budget are illustrated below.

**Michael J. Jackson, Sr.** is Chairperson of the Wayne County Airport Authority Board. Mr. Jackson is Executive Secretary/Treasurer of the Michigan Regional Council of Carpenters and Millwrights. In this role, he serves as chief operating officer for the organization representing more than 20,000 carpenters, millwrights, resilient floor layers and pile drivers in public and private workplaces through ten locals across Michigan. Prior to his election to the union's highest state office in 2009, he served as the Council's Political Director. Jackson began his career as a Journeyman Field Carpenter in 1989, and has since held a number of progressively responsible positions within the Council from organizer and business agent to office manager. Throughout his career, Jackson has become a nationally recognized labor and civic leader. He has been honored with the Spirit of Detroit Award by Detroit City Council in recognition of outstanding achievement and service to the City. He served as president of a Central Labor Council of the AFL-CIO, and on the boards of the Robert Ficano Hope Foundation and Wayne County Business Development Corporation. Jackson was also appointed by Michigan Governor Rick Snyder to serve on his Economic Development Transition Team and as a board member of the Michigan Economic Growth Authority. He is a resident of Dearborn and appointed to a six-year WCAA Board term by former Wayne County Executive Robert A. Ficano expiring October 1, 2017.

**Suzanne K. Hall** is Vice Chairperson of the Wayne County Airport Authority Board. Ms. Hall is a private consultant specializing in public administration. Hall retired from Wayne County in 2009 after 23 years of service during which time she held various executive level positions including Director of Administration for the Sheriff's Office, Assistant County Executive for Administration and Deputy Director for the Department of Health and Community Services. For 18 years, Hall was an elected official for the City of Southgate – four years as Mayor and 14 years as a Councilwoman. Hall holds a master's degree in Public Administration from the University of Michigan and a bachelor's degree in Local Government Administration from Central Michigan University. She is also a graduate of Leadership Michigan and Leadership Detroit. Hall is a resident of Southgate and was appointed to a six-year term by former Governor Jennifer Granholm. Her term on the Wayne County Airport Authority Board expires October 1, 2016.

**Reginald M. Turner** is Secretary of the Wayne County Airport Authority Board. Mr. Turner was appointed to the Airport Authority Board by former Wayne County Executive Robert Ficano in January 2013. Turner is a highly skilled litigator with Clark Hill, PLC, where he serves on the firm's Executive Committee, Government Policy Group and Labor and Employment Group. Turner is named in such peer review guides as The Best Lawyers in America, Super Lawyers® and Crain's Detroit Power Lawyers. He is a past president of both the National Bar Association and the State Bar of Michigan and a Life Fellow of the American Bar Foundation, an honor reserved to less than 1 percent of lawyers in each state. Turner's practice also includes counsel and advocacy on behalf of clients on matters of public policy, with governmental experience at the federal, state and local levels. Turner completed a White House Fellowship in Washington, D.C., managing a Presidential Task Force and working as an aide to two U.S. Cabinet secretaries. He also served on former Governor John Engler's Blue Ribbon Commission on Michigan Gaming, the City of Detroit Brownfield Redevelopment Advisory Committee and the City of Detroit Board of Ethics. Turner now serves as Vice Chairman of the Detroit Public Safety Foundation. He is a director of Comerica, Inc., the Community Foundation for Southeast Michigan, and serves on the executive committee for United Way for Southeastern Michigan. Turner is a graduate of Wayne State University and the University of Michigan Law School. His term on the Airport Authority Board expires October 1, 2019.

**Nabih H. Ayad Esq.** was appointed to the Airport Authority Board by former Wayne County Executive Robert Ficano in November 2014. Mr. Ayad is a private practice attorney from Dearborn with law offices in Canton, Michigan. Attorney Ayad is Chairman of the Board for the Arab American Civil Rights League (ACRL). From December 2008 to December 2011 Attorney Ayad was a Michigan Civil Rights Commissioner, appointed by former Governor Granholm. He has been a member of the Advisory Council on Arab and Chaldean Affairs for the State of Michigan since 2007. Ayad was Vice President of the Arab-American Political Action Committee (AAPAC); on the Detroit NAACP Legal Redress Committee; Chairman of the NAACP Western Wayne County Legal Redress Committee for 18 cities in western Wayne County and on the ACLU Lawyers Committee for the State of Michigan since 2002. Ayad was on the National Executive Board for the American-Arab Anti-Discrimination Committee (ADC) and also served as former Chairman of the ADC Advisory Board for the State of Michigan for over 7 years. Ayad was also Co-Chair of ALPACT (Advocates and Leaders for Police and Community Trust), an organization made up of 100 law enforcement and civil rights groups where he co-chaired with the head of the FBI in Detroit. Ayad received his Juris Doctorate from the Detroit College of Law at Michigan State University and B.S. in Accounting from Wayne State University School of Business in Detroit. His term on the Airport Authority Board expires October 1, 2020.

**Irma Clark-Coleman**, Wayne County Commissioner, was appointed to the Wayne County Airport Authority Board by her peers in February 2015. She is in her third two-year term on the Commission and has served since 2011. Prior to that, she served for eight years in the Michigan Senate and four years in the Michigan House of Representatives. Before going to Lansing, she worked for Wayne County for 31 years, starting with the Road Commission in 1967. While working for the county, she served for seven years on the Detroit Public Schools Board of Education. In 2004, Governor Jennifer Granholm appointed Clark-Coleman to the National Education Commission of the States as well as the Cherry Commission on Higher Education. She is also a former member of the National School Board Association Board of Directors, Michigan Association of School Boards Board of Directors and National Alliance of Black School Educators. Clark-Coleman graduated from Pershing High School in Detroit and went on to earn bachelor's and master's degrees from Wayne State University. Her term on the Airport Authority Board will expire October 1, 2018.

**Michael Garavaglia** is president and founder of Capitol Relations, LLC, a Farmington Hills based lobbying and consulting agency. The firm represents a wide range of clients in the health care and insurance industries as well as county and municipal governments. Prior to establishing his firm, he served as the Chief Administration Officer for the Michigan Department of Attorney General under former Michigan Attorney General Mike Cox. He also was director of legislative affairs for Attorney General Cox. Licensed by the State of Michigan as both a real estate

builder and a real estate broker, Garavaglia was President and CEO of his own real estate development company for more than a decade. He previously worked in key accounting and financial positions for Turner Construction and General Motors. Garavaglia is a director on the boards of the Detroit Medical Center and Forgotten Harvest. He holds a bachelor's degree in Accounting and a master's degree in Economics, both from the University of Detroit-Mercy. A resident of Livonia, he was appointed to the Wayne County Airport Authority Board by Wayne County Executive Robert A. Ficano. His term on the Airport Authority Board expires October 1, 2020.

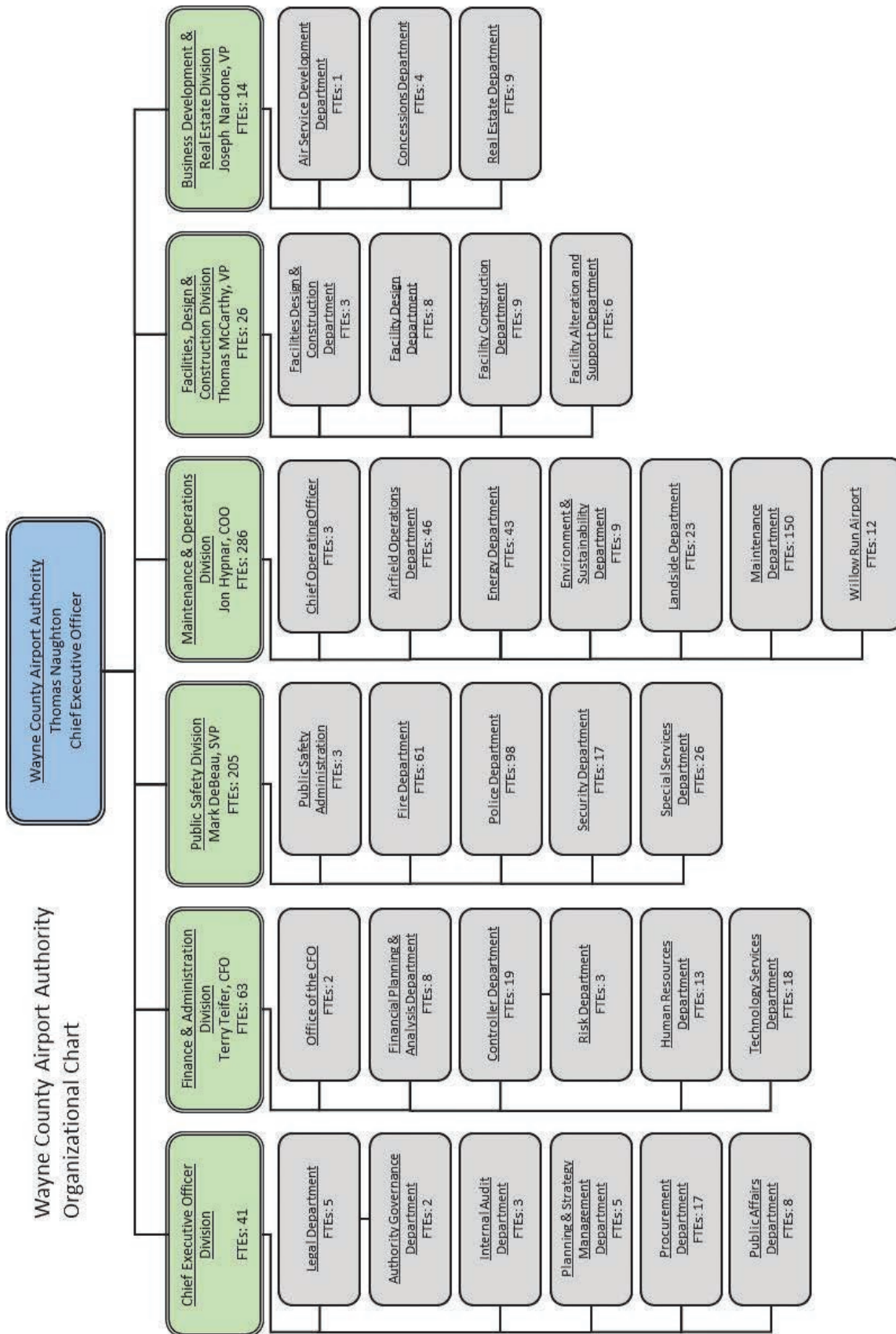
**Ronald E. Hall, Jr.** is Vice President and General Counsel for Bridgewater Interiors, LLC. He joined the company in 2007. In this role, Hall advises the company's President and its Chief Operating Officer across a number of areas critical to the business, including the provision of legal services, commercial management, operations launch management, and community relations. Prior to joining Bridgewater, Hall spent five years at Johnson Controls, Inc., first as an attorney in its Law department, and later in various positions of increasing responsibility in operations and program management. Before joining Johnson Controls he practiced corporate law for several years at a prominent Detroit regional law firm. Hall earned his Juris Doctor degree at the University of Michigan Law School, where he was an associate editor on the Michigan Journal of International Law, a recipient of the Dean's Scholarship Award and other awards. Prior to his career in law, Hall was a professional soldier. A West Point graduate, he was commissioned into the Army's field artillery branch, and decorated for meritorious service with the 1<sup>st</sup> Cavalry Division in the Persian Gulf. He attained the rank of Captain before resigning from active duty. Hall sits on one corporate and several nonprofit boards, holding several leadership positions therein, and is an alumnus of Leadership Detroit. His term on the Airport Authority Board expires October 1, 2020.

#### CHANGES TO THE BOARD SINCE APPROVAL OF THE BUDGET

On September 29, 2015, Reginald M. Turner submitted his resignation from the Board. On September 30, 2015, County Executive Warren C. Evans appointed Dr. Curtis L. Ivery, Chancellor of the Wayne County Community College District, to complete Mr. Turner's term.

**Dr. Curtis L. Ivery** became Chancellor of Wayne County Community College District (WCCCD) on September 1, 1995. As the Chief Executive Officer, Ivery directs the five campus, multi-cultural institution serving more than 72,000 students. He is currently serving on the Board of Directors for the American Association of Community Colleges (AACC). Ivery oversees an operating budget of \$100 million and a \$650 million capital improvement program. Prior to becoming Chancellor of WCCCD, Ivery served as Vice President of Instruction and acting President at Mountain View College of the Dallas County Community College District (DCCCD). In 1996, the Life Extension Foundation selected Ivery as the "Community College President of the Year", and in 2004 he received the Walter E. Douglas Humanitarian Award from Detroit Omega Foundation Inc. In 2010, Ivery was chosen as one of the first recipients of the Dr. Charles H. Wright Vision Awards in celebration of higher education. Ivery is an accomplished author publishing books, "Journeys of Conscience", "Reclaiming Integration and the Language of Race in the Post-Racial Era", and others, along with publishing over 600 articles for weekly and monthly metropolitan newspapers in the United States. Ivery was appointed to the Wayne County Airport Authority Board by Wayne County Executive Warren Evans. His term on the Airport Authority Board expires October 1, 2018.

WAYNE COUNTY AIRPORT AUTHORITY ORGANIZATIONAL CHART



**DETROIT METROPOLITAN AIRPORT**

The Airport is the primary air carrier and cargo airport serving Southeast Michigan, including Detroit and the ten-county surrounding areas. Furthermore, as a hub airport in Delta’s route network, the Airport serves a key role as a domestic connection point and an international gateway that attracts passengers from beyond its primary catchment area due to the level of airline service offered. The Airport is Delta’s second busiest hub in terms of its scheduled departures behind only Hartsfield-Jackson Atlanta International Airport (ATL), the busiest airport in the world, and third busiest in total enplaned passengers and seats.

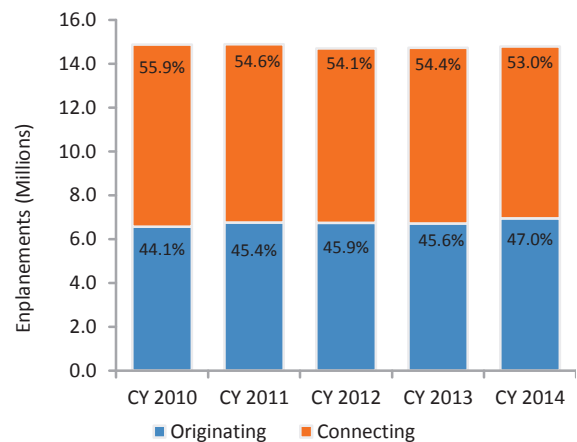
**NATIONAL PERSPECTIVE**

According to preliminary Airports Council International (ACI) traffic data for calendar year (CY) 2014, the Airport ranked 17th in the US for both total and enplaned passengers, with approximately 32.5 million total passengers and enplaned approximately 16.2 million passengers. Also in CY 2014, the Airport ranked 16th nationwide in total aircraft operations, with approximately 392,635 takeoffs and landings.

As a major hub airport, origin and destination (O&D) and connecting passengers are almost equal in terms of enplanements. As shown in Figure B - 1, for CY 2014, 47 percent of the Airport’s total domestic enplanements were O&D passengers and the remaining 53 percent were connecting passengers which were mostly serviced by Delta and the Delta Connection Carriers.

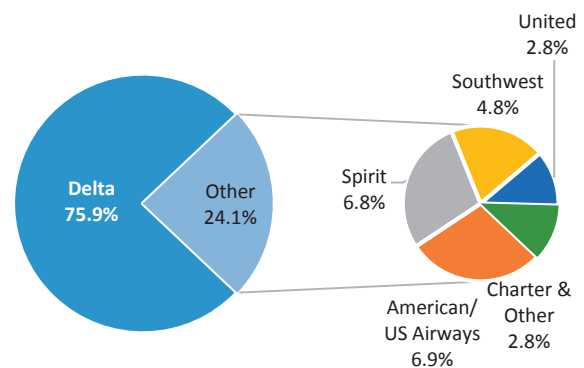
As shown in Figure B - 2, for FY 2015, Delta and the Delta Connection Carriers totaled approximately 75.9 percent of the Airport’s enplanements. The Airport also plays the role of an international gateway for Delta, attributing 1.3 million of the total 1.4 million international enplaned passengers to the air carrier and their partners. Spirit Airlines, Southwest Airlines and US Airways were the next three largest carriers in terms of enplanements at the Airport, however a much smaller percentage of the market share. Even though Delta and the Delta Connection Carriers account for more than 75 percent of the passenger activity at the Airport, the other air carriers, including low cost carriers, foreign flag carriers, charter carriers and regional carriers provide service to many of the Airport’s top O&D markets. The airlines serving the Airport had approximately 504 scheduled departures during FY 2015 with non-stop service to 142 destinations. The following maps illustrate the Airport’s non-stop service to 120 domestic and 22 international destinations, including some markets on a seasonal demand basis.

**Figure B - 1: DTW Domestic Originating & Connection Passengers**



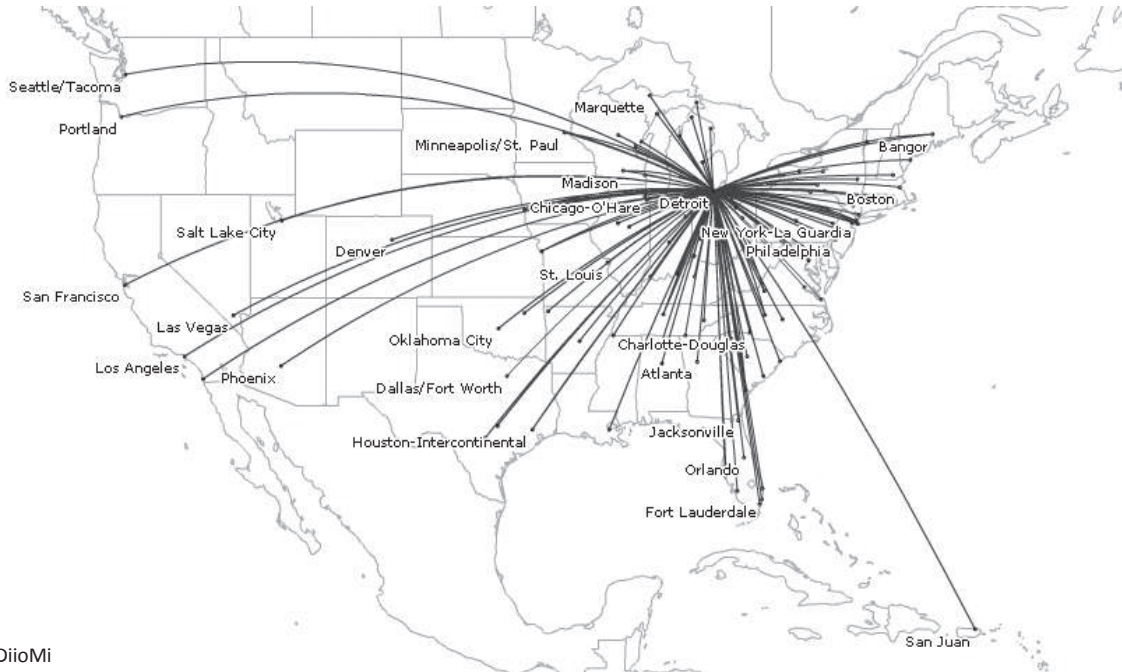
Source: WCAA

**Figure B - 2: FY 2015 Enplanement Market Share by Airline at DTW**



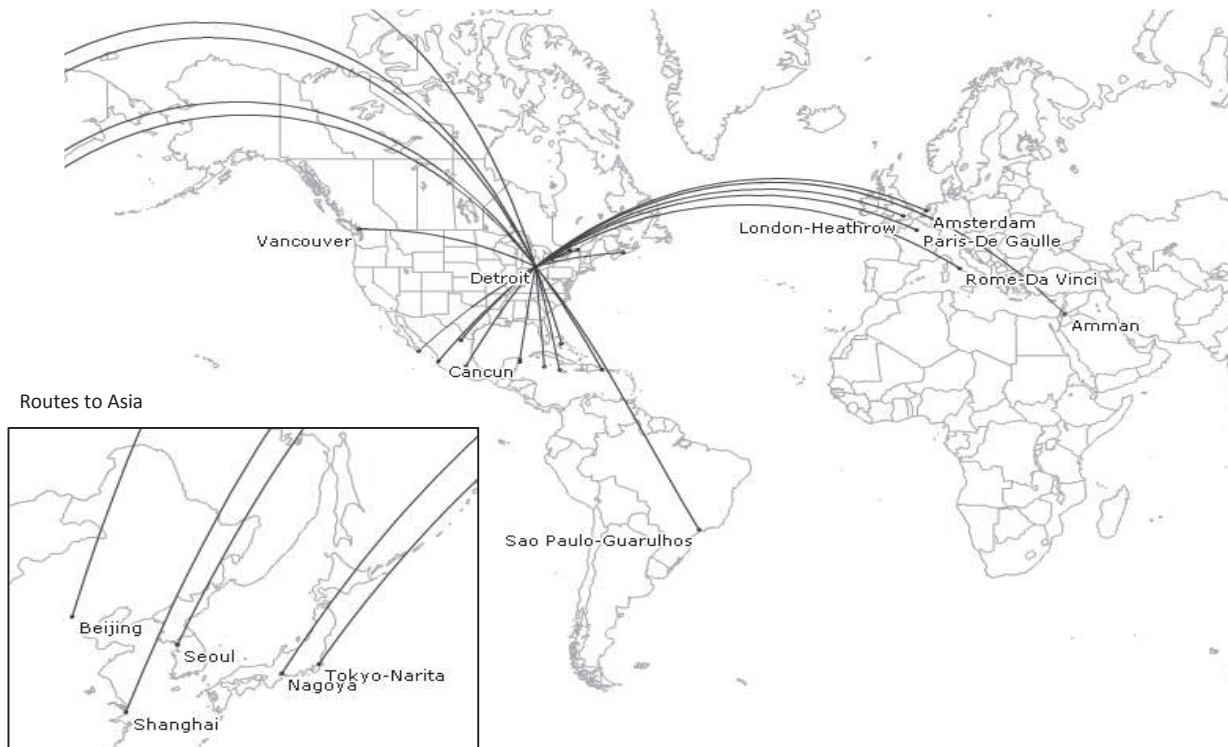
Source: WCAA

Figure B - 3: Scheduled Non-stop Domestic Destinations



Source: DiiMi

Figure B - 4: Scheduled Non-stop International Destinations



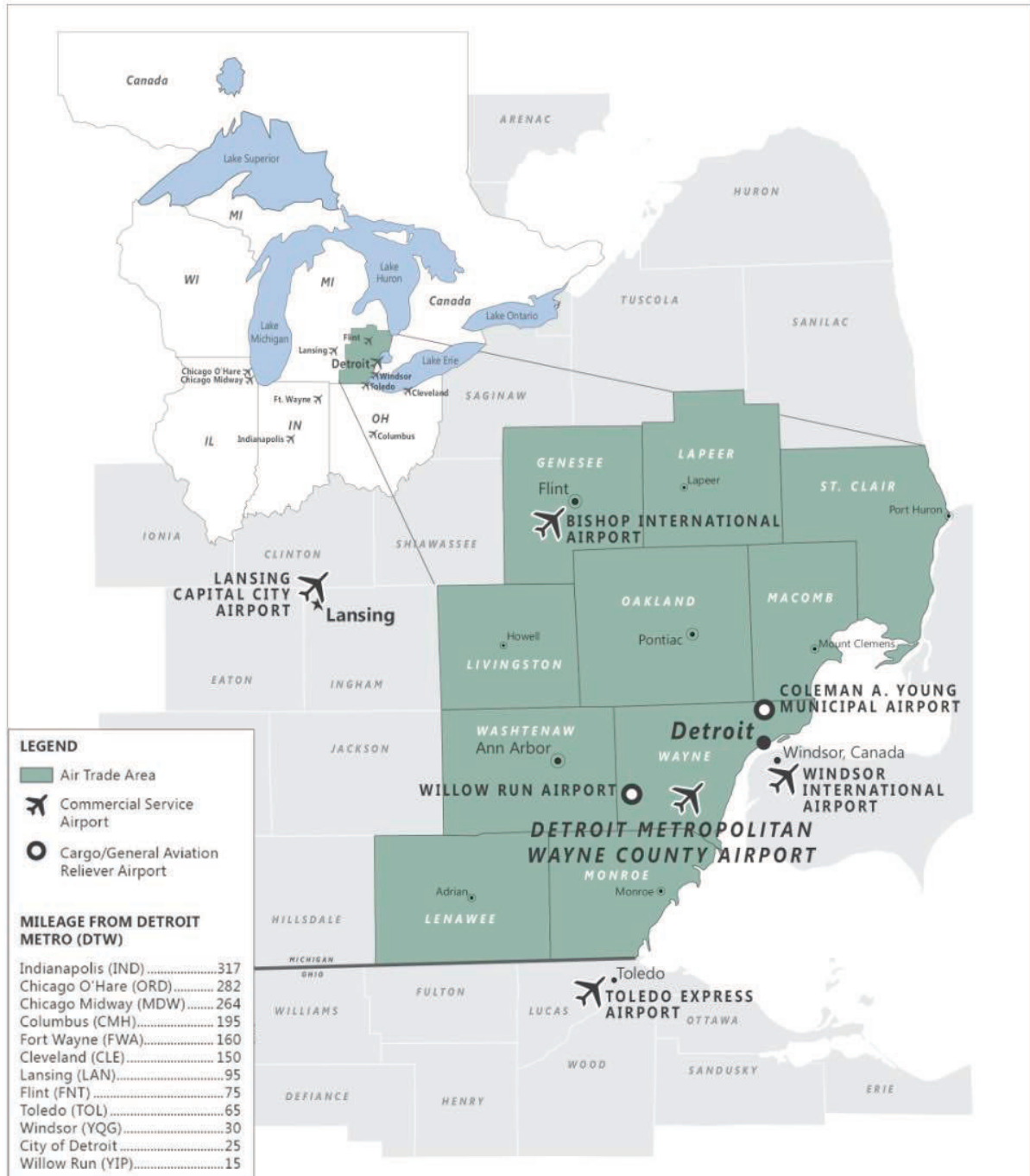
Source: DiiMi



AIR TRADE AREA

Not only is the Airport a key component of the US air transportation system, it is also the primary air carrier airport serving the City of Detroit and the ten-county Air Trade Area, which encompasses the counties of Genesee, Lapeer, Lenawee, Livingston, Macomb, Monroe, Oakland, St. Clair, Washtenaw and Wayne. The Airport is also accessible and within close geographical proximity to Canada, which serves as an extended secondary Air Trade Area. It is the economic strength of the ten counties encompassing the primary Air Trade Area that provides the principal base for supporting O&D air travel at the Airport. However, the number of non-stop domestic and international destinations served by the Airport and the frequency with which those destinations are served, tends to attract

Figure B - 5: Map of the Air Trade Area



SOURCE: Map Resources, 2007 (vector map graphics); Ricondo & Associates, Inc., May 2012.  
 PREPARED BY: Ricondo & Associates, Inc., May 2012.

passengers from a broader geographic region who may prefer to use the Airport instead of an airport located closer to their residence.

Based on location, accessibility and services available at other commercial service airports within nearby service areas, the borders of the Air Trade Area are generally established by Toledo Express Airport (TOL) to the south, Fort Wayne International Airport (FWA) to the southwest, Lansing Capital City Airport (LAN) to the west and Bishop International Airport (FNT) to the north. The closest large hub airport to the Air Trade Area is Cleveland-Hopkins International Airport (CLE), which, despite experiencing recent activity reductions, primarily serves its own Air Trade Area approximately 150 miles southeast of the Airport across Lake Erie. CLE had approximately 4.8 million scheduled seats in CY 2014, representing approximately 24.7 percent of the scheduled departing seat capacity at the Airport. Among the remaining airports in the Air Trade Area or nearby, FNT had the most scheduled departing seats in CY 2014, approximately 543,000 seats, or approximately 2.8 percent of the total scheduled departing seat capacity at the Airport in the same period.

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## LOCAL ECONOMY

According to the Detroit Regional Chamber, the Air Trade Area has approximately 300,000 existing businesses including 13 Fortune 500 companies. With its high concentration of Fortune 500 companies, high-capacity transportation infrastructure, skilled workforce and research and development (R&D) facilities, the Air Trade Area has been gaining recognition as one of the best places in the nation for new and expanded business according to the Detroit Regional Chamber. This optimistic assessment was echoed by an October 2010 article in *Inc. Magazine*, entitled “Five Reasons to Start a Business in Detroit.” In particular, the article noted the Air Trade Area’s strong support network for new businesses (including government support) and access to space and capital. In May 2012, *Site Selection* magazine included the Wayne County Economic Development Growth Engine on its honorable mention list of the top-performing economic development groups nationwide in 2011. The Detroit Regional Chamber’s 2014 “State of the Region” publication notes that the Detroit region remains one of the fastest growing in the nation, ranked second only to Dallas for GDP growth against peer metropolitan areas and has experienced GDP growth each of the five past years greater than 1.3 percent.

In addition to post-recession growth in manufacturing, the technology sector is a growing contributor to the Air Trade Area’s recovery. This growth in the technology sector has occurred as automobile makers and their suppliers are recruiting, often in competition with Silicon Valley, computer programmers and other workers with the technological skills necessary in the modern automobile manufacturing environment. The relocation of major high-tech operations of Quicken Loans and CompuWare, among others, to downtown Detroit has also attracted high-tech workers to the Air Trade Area. The Air Trade Area’s technology sector growth is illustrated in a 2013 report by *Dice.com*, an information technology and engineering career website, which identifies Detroit as one of the fastest growing metropolitan areas for technology jobs. In that report, the Detroit metropolitan area was cited as having 10 percent year-over-year growth in technology jobs being posted behind only St. Louis, Charlotte, Austin and Phoenix.

A study conducted by a team from the University of Michigan-Dearborn College of Business titled “The Economic Impact of Detroit Metropolitan Airport 2013” documents the importance of Detroit Metropolitan Wayne County Airport to the economies of Michigan and the metropolitan Detroit region. The study concluded that through both the immediate impact of air transportation and the effects of visitor’s spending money in Michigan, the Airport has an economic impact of approximately \$10.2 billion, which includes \$3 billion in income to businesses and workers in the area. This economic activity is responsible for 86,000 jobs and almost \$300 million in state and local tax revenue.

PROMINENCE OF THE AUTOMOTIVE INDUSTRY

Detroit and the surrounding area is well known as “The Automotive Capital of the World,” as it is home to three of the world’s largest automakers General Motors Company, Ford Motor Company and Fiat Chrysler Automobiles. In addition to the “Big Three” US automakers, the Air Trade Area is home to important facilities of foreign manufacturers including research and development (R&D) centers of Toyota Motor North America Inc., Hyundai Motor Company, Nissan North America Inc. and KIA Motors America, Inc. Furthermore, 63 of the top 100 automotive suppliers to North America are headquartered in Michigan. Michigan’s automotive factories accounted for 22.9 percent of total US vehicle production in 2013, more than any other state in the nation and was the state’s highest US vehicle production share since 2003.

AIR TRADE AREA PROFILE

Population by County

County	1990	2000	2013
Genesee	430,938	436,965	418,306
Lapeer	75,118	88,271	88,226
Lenawee	91,753	99,069	99,211
Livingston	116,655	158,345	183,309
Macomb	718,280	790,846	848,455
Monroe	133,892	146,364	150,944
Oakland	1,086,685	1,196,165	1,221,103
St. Clair	146,333	164,621	160,878
Washtenaw	283,987	324,372	351,345
Wayne	2,107,915	2,057,255	1,789,819
Air Trade Area	5,191,556	5,462,273	5,311,596

Median Age (2012) **39.4 years**

Percent of Population aged 35-54 years (2012) (age range most likely to travel) **28.1%**

Per Capita Personal Income (2011)

Air Trade Area	\$39,087
State of Michigan	\$36,264
United States	\$41,561

World Region of Birth of Foreign-Born Population In Air Trade Area (2012)

Asia	220,159	50.6%
Europe	110,032	25.3%
Americas	89,045	20.5%
Africa	15,308	3.5%
Oceania	831	0.2%
Total	435,375	100.0%

Gross Regional/Domestic Product (millions of 2009 dollars)

Year	Air Trade Area	State of Michigan	United States
2002	\$259,163	\$409,717	\$12,311,799
2003	\$262,835	\$414,114	\$12,638,401
2004	\$256,138	\$407,577	\$13,125,991
2005	\$255,501	\$407,276	\$13,591,064
2006	\$246,932	\$397,146	\$14,028,843
2007	\$247,295	\$398,141	\$14,352,564
2008	\$226,458	\$368,731	\$14,184,185
2009	\$210,716	\$349,195	\$13,869,679
2010	\$216,768	\$361,134	\$14,154,695
2011	\$223,683	\$370,005	\$14,372,520

2002-2011 Compounded Annual Growth Rate

-1.6%      -1.1%      1.7%

Air Trade Area Employment by Sector (2013)

	Amount (000's)	Percent
Construction	67	3.0%
Financial	118	5.2%
Government	289	12.8%
Information	36	1.6%
Manufacturing	261	11.6%
Transportation/Utilities	72	3.2%
Services	1,065	47.4%
Trade	342	15.2%
Total	2,250	100.0%

Unemployment Rates (June 2015)

Air Trade Area	6.3%
State of Michigan	5.8%
United States	5.5%

**ROLE WITHIN DELTA AIR LINES' SYSTEM**

The Airport is a key connecting hub and one of the primary international gateways in the Delta Air Lines' system. Offering 117 non-stop domestic destinations and 21 international destinations, Delta along with Delta Connection Carriers enplanes approximately 76 percent of the Airport's enplaned passengers.

**DELTA AIR LINES HUB SYSTEM**

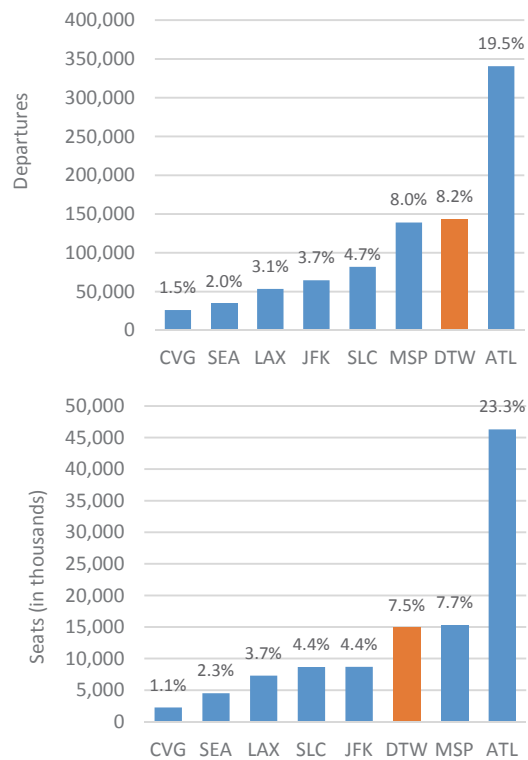
Delta's hub system network consists of the following domestic hub airports: the Airport (DTW), Cincinnati/Northern Kentucky International Airport (CVG), Hartsfield-Jackson Atlanta International Airport (ATL), Los Angeles International Airport (LAX), New York John F. Kennedy (JFK), Minneapolis-St. Paul (MSP), Salt Lake City International Airport (SLC) and Seattle-Tacoma International Airport (SEA).

Due to the Air Trade Area's large O&D base and the Airport's ideal geographical location, Delta is able to move passengers from the US Midwest to anywhere in the world as well as move passengers traveling from the US east coast to the US west coast or vice versa. For FY 2015, based on scheduled departures, the Airport has the second most operations in the Delta system. The Airport is third in Delta's system for departing seat capacity, narrowly behind MSP.

**ASIAN GATEWAY**

The Airport provides the largest departing seat capacity to Asia in Delta's network. Currently Delta serves five Asian destinations with daily non-stop service from the Airport. The Airport is geographically positioned well to serve Asian destinations by utilizing polar routing that traverse Canada and the Arctic Circle. It's a shorter distance for passengers connecting from central and eastern time-zones than connecting through a west coast hub like Los Angeles or Seattle. In FY 2015, 28.4 percent of all Delta flights to Asia from the Continental US departed from DTW. Scheduled seats-out in FY 2015 were 33.5 percent of Delta's capacity to Asia.

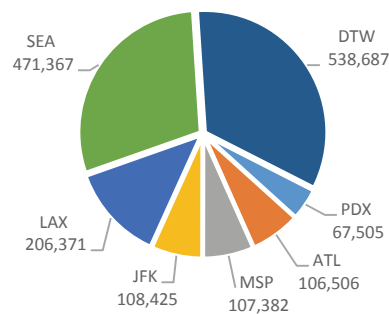
**Figure B - 6: Delta Departures & Seats-Out at Hub Airports FY 2015**



*With Percent of Departures and Seats from all U.S. Airports*

Source: Diio Mi

**Figure B - 7: FY 2015 Delta's Scheduled Seats to Asia**



Source: Diio Mi

## AIRPORT FACILITIES

### TERMINAL FACILITIES

The Airport currently has 131 aircraft gates within its two passenger terminal facilities; the North Terminal and the Edward H. McNamara Terminal (also referred to as the McNamara Terminal or, for the purposes of Authority cost center accounting, the South Terminal). The McNamara Terminal opened on February 24, 2002 and currently serves Delta, the Delta Connection Carriers, Air France and Virgin Atlantic. The North Terminal opened on September 17, 2008 and replaced the Smith and Berry Terminals, which were retired as passenger facilities on the same date. The North Terminal is used for non-hubbing carrier operations at the Airport. The Authority has invested over \$2.1 billion in terminal development since FY 2000. With the McNamara Terminal and the North Terminal, the Airport has two of the most modern and efficient terminal facilities of any airport in the US with ample capacity to accommodate future growth.

In February 2010, J.D. Power and Associates ranked the Airport first in overall customer satisfaction among US airports accommodating 30 million or more passengers per year. Factors used in the survey to determine overall customer satisfaction included airport accessibility, check-in, baggage claim, security check, terminal facilities, food and beverage, retail services, baggage claim and immigration services. In November 2010, Zagat Airline Survey, a survey of frequent fliers and travel professionals, awarded the Airport fourth place for *Best US Airport in Overall Quality*. In each year 2009 through 2011, the Physician's Committee for Responsible Medicine awarded the Airport first place in its "Airport Food Review". The Airport is the only airport in the 11-year history of the review to receive a perfect score, having done so twice. In 2011, the Airport received the top honor from Airports Council International – North America (ACI-NA) in the "Best 'Green' Concessions Practice or Concept" category for industry-leading recycling programs related to waste cooking oil and used cardboard. In 2013, the Airport received the Entity of the Year Award from the Michigan Public Purchasing Offices Association. In both 2013 and 2014, the Michigan Concrete Association presented the Airport with the Award of Excellence. For the same time period, the American Council of Engineering Companies of Michigan also presented the Airport with the Engineering Merit Award.

### MCNAMARA TERMINAL

The McNamara Terminal currently serves Delta, the Delta Connection Carriers, Air France and Virgin Atlantic. The airline space in the terminal is leased by Delta under an Airport Use and Lease Agreement which extends through 2032. The McNamara Terminal was opened in February 2002 and expanded in FY 2005, adding 25 gates to Concourses B and C, facilitating increased mainline and regional aircraft activity. Included as part of the expansion were luggage handling system modifications, additional moving walkways, escalators and hydrant fueling pits. In 2015, 16 gates at Concourse C were closed for operations due to Delta's up-gauging model resulting in a reduction of regional flights. The McNamara Terminal has approximately 2.4 million square feet of gross building space, including 105 aircraft gates in three concourses (i.e., Concourses A, B and C) and a Federal Inspection Station (FIS) facility of approximately 105,000 square feet, which can process up to 3,200 passengers per hour. The

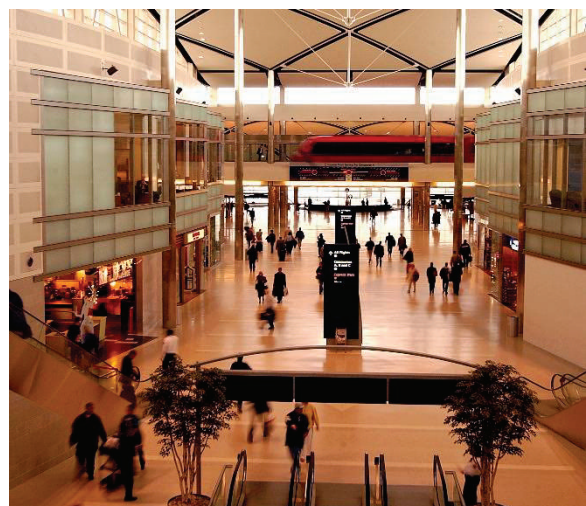


Photo: McNamara Terminal Center Link

centralized passenger terminal has over 100 ticket counter positions and an automated passenger train that travels across the mile-long Concourse A. Additionally, the terminal includes over 75 shops and restaurants encompassing over 147,000 square feet of concessions space and four Delta Sky Clubs. There is an underground tunnel that provides access between the concourses and serves as a utility and luggage handling system corridor.

The Authority and its tenants continue to invest in the McNamara Terminal to improve customer service. From 2012 to 2015, the Authority initiated a program to restructure both the Retail and the Food and Beverage concession programs featuring new concession agreements, new stores and restaurants. As a result, two of the newest retailers have received national recognition at the Airports Council International-North America 2015 Airport Concessions Awards ceremony in Phoenix, Arizona. The Wall Street Journal/Starbucks travel store won first place in the “Best New News and Gift Concept” category and the Estee Lauder Beauty Boutique received a second place award in the category of “Best New Retail Concept” and an honorable mention in the category of “Best Innovative Consumer Experience”.

Connected to the McNamara Terminal is a 404-room and 10-suite luxury-class Westin Hotel. The hotel is accessible from the curb front roadway or the ticket lobby of Concourse A and also offers a security checkpoint for direct access to Concourse A. The Westin Hotel was chosen as one of the top three airport hotels in North America in the 2011 Skytrax World Airport Survey.

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## NORTH TERMINAL

The North Terminal was opened on September 17, 2008 and replaced the Smith and Berry Terminal facilities for non-hubbing carrier operations at the Airport, including international operations. The North Terminal includes over 850,000 square feet of gross building space including a central terminal facility, a 26-aircraft gate airside concourse, approximately 50,000 square feet of concessions space and a FIS facility of approximately 26,000 square feet with facility capacity to process up to 800 passengers per hour. Five of the gates are common use and four of the five common use gates can serve both international and domestic flights. The facility is designed to be expandable by another four gates as demand warrants. Key features of the facility include related airside apron, dual taxi lanes, hydrant fueling, luggage handling facilities, loading bridges with 400 Hz power and preconditioned air. Internal features include numerous ticket counters, airline offices, an airline club for Lufthansa German Airlines and a pedestrian bridge connecting the terminal to the adjacent parking structure. The facility includes a full in-line explosive detection system (EDS) for improved luggage security screening operations. Upper and lower level roadways provide access to the “arrivals” and “departures” levels of the terminal and encompass a ground transportation facility for public transportation. The North Terminal serves all domestic and foreign flag passenger airlines at the Airport except Delta, the Delta Connection Carriers, Air France and Virgin Atlantic.



Photo: North Terminal

## PUBLIC PARKING

Public parking at the Airport currently consists of 18,174 spaces, including structured facilities and surface lots. The structured parking facilities, the Big Blue Deck and the McNamara Parking Deck, are located adjacent to each of the terminals to allow for convenient pedestrian access. Both parking facilities have Ground Transportation Centers for car rental, hotel, on and off airport parking shuttles, taxis, luxury sedans, etc.

Green Lot and Green Lot #2 (seasonal) are located along the East Service Drive and provide additional economy service parking for the Airport.

In addition to the above parking facilities, approximately 13,875 additional parking spaces are estimated to be available off-airport through third-party operators.



Photo: Electric Vehicle (EV) Charge Ports at the Blue Deck

## AIRFIELD

The major airfield facilities at the Airport consist of six runways, four of which are north/south parallels for prevailing wind conditions and two of which are east/west crosswind parallels, an extensive taxiway system which provides aircraft access to terminal areas, aircraft parking aprons and other cargo, maintenance and hangar areas.

Primary characteristics of each runway are as follows:

**Runway 4L/22R** – This runway is 10,000 feet long by 150 feet wide and is equipped with high intensity runway edge lights (HIRL) and in-pavement centerline lights. Both runway ends have precision runway markings with the Runway 4L end having Category III instrument landing system (ILS) capability and the Runway 22R end having ILS capability with a medium intensity approach lighting system (MALSR). Runway 4L/22R and its associated taxiways are scheduled to be rehabilitated in FY 2016.

**Runway 4R/22L** – This runway is 12,003 feet long by 200 feet wide and is equipped with HIRL and in-pavement centerline lights. Both runway ends have precision runway markings with the Runway 4R end having Category III instrument landing system (ILS) capability and the Runway 22L end having ILS capability with a MALSR. Runway 4R/22L was reconstructed in FY 2012 and 2013.

**Runway 3L/21R** – This runway is 8,501 feet long by 200 feet wide and is equipped with HIRL and in-pavement centerline lights. Both runway ends have non-precision runway markings. The south portion of Runway 3L/21R was rehabilitated in FY 2009.

**Runway 3R/21L** – This runway is 10,001 feet long by 150 feet wide and is equipped with HIRL and in-pavement centerline lights. Both runway ends have precision runway markings with the Runway 3R end having Category III instrument landing system (ILS) capability and the Runway 21L end having ILS capability with a MALSR. Runway 3R/21L was reconstructed in FY 2006 and 2007.



Photo: Aircraft Taxi across the North Terminal Apron

**Runway 9L/27R** – This crosswind runway is 8,708 feet long by 150 feet wide and is equipped with HIRL and pavement centerline lights. Both runway ends have precision runway markings with the Runway 27R end having ILS capability with a MALSR. The majority of Runway 9L/27R was reconstructed in FY 2009 and 2013.

**Runway 9R/27L** – This crosswind runway is 8,500 feet long by 150 feet wide and is equipped with HIRL and pavement centerline lights. Both runway ends have precision runway markings with the Runway 27L end having ILS capability with a MALSR.

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#### OTHER ANCILLARY/SUPPORT FACILITIES

**General Aviation** – General aviation and corporate aviation facilities are generally located on the southern portion of the Airport with one facility on the northern end. The fixed base operator (FBO) at the Airport is Signature Flight Support Corporation and accommodates aircraft parking, fuel, hangars, catering and other flight support services.

**Air Cargo/Mail Facilities** – Air cargo facilities at the Airport are located in three general areas of Airport property. The largest air cargo tenants, FedEx and United Parcel Service, are located in different areas of the airfield. FedEx is located in the northwest area of the Airport adjacent to Taxiway Z. United Parcel Service’s facility is located on the southern portion of the Airport between the Runway 27R and 27L ends. Several passenger airline and smaller cargo facilities are also located in the northern area of the Airport with access from Merriman Road.



Photo: Delta Hangar

**Aircraft Maintenance Facilities** – Several aircraft maintenance operation facilities are based at the Airport. These facilities are located in various areas of the Airport. Some of these include facilities for Delta Air Lines, United Parcel Service and FedEx. Aircraft serviced at these facilities include large wide-body aircraft (i.e., Boeing 747s) to smaller general aviation type aircraft. Spirit Airlines will be constructing a new maintenance hangar for its aircraft and anticipates it will add more than 80 new jobs to the area. The 126,000 square foot hangar will be the lead maintenance facility for Spirit Airlines and is scheduled to be completed by the third quarter of 2016.

**Fuel Farm** – The fuel farm at the Airport is located in the northwestern section of the airfield and consists of four 20,000-barrel fuel storage tanks and two 65,000-barrel fuel storage tanks. The fuel farm has a capacity of over four million gallons, an estimated five days of storage capacity. The fuel facilities at the Airport also include a truck load rack, underground pipelines and underground hydrant systems that serve the McNamara Terminal and North Terminal. Delta is the lessee of the entire fuel system at the Airport, which it operates for its benefit as well as the benefit of the other air carriers at the Airport, under an Operating Agreement with Shell/Servisair.

Other Airport support facilities include, but are not limited to, aircraft rescue and firefighting (ARFF) facilities, flight kitchens and an airport traffic control tower (ATCT). The primary ARFF station is located just north of the McNamara Terminal and south of Runway 9L/27R. The Airport also has a smaller secondary facility located near Taxiway V adjacent to the FedEx cargo apron. Additionally, the Airport has a landside ARFF station serving the roadways and terminals located along Rogell Drive to the north of the North Terminal. LSG Sky Chefs prepares meals for flights departing from the Airport and operates out of the one flight kitchen facility at the Airport (Building 505), which is leased to Delta and subleased to LSG Sky Chefs. The ATCT is located adjacent to the McNamara Terminal and houses the Terminal Radar Approach Control (TRACON) facility that serves the Airport and other regional airports.



DETROIT METROPOLITAN AIRPORT AT A GLANCE

AVIATION ACTIVITY

	FY 2014	FY 2015	FY 2016 Budget
<b>Enplaned Passengers</b> (in thousands)			
<i>Domestic</i>			
South Terminal	11,380	11,281	11,393
North Terminal	3,393	3,752	3,785
<b>Total</b>	<b>14,773</b>	<b>15,032</b>	<b>15,177</b>
<i>International</i>			
South Terminal	1,314	1,292	1,302
North Terminal	129	120	121
<b>Total</b>	<b>1,444</b>	<b>1,411</b>	<b>1,423</b>
<b>Grand Total</b>	<b>16,217</b>	<b>16,444</b>	<b>16,600</b>
<b>Scheduled Aircraft Operations</b>	389,495	368,088	362,462
<b>Landed Weight (1,000 lbs.)</b>	20,382,701	20,613,208	20,900,000

AIRPORT OPERATIONS AREA

<b>Airfield (Acres)</b>	
Runways	225
Taxiways	405
Shoulder & Blast Pad	250
Ramps/Aprons	375
<b>Overall Airport</b>	<b>6,130</b>
<b>Runway Length</b>	
<i>North-south runways in the primary wind direction</i>	
Runway 4R - 22L	12,003 ft.
Runway 4L - 22R	10,000 ft.
Runway 3L - 21R	8,501 ft.
Runway 3R - 21L	10,001 ft.
<i>East-west crosswind runways</i>	
Runway 9L - 27R	8,708 ft.
Runway 9R - 27L	8,500 ft.

TERMINALS

<b>Gates</b>	
South Terminal	
Concourse A	63
Concourse B	17
Concourse C	25
<b>Total</b>	<b>105</b>
North Terminal	26
<b>Grand Total</b>	<b>131</b>

Square Footage of Terminal Space by Concourse

South Terminal	
Concourse A	1,939,005
Concourse B	252,591
Concourse C	166,914
South Terminal Ramp Tower	2,416
<b>Total</b>	<b>2,360,926</b>
North Terminal	851,049
<b>Grand Total</b>	<b>3,211,975</b>

Square Footage of Concession Space

South Terminal	147,796
North Terminal	50,233
<b>Total</b>	<b>198,029</b>

PUBLIC PARKING

On-Airport Parking Spaces (WCAA Operated)

McNamara Deck	9,840
Blue Deck	5,788
Green Lot #1 & Green Lot #2	2,546
<b>Total</b>	<b>18,174</b>

Off-Airport Parking Spaces (Independently Owned/Operated) 13,875

FINANCES

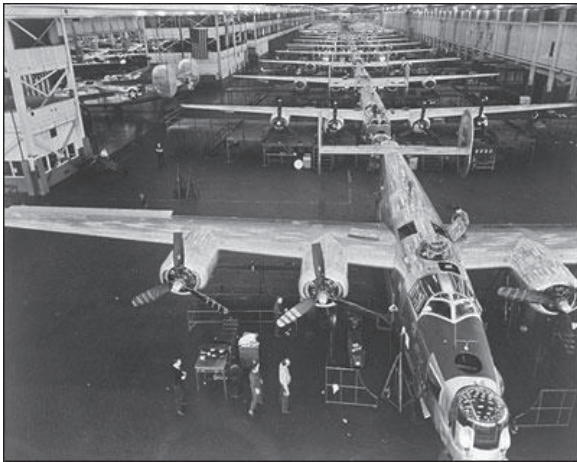
**Net Position** \$344,972,078  
*as of October 1, 2014*

Credit Ratings

Standard & Poor's	A	Outlook Stable
Fitch	A-	Outlook Stable
Moody's	A2	Outlook Stable

**WILLOW RUN AIRPORT**

Willow Run has a rich history, dating back to 1941 when Henry Ford and Charles Lindbergh built the world's largest bomber facility at the airport. During World War II, nearly 8,700 B-24 "Liberator" bombers were built at Willow Run. During its peak production, the plant employed 42,000 people including "Rosie the Riveter." After the war, Hangar 1 was converted into a luxury passenger terminal. Commercial airline traffic was transferred from Detroit City Airport and Willow Run became Detroit's principal airport.



**Photo: B-24 Final Assembly, Willow Run Plant, 1944**

In 1947, the Federal Government sold Willow Run to the University of Michigan for \$1.00. Soon after, commercial air traffic began moving from Willow Run to Detroit Metropolitan Airport. By 1966, all commercial airline operations at Willow Run ceased. It has been a cargo, general and executive aviation airport since. In 1977, the University of Michigan sold Willow Run to Wayne County for \$1.00.

Willow Run offers three runways, 24-hour FAA Tower and US Customs operations, to provide ease of access for its users. Willow Run's runways include ILS all-weather runways. The airport accommodates small private planes as well as international 747 cargo jets. In FY 2015, Willow Run had nearly 60,000 operations and 3,600 landings related to cargo, making it the third largest reliever airport in Michigan.

**AVIATION ACTIVITY**

	FY 2014	FY 2015	FY 2016 B
<b>Aircraft Operations</b>	68,060	59,987	54,500
<b>Cargo Landings</b>	3,576	3,604	3,890
<b>Fuel Sold (Gallons)</b>	6,282,738	6,388,421	6,831,100
<b>US Customs Transactions</b>	1,262	1,772	1,726

**Landed Weight (in thousand pounds)**

Cargo	197,235	183,672	195,565
General Aviation	126,706	103,369	97,340
<b>Total</b>	<b>323,941</b>	<b>287,041</b>	<b>292,905</b>

**AIRPORT OPERATIONS AREA**

**Airfield Size in Acres**

Runways	75
Taxiways	53
Ramps/Aprons	132
<b>Overall Airport</b>	<b>2,600</b>

**Runway Length**

Runway 5R/23L	7,526 ft.
Runway 5L/23R	6,655 ft.
Runway 9/27	7,294 ft.



**Photo: Hangar 1, Willow Run Airport**

## AIRPORT WESTIN HOTEL

The Westin, a luxury upscale hotel located at the Detroit Metropolitan Airport and operated by Starwood Hotels and Resorts Worldwide, Inc., offers guests a private security entrance and access into the McNamara Terminal, as well as complimentary 24 hour shuttle services to the North Terminal. The Westin has 404 guest rooms and ten luxury suites. Amenities within the hotel include a workout fitness studio, an indoor pool, high speed internet access, in-room dining and a refreshment center. The hotel has 28 meeting rooms spanning 26,000 square feet of space, along with a restaurant and bar that offer health enhancing dining options.

The Westin was the top-rated airport hotel in the Starwood system and guest satisfaction was rated in the top ten of all hotels in North America for 2014.

In March 2001, the County of Wayne issued \$110.9 million in Airport Hotel Revenue Bonds, Series 2001A and Series 2001B. The 2001A Bonds, \$99.6 million, were issued for the purpose of paying the cost of acquiring, constructing, equipping and furnishing an airport hotel (the Westin) and related improvements at the new McNamara Terminal. In addition, these bonds will pay capitalized interest and certain costs of issuance for this series. The 2001B Bonds, \$11.3 million, were issued for the purpose of paying the County Credit Enhancement Fee, funding the Operation and Maintenance Reserve Fund, paying capitalized interest and certain costs of issuance related to this series.

The Wayne County Airport Authority issued Series 2015G-H bonds in October 2015 to refund the Series 2001A Airport Hotel Revenue Bonds and convert the debt to General Airport Revenue Bonds (GARBS). The Signatory Airlines provided weighted majority approval to refinance the Hotel Bonds, relieving the County of its responsibility for credit enhancement, and necessitating and permitting the restructuring and simplification of the flow of funds along with the fund and account structure to be consistent with general airport revenue bond financing. The Authority successfully negotiated a new Hotel Management Agreement with Starwood Hotels & Resorts Worldwide, Inc.

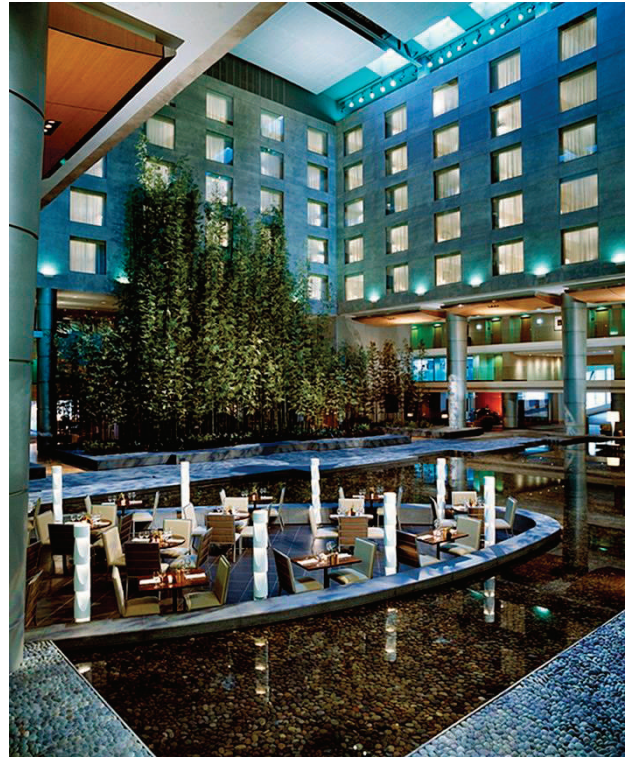


Photo: Westin Hotel Lobby

### HOTEL OPERATING METRICS

	FY 2013 Actual	FY 2014 Actual	FY 2015 Actual	FY 2016 Budget
Average Daily Rate	\$148.51	\$159.40	\$162.47	\$161.99
Revenue Per Available Room	\$111.09	\$125.58	\$127.93	\$132.62
Occupancy	74.7%	78.6%	78.7%	81.9%
Operating Margin	40.4%	43.4%	44.2%	43.9%

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# STATE OF THE AVIATION INDUSTRY

The outlook for the aviation industry is positive. US economic growth has stimulated consumer spending, a key driver to enplanement growth, and the airlines have responded by increasing seat capacity. As history has demonstrated, the industry is still vulnerable to geo-political events and fuel cost volatility. Nonetheless, the outlook for FY 2016 is positive.

The demand for air transportation is, to a large degree, dependent upon the demographic and economic characteristics of the geographical area served by an airport (i.e., the Air Trade Area), particularly for the origin and destination (O&D) portion of an airport's passenger traffic. Although O&D passengers are slightly less than a majority of the Airport's total traffic, primarily as a result of hubbing activity by Delta, the strength and characteristics of the Airport's underlying economic base remain significant with regard to expectations of continued growth in its O&D demand.

In this chapter are the findings of the Authority's on-going analysis of the commercial airline industry, the Air Trade Area's demographic composite and trends at peer North American airports. The analysis indicates that the Air Trade Area has an economic base capable of supporting increased demand for air travel. In tandem with the commercial air carriers' capacity growth, the Authority expects gains in enplanements and landed weights in FY 2016.

## FACTORS AFFECTING AVIATION DEMAND

### STATE OF THE AIRLINES

The industry is susceptible to world events and global economic conditions. In the aftermath of the events of September 11, the US airline industry saw a material adverse shift in the demand for air travel. The result was five years of reported industry operating losses between 2001 and 2005, totaling more than \$28 billion (excluding extraordinary charges and gains). The airline industry finally gained ground in 2007 with virtually every US airline posting a profit. In 2008 and through the first half of 2009, the combination of record high fuel prices, weakening economic conditions and a weak dollar resulted in many of the domestic network competitors announcing changes in business strategies. These included mergers, significant capacity reductions and increases in fares and fees to mitigate these challenges.

Following a period of consolidations and mergers the airlines have returned to profitability. Building upon earnings of \$10.6 billion in net post-tax profits for the global airline industry in 2013 and \$16.4 billion in 2014, the International Air Transport Association (IATA) forecasts the airlines' net profit will be \$29.3 billion in 2015. Global passenger traffic grew 5.7 percent and 6.0 percent in 2013 and 2014, respectively. IATA forecasts passenger traffic to grow by 6.7 percent in 2015. Performance among the industry is uneven across global regions. Over the past two years, North American airlines have fared best with profits of approximately \$11.2 billion in 2014 and a forecast of \$15.7 billion in 2015. IATA forecasts a 12.1 percent margin for earnings before interest and taxes (EBIT) among North American airlines in 2015.

### AIRFARE & AIRLINE YIELDS

In addition to the availability of service to meet the domestic and international O&D demand of the market area, air service at an airport can also be characterized by the availability of competitive air fares and airline yields. At airports where hubbing carriers maintain a significant market share of activity, such as at the Airport, service provided by low-cost carriers can complement overall air service and also stimulate demand.

Figure C – 1 provides a comparison of average outbound domestic fares and yields for CY 2014 for US East/West Airline Hub Airports identified as peer airports. Based on these comparisons, competitive fares are offered at the Airport as compared to airports both in the region and peer connecting hubs. Being the largest airport in the region with a high degree of non-stop air service and competitive fares, the Airport is price competitive for both local and connecting passengers. The Airport also compares well in terms of domestic yield per coupon mile making it an attractive market to commercial air carriers.

Figure C - 1: Comparison of US East/West Airline Hub Airports

(CY 2014)	AVERAGE OUTBOUND DOMESTIC FARE <sup>1</sup>	OUTBOUND DOMESTIC YIELD PER COUPON MILE
<b>AIRPORT</b>		
Denver (DEN)	\$155.64	\$0.1522
Phoenix (PHX)	\$170.13	\$0.1449
Atlanta (ATL)	\$188.17	\$0.2101
<b>Detroit (DTW)</b>	<b>\$189.21</b>	<b>\$0.1854</b>
Salt Lake City (SLC)	\$189.30	\$0.1753
Chicago-O'Hare (ORD)	\$191.19	\$0.1900
Dallas/Fort Worth (DFW)	\$192.26	\$0.1864
<b>Average</b>	<b>\$192.30</b>	<b>\$0.1911</b>
Charlotte-Douglas (CLT)	\$196.43	\$0.2279
Minneapolis/St. Paul (MSP)	\$197.20	\$0.1876
Houston-Intercontinental (IAH)	\$220.94	\$0.2004
Cincinnati (CVG)	\$224.87	\$0.2416

NOTE:

<sup>1</sup> Includes zero-fares, but excludes non-revenue passengers.

SOURCE: US DOT Origin & Destination Survey of Airline Passenger Traffic, December 2014.

## AIRLINE SCHEDULED SEAT CAPACITY

Cutting capacity during the economic downturn has been a key strategy to the airlines' return to profitability in recent years. In response to changes in demand, airlines have selectively added back domestic and international seat capacity over the past two years.

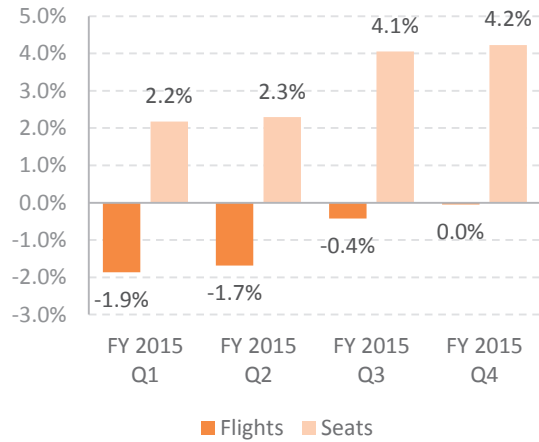
To take advantage of growing demand for air travel, domestic air carriers are adding capacity that was trimmed over the past decade following a series of mergers and economic recession. The capacity growth is a result of additional seats on fewer flights. To accomplish this, airlines are:

- Up-gauging equipment (replacing smaller aircraft with larger aircraft)
- Reconfiguring coach cabin space to squeeze in additional seats (more rows and/or seats per row).

Figure C – 2 and Figure C – 3 illustrate the year-over-year change of scheduled departures and seats for the US and DTW during FY 2015. Both charts show the changes in flights and seats do not correlate one-for-one. US flights decrease each quarter but seats continue to grow demonstrating the effect of the airlines' equipment up-gauging. In Q1, DTW experienced declines in both seats and flights with substantially more flights reduced than declines in

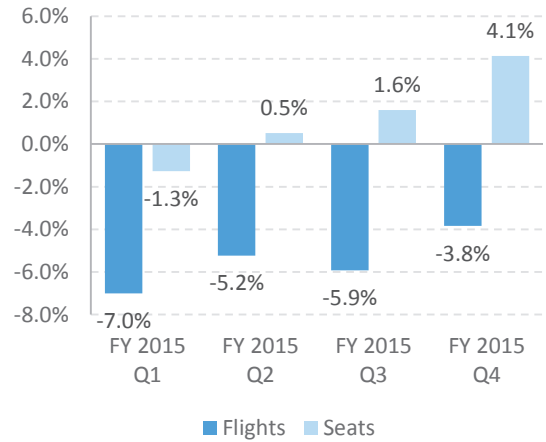
seats. The carriers' fleet re-configuration at DTW is largely completed by FY 2015 Q2 with a net reduction of approximately 5 to 6 percent flights year-over-year. The declining trends in seats reverses in Q2 and climbs to 4.1 percent in Q4, comparable to the national growth rate in scheduled seats.

Figure C - 2: US Domestic Capacity Year-over-Year Change



Source: WCAA

Figure C - 3: DTW Domestic Capacity Year-over-Year Change



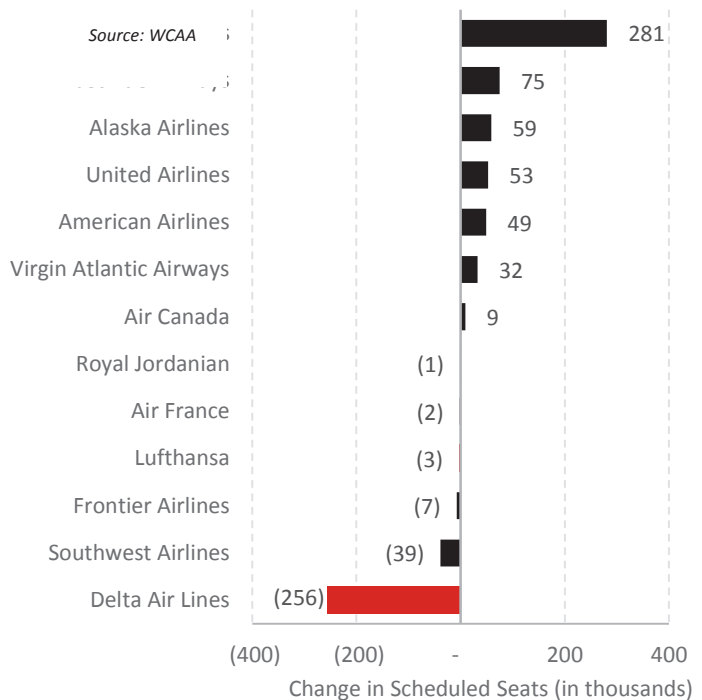
Source: WCAA

According to schedules posted in the Official Airline Guide (OAG) for Q1 FY 2016, year-over-year departures from the Airport are essentially flat for the first time since Q1 in FY 2014. The growth in scheduled seats experienced at the end of FY 2015 continues into Q1 of FY 2016 at 3.9 percent.

AGGRESSIVE GROWTH FROM SMALL AIRLINES

Moody's US Airports 2015 Outlook reports that growth among the four largest airlines is moderate, at or below 3.0 percent, approximately the rate of US economic growth. However, smaller airlines such as Alaska Airlines, JetBlue Airways and Spirit Airlines expect to add system-wide seat capacity between 2.9 percent and 3.8 percent in 2016 by growing their fleets. The impact to the Airport has been substantial growth in new carriers and new routes added since FY 2014. Figure C – 4 illustrates the year-over-year change in seats-out by carrier at DTW for the 12-months ended June 30, 2015. Spirit's year-over-year growth is 281,000 seats (28 percent) followed by JetBlue and Alaska – both new carriers that began service from DTW in 2014.

Figure C - 4: Scheduled Seats DTW Year-over-Year Change



## PASSENGER DEMOGRAPHICS

The demographic analysis summarizes data and trends with respect to population, diversity and age distribution in the Air Trade Area. In addition to providing a general overview of the Air Trade Area, these factors, to varying degrees, also impact the demand for air travel.

## POPULATION

With over 50 percent of Michigan's population residing in the Air Trade Area, it is reasonable to conclude that a significant portion of the growth in population that occurred on a statewide basis is directly or indirectly tied to activities occurring within the Air Trade Area.

Population in the Air Trade Area is 5.3 million according to the 2010 US Census. Population since 1990 has fluctuated from 5.2 million to 5.5 million people in 2000 and then retreating to 5.3 million people in 2013. The overall population in the Air Trade Area between 1990 and 2013 grew at a Compounded Annual Growth Rate (CAGR) of 0.1 percent, slightly below Michigan's CAGR of 0.3 percent, and below the United States' CAGR of 1.0 percent, during this same period. For the purpose of the budget and long-term financial planning, it's important to note that the population projection for the Air Trade Area is expected to remain stable between 2013 and 2020.

Figure C - 5: Historical and Projected Population

AREA	HISTORICAL			PROJECTED	COMPOUNDED ANNUAL GROWTH RATE			
	1990	2000	2013	2020	1990-2000	2000-2012	1990-2013	2013-2020
Genesee County	430,938	436,965	415,376	414,212	0.1%	-0.4%	-0.2%	0.0%
Lapeer County	75,118	88,271	88,389	94,212	1.6%	0.0%	0.7%	0.9%
Lenawee County	91,753	99,069	99,188	100,158	0.8%	0.0%	0.3%	0.1%
Livingston County	116,655	158,345	184,443	201,870	3.1%	1.2%	2.0%	1.3%
Macomb County	718,280	790,846	854,769	876,570	1.0%	0.6%	0.8%	0.4%
Monroe County	133,892	146,364	150,376	158,021	0.9%	0.2%	0.5%	0.7%
Oakland County	1,086,685	1,196,165	1,231,640	1,259,529	1.0%	0.2%	0.5%	0.3%
St. Clair County	146,333	164,621	160,469	166,758	1.2%	-0.2%	0.4%	0.6%
Washtenaw County	283,987	324,372	354,240	374,847	1.3%	0.7%	1.0%	0.8%
Wayne County	2,107,915	2,057,255	1,775,273	1,700,744	-0.2%	-1.1%	-0.7%	-0.6%
Air Trade Area	5,191,556	5,462,273	5,314,163	5,346,921	0.5%	-0.2%	0.1%	0.1%
State of Michigan	9,311,319	9,952,450	9,895,622	10,097,481	0.7%	0.0%	0.3%	0.3%
United States	249,622,814	282,162,411	316,128,839	336,499,603	1.2%	0.9%	1.0%	0.9%

SOURCE: Woods and Poole Economics, Inc., 2015 Complete Economic and Demographic Data Source (CEDDS), May 2015.  
PREPARED BY: Ricondo & Associates, Inc., May 2015.

## AGE DISTRIBUTION

The Air Trade Area has a higher percentage of residents in the age ranges most likely to travel. According to the US Travel Association, air travel frequency in the United States varies by age group. Persons between the ages of 35 and 54, which makes up approximately 28.1 percent of the population in the Air Trade Area, tend to travel the most by air. This represents an important source of demand for air service at the Airport.



**PERSONAL INCOME**

Another key indicator regarding demand for air travel is wealth, which can be measured by assessing levels of personal income. Personal income is defined as a composite measurement of market potential and indicates the general level of affluence of local residents. This indicator directly corresponds to an area’s ability to afford air travel, as well as an area’s attractiveness to business and leisure travelers.

A high percentage of households in the Air Trade Area are in the top income categories. 42.5 percent of households had incomes of \$60,000 or more in 2010, which was higher than the 38.8 percent of households in this income category for Michigan and comparable with the 42.5 percent of households in this income category nationwide.

**Figure C - 6: Per Capita Personal Income**

PER CAPITA PERSONAL INCOME (CURRENT DOLLARS)			
YEAR	AIR TRADE AREA	STATE OF MICHIGAN	UNITED STATES
<b>Historical</b>			
2010	\$36,810	\$34,511	\$39,492
2011	\$38,217	\$35,683	\$40,646
2012	\$39,134	\$36,379	\$41,674
2013	\$39,066	\$36,387	\$41,707
<b>Projected</b>			
2020	\$44,001	\$40,646	\$46,291
<b>Compounded Annual Growth Rate</b>			
2013-2020	1.7%	1.6%	1.5%

PERCENTAGE OF HOUSEHOLDS IN INCOME CATEGORIES (2010)			
INCOME CATEGORY (IN 2009 DOLLARS)	AIR TRADE AREA	STATE OF MICHIGAN	UNITED STATES
Less than \$29,999	30.4%	32.3%	30.3%
\$30,000 to \$59,999	27.1%	28.9%	27.4%
\$60,000 to \$74,999	10.1%	10.3%	10.3%
\$75,000 to \$99,999	12.3%	11.8%	12.0%
\$100,000 or More	20.0%	16.8%	20.0%

NOTE: As household income increases, air transportation becomes more affordable and, therefore, is used more frequently.

SOURCE: Woods and Poole Economics, Inc., 2015 Complete Economic and Demographic Data Source (CEDDS), May 2015.

PREPARED BY: Ricondo & Associates, Inc., May 2015.

## POPULATION DIVERSITY

The Air Trade Area has an ethnically diverse population, a characteristic that contributes to demand for international air travel. In a global economy, ethnic diversity within a region's labor force is a distinct economic advantage because employees with cultural and linguistic ties to international markets give companies an edge in establishing trade and investment opportunities. Key sectors in the Air Trade Area's regional economy are manufacturing, technology and R&D. These are impacted by the contribution of labor and investment from immigrant communities and entrepreneurs. An ethnically diverse population also retains family ties that create demand for air travel services to and from homeland countries.

## AIR TRAFFIC AT THE AIRPORT

## AIRLINES SERVING THE AIRPORT

As of September 2015, the Airport has 23 US flag carriers, comprising of five legacy/mainline carriers, four low-cost carriers and 12 regional carriers. Additionally, five foreign flag carriers offer scheduled passenger service. The Airport also has two regularly scheduled all-cargo carriers.

Figure C - 7: Airlines Serving the Airport

As of September 1, 2015

<b>LEGACY/MAINLINE CARRIERS (5)</b>	<b>LOW COST CARRIERS (4)</b>	<b>REGIONAL CARRIERS (12)</b>
Air Alaska	Frontier Airlines	Air Wisconsin (d/b/a US Airways Express)
American Airlines * <sup>1</sup>	JetBlue	Compass (d/b/a Delta Connection)
Delta Air Lines *	Southwest Airlines *	Endeavor Air (d/b/a Delta Connection)
United Airlines *	Spirit Airlines *	Envoy (d/b/a American Eagle)
US Airways * <sup>1</sup>		ExpressJet (d/b/a Delta Connection & United Express)
		GoJet (d/b/a Delta Connection & United Express)
		Mesa (d/b/a US Airways Express & United Express)
		PSA (d/b/a US Airways Express)
		Republic Airlines (d/b/a American Eagle, US Airways Express & United Express)
		Shuttle America (d/b/a Delta Connection & United Express)
		SkyWest (d/b/a Delta Connection & United Express)
		Trans States (d/b/a United Express)
<b>FOREIGN FLAG CARRIERS (5)</b>	<b>ALL-CARGO CARRIERS (2)</b>	
Air Canada	Federal Express *	
Air France *	United Parcel Service *	
Lufthansa German Airlines *		
Royal Jordanian		
Virgin Atlantic		

## NOTES:

\* Signatory Airline.

<sup>1</sup> American Airlines and U.S. Airways merged on December 9, 2013, and a single Operating Certificate for the two airlines was issued by the Federal Aviation Administration (the "FAA") on April 8, 2015. American and US Airways continue to operate as two separate airlines. On July 10, 2015, American announced that on October 17, 2015, American and US Airways will transition to a single reservation system, and all US Airways flights will transition to American flights.

SOURCES: Wayne County Airport Authority; Diio Mi, September 2015

## PASSENGER ACTIVITY

Figure C – 8 presents the historical share of enplanements by airline at the Airport between FY 2012 and FY 2015. In each year shown, Delta maintains the greatest market share ranging from 79.3 percent in FY 2012 to 75.9 percent in FY 2015. A corresponding increase in market share was gained from the North Terminal airlines which gained 3.4 percentage points since FY 2012. Spirit has gained the most market share climbing from 4.5 percent in FY 2012 to 6.8 percent in FY 2015. All other carriers (including their regional affiliates, as applicable) are presented in a descending order according to FY 2015 enplanements.

Figure C - 8: Historical Total Enplaned Passengers by Airline

(Fiscal Years Ending September 30)

	2012		2013		2014		2015	
	ENPLANED PASSENGERS	SHARE	ENPLANED PASSENGERS	SHARE	ENPLANED PASSENGERS	SHARE	ENPLANED PASSENGERS	SHARE
<b>South Terminal</b>								
Delta Air Lines	12,829,785	79.3%	12,754,063	79.3%	12,620,392	77.8%	12,475,818	75.9%
Air France	82,675	0.5%	77,751	0.5%	73,512	0.5%	75,576	0.5%
Virgin Atlantic	-	0.0%	-	0.0%	-	0.0%	20,442	0.1%
<b>Subtotal South Terminal</b>	<b>12,912,460</b>	<b>79.9%</b>	<b>12,831,814</b>	<b>79.8%</b>	<b>12,693,904</b>	<b>78.3%</b>	<b>12,571,836</b>	<b>76.5%</b>
<b>North Terminal</b>								
Spirit Airlines	734,473	4.5%	777,838	4.8%	898,449	5.5%	1,118,682	6.8%
Southwest Airlines <sup>1</sup>	853,027	5.3%	843,892	5.2%	840,850	5.2%	784,365	4.8%
US Airways <sup>2</sup>	575,778	3.6%	596,466	3.7%	615,358	3.8%	575,316	3.5%
American Airlines <sup>2</sup>	432,226	2.7%	407,108	2.5%	503,445	3.1%	560,435	3.4%
United Airlines	437,550	2.7%	438,771	2.7%	398,315	2.5%	455,206	2.8%
JetBlue Airways	-	0.0%	-	0.0%	46,011	0.3%	105,591	0.6%
Frontier Airlines	125,186	0.8%	80,496	0.5%	98,958	0.6%	99,869	0.6%
Lufthansa	64,854	0.4%	66,977	0.4%	77,650	0.5%	76,694	0.5%
Alaska Airlines	-	0.0%	-	0.0%	3,927	0.0%	57,636	0.4%
Air Canada (Jazz)	14,887	0.1%	17,156	0.1%	21,253	0.1%	23,980	0.1%
Royal Jordanian	15,143	0.1%	14,334	0.1%	14,755	0.1%	12,225	0.1%
Other <sup>3</sup>	4,000	0.0%	2,800	0.0%	3,798	0.0%	1,943	0.0%
<b>Subtotal North Terminal</b>	<b>3,257,124</b>	<b>20.1%</b>	<b>3,245,838</b>	<b>20.2%</b>	<b>3,522,769</b>	<b>21.7%</b>	<b>3,871,942</b>	<b>23.5%</b>
<b>Airport Total</b>	<b>16,169,584</b>	<b>100.0%</b>	<b>16,077,652</b>	<b>100.0%</b>	<b>16,216,673</b>	<b>100.0%</b>	<b>16,443,778</b>	<b>100.0%</b>

NOTE: Figures may not add due to rounding; Includes regional affiliated carriers, as applicable

<sup>1</sup> Southwest and AirTran finalized its merger in December 2015, historical enplanements for these carriers are combined in this

<sup>2</sup> American Airlines and U.S. Airways merged on December 9, 2013, and a single Operating Certificate for the two airlines was issued by the Federal Aviation Administration (the "FAA") on April 8, 2015. American and US Airways continue to operate as two separate airlines. On July 10, 2015, American announced that on October 17, 2015, American and US Airways will transition to

<sup>3</sup> Includes airlines with minimal market share or that may not operate at the Airport as of Operating Year 2012.

SOURCE: Wayne County Airport Authority, October 2015

Figure C – 9 illustrates the Airport’s historical trends related to the domestic and international passenger activity split. Over the ten-year span since 2005, total enplanements have decreased by a 1.1 percent CAGR. However, there are two distinct periods. First, coinciding with a global economic recession, enplanements contracted between FY 2005 and FY 2010 by a -2.8 CAGR. Since 2010, total enplanements have been stable with modest 0.5 percent CAGR.

Figure C - 9: Historical Domestic and International Enplanements

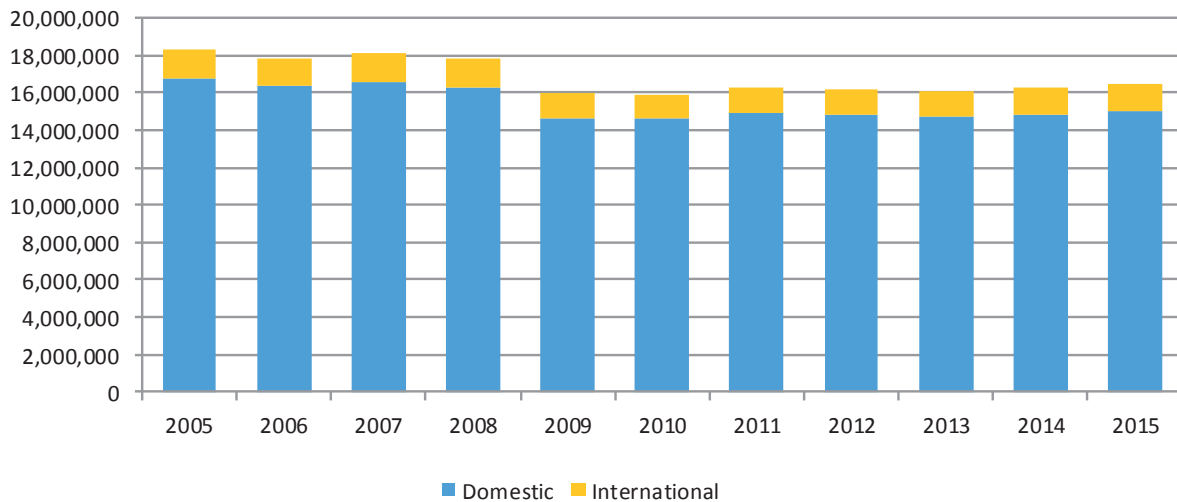
(Fiscal Years Ending September 30)

YEAR	DOMESTIC ENPLANEMENTS	ANNUAL GROWTH	INTERNATIONAL ENPLANEMENTS	ANNUAL GROWTH	TOTAL ENPLANED PASSENGERS	ANNUAL GROWTH	INTERNATIONAL ENPLANEMENT SHARE
2005	16,758,421	5.3%	1,527,861	9.0%	18,286,282	5.6%	8.4%
2006	16,321,812	(2.6%)	1,478,120	(3.3%)	17,799,932	(2.7%)	8.3%
2007	16,581,322	1.6%	1,526,768	3.3%	18,108,090	1.7%	8.4%
2008	16,271,128	(1.9%)	1,560,103	2.2%	17,831,231	(1.5%)	8.7%
2009	14,622,391	(10.1%)	1,318,741	(15.5%)	15,941,132	(10.6%)	8.3%
2010	14,614,045	(0.1%)	1,262,336	(4.3%)	15,876,381	(0.4%)	8.0%
2011	14,912,532	2.0%	1,313,669	4.1%	16,226,201	2.2%	8.1%
2012	14,802,280	(0.7%)	1,367,304	4.1%	16,169,584	(0.3%)	8.5%
2013	14,665,317	0.3%	1,412,335	3.3%	16,077,652	0.9%	8.8%
2014	14,773,126	1.1%	1,443,547	2.2%	16,216,673	2.1%	8.9%
2015	15,032,279	1.6%	1,411,499	(2.2%)	16,443,778	1.7%	8.6%

**Compound Annual Growth Rate**

2005 - 2010	(2.7%)	(3.7%)	(2.8%)
2010 - 2015	0.5%	1.1%	0.5%
2005 - 2015	(1.1%)	(0.8%)	(1.1%)

**Enplaned Passengers**



Source: WCAA

## DOMESTIC O&amp;D MARKETS

An important airport characteristic is the distribution of its O&D markets, which is a function of air travel demands and available services and facilities. Figure C – 10 illustrates the Airport’s top 20 domestic O&D markets for CY 2014, as measured by the number of passengers. As shown, the top 20 markets accounted for approximately 47.1 percent of total domestic O&D passengers. All top 20 markets have non-stop service from the Airport. Delta is the primary carrier for all 20 top markets and the sole provider of non-stop service to the San Francisco and San Diego markets. The remaining 18 markets are served by at least one additional carrier.

Figure C - 10: Top 20 O&amp;D Markets

(Passengers in thousands for Calendar Year 2014)

RANK	MARKET	TOTAL O&D PASSENGERS	PERCENTAGE OF O&D PASSENGERS	PRIMARY CARRIER	MARKET SHARE	SECONDARY CARRIER	MARKET SHARE
1	New York <sup>1</sup>	959	6.9%	Delta	53.7%	Spirit	19.1%
2	Florida South <sup>2</sup>	779	5.6%	Delta	59.6%	Spirit	25.6%
3	Orlando	736	5.3%	Delta	64.1%	Spirit	23.6%
4	Las Vegas	696	5.0%	Delta	47.3%	Spirit	36.9%
5	Washington D.C. <sup>3</sup>	671	4.8%	Delta	65.1%	Southwest	19.4%
6	Los Angeles <sup>4</sup>	603	4.3%	Delta	54.4%	Spirit	42.5%
7	Tampa	503	3.6%	Delta	59.4%	Spirit	25.2%
8	Atlanta	484	3.5%	Delta	65.5%	Southwest	24.7%
9	Denver	470	3.4%	Delta	33.4%	Southwest	22.4%
10	Chicago <sup>5</sup>	466	3.3%	Delta	49.4%	Southwest	21.1%
11	Fort Myers	453	3.3%	Delta	60.1%	Spirit	30.1%
12	San Francisco <sup>6</sup>	435	3.1%	Delta	65.9%	Southwest	12.6%
13	Dallas <sup>7</sup>	424	3.0%	Delta	33.7%	Spirit	24.4%
14	Phoenix	400	2.9%	Delta	49.1%	Southwest	20.9%
15	Boston	370	2.7%	Delta	63.0%	JetBlue	26.8%
16	Houston <sup>8</sup>	323	2.3%	Delta	31.1%	Spirit	28.0%
17	Seattle	236	1.7%	Delta	69.2%	Southwest	7.1%
18	Nashville	235	1.7%	Delta	63.0%	Southwest	33.6%
19	Minneapolis	222	1.6%	Delta	71.4%	Spirit	15.5%
20	San Diego	206	1.5%	Delta	58.9%	Southwest	18.6%
<b>Other O&amp;D Markets</b>		<b>4,259</b>	<b>30.6%</b>				
<b>Domestic O&amp;D Passengers</b>		<b>13,929</b>					
<b>O&amp;D % of Domestic Passengers</b>		<b>47.1%</b>					

NOTE: Figures may not add due to rounding

<sup>1</sup>Includes John F. Kennedy (JFK), LaGuardia (LGA), and Newark, NJ (EWR).<sup>2</sup>Includes Fort Lauderdale International Airport (FLL) and Miami International Airport (MIA).<sup>3</sup>Includes Baltimore/Washington International Airport (BWI), Washington Dulles International Airport (IAD), and Washington National Airport (DCA).<sup>4</sup>Includes Los Angeles International (LAX), Burbank (BUR), Ontario International (ONT), and Long Beach Municipal (LGB).<sup>5</sup>Includes Chicago/O'Hare (ORD) and Chicago/Midway (MDW).<sup>6</sup>Includes San Francisco International (SFO), Oakland International (OAK) and San Jose International (SJC).<sup>7</sup>Includes Dallas-Ft. Worth Airport (DFW) and Dallas Love Field (DAL).<sup>8</sup>Includes Houston Intercontinental (IAH) and Houston Hobby (HOU).

SOURCE: US DOT Origin &amp; Destination Survey of Airline Passenger Traffic, Domestic, December 2014

## INTERNATIONAL O&amp;D MARKETS

Figure C – 11 illustrates data on the Airport’s top 25 international markets for O&D passengers. Non-stop (including seasonal service) is provided to 21 of these markets. Cancun is the most popular international destination for the Airport’s O&D passengers, serving approximately 187,000 passengers in CY 2014.

Figure C - 11: Top 25 International O&D Markets

(Calendar Year 2014)

RANK	MARKET	CODE	TOTAL INTERNATIONAL	NON-STOP
			O&D PASSENGERS	SERVICE
1	Cancun, Mexico	CUN	186,867	●
2	Frankfurt, Germany	FRA	80,975	●
3	London (Heathrow), England	LHR	74,917	●
4	Shanghai, China	PVG	70,126	●
5	Mexico City, Mexico	MEX	62,223	●
6	Punta Cana, Dominican Republic	PUJ	60,272	●
7	Montego Bay, Jamaica	MBJ	57,801	●
8	Tokyo (Narita), Japan	NRT	50,747	●
9	Paris, France	CDG	48,509	●
10	Monterrey, Mexico	MTY	41,359	●
11	Beirut, Lebanon	BEY	39,821	
12	Seoul, South Korea	ICN	38,354	●
13	Beijing, China	PEK	35,199	●
14	Sao Paulo, Brazil	GRU	33,102	●
15	Los Cabos, Mexico	SJD	32,573	●
16	Nagoya, Japan	NGO	29,870	●
17	Rome, Italy	FCO	29,644	●
18	Vancouver, Canada	YVR	28,350	●
19	Nassau, Bahamas	NAS	26,453	●
20	Amsterdam, Netherlands	AMS	25,910	●
21	Toronto, Canada	TOR	25,330	●
22	Mumbai, India	BOM	23,023	
23	Aruba, Aruba	AUA	21,833	
24	Leon/Guanajuato, Mexico	BJX	21,557	
25	Puerto Vallarta, Mexico	PVR	20,722	●

SOURCE: IATA/Diio FMdg, December 2014

PEER AIRPORTS

**AIRPORTS KEY INDICATORS**

▲ AIRPORTS FINANCIAL POSITION

Enplanement growth, although low, will support limited revenue increases

▲ ENPLANEMENT GROWTH LOWERS CPE

▼ FEDERAL FUNDING

AIP grants and PFCs Uncertainty

In December 2014, Moody’s Investor Services upgraded its outlook for the US airport industry to “positive” from “stable” citing the fundamental business conditions of economic growth and seat capacity discussed above. They write:

*We expect airports will report higher revenue in 2014-15, given that enplanements will surpass the expectations built into their budgets. The increased revenue will lead to stronger debt service coverage and liquidity, while lowering airport-related cost to airlines per enplaned passenger.*

Enplanement growth generates more revenue from parking fees and concessions sales along with providing additional Passenger Facility Charges (PFCs) revenue to pay debt service.

TERMINAL REDEVELOPMENT

The airlines’ fleet reconfigurations de-emphasize the need for airports to increase airfield capacity but instead focus capital improvements on terminal redevelopment. The switch to larger aircraft for increased seat capacity and fewer flights relieves runway and taxiway congestion. Broadly speaking, enplanements will grow at most large airports without requiring intensive airfield capital projects.

On the other hand, enplanement growth will put pressure on terminal capacity. The switch to larger planes potentially requires larger hold rooms than residing in existing terminal areas that are designed for small regional jets. Enplanement growth may necessitate the need for additional concession space in terminals. Further, larger aircraft may require some airports to add or reconfigure apron space to accommodate parking for larger jets. Many capital improvement plans at peer airports are focusing on terminal redevelopment.

EXISTING PROJECTS AT PEER AIRPORTS

A few notable terminal re-development projects that are underway at large-hub airports with obsolete facilities include:

- ➔ Los Angeles International (LAX) \$1.9 billion to rebuild the Tom Bradley International Terminal scheduled for completion in 2015
- ➔ San Francisco International Airport (SFO) \$138 million renovation of Terminal 3 (Boarding Area E) and \$2.4 billion redevelopment of its oldest terminal, Terminal 1
- ➔ Dallas-Fort Worth (DFW) \$2.7 billion terminal renovation and renewal project of the four original terminals
- ➔ Bush Intercontinental Airport (IAH) \$1.5 billion plan to modernize and expand Terminal D
- ➔ Proposed \$3.6 billion replacement of the central terminal building at LaGuardia Airport (LGA)



Illustration: LAX Tom Bradley International Terminal Project

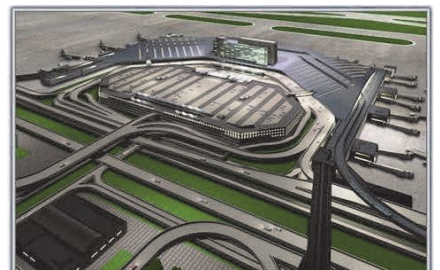


Illustration: DFW Terminal D Project

## CAPITAL NEEDS AT DTW

With two relatively new terminals, the Airport has a competitive CPE advantage to peer airports with massive terminal redevelopment projects that are planned or are currently underway. The current five-year capital improvement plan (CIP) addresses runway reconstruction and infrastructure improvements that sustain operational excellence.

However, enplanement growth and fleet reconfigurations may require terminal reconfigurations at DTW. At the North Terminal, aggressive growth from Alaska, JetBlue and Spirit are putting pressure on common use gate availability. The terminal was designed to accommodate an expansion of five future gates to accommodate additional wide-body aircraft following the demolition of the L.C. Smith and Berry terminals. However, the economic downturn that began in 2008 coincided with the terminal's opening and the need to expand has not been warranted since. FY 2015 enplanements at the North Terminal were nearly 20 percent greater than FY 2011. At that pace of enplanement growth, expansion plans will need to be revisited at some time in the future.

## FEDERAL FUNDING

The Federal Aviation Administration's (FAA) budget authorization bill expires in September 2015 and President Obama's proposed Fiscal Year 2016 Budget proposes changes to how grant programs are administered. The proposal would increase the federal cap on PFCs from \$4.50 to \$8.50 per flight segment and couple it with a \$450 million cut in Airport Improvement Program (AIP) funding. This would lower AIP to \$2.9 billion, as well as eliminate cargo and passenger entitlements for large hub airports.

Testifying before Congress on March 17, 2015, FAA Administrator Michael Huerta emphasized that the nation has a backlog of significant infrastructure improvements, especially at the country's largest airports. Cutting AIP funding while boosting the PFC cap would allow airports to help themselves. "The FAA reauthorization bill that Congress will consider this year is a good chance to align airport needs with the available revenues", Huerta said. The FAA must approve any airport capital project that is financed through PFCs, Huerta added.

Airports Council International - North America (ACI-NA) estimates that airports' capital development needs for 2015 through 2019, adjusted for inflation, is \$75.7 billion or \$15.1 billion annualized. 56 percent of the development is intended to accommodate growth in passenger and cargo activity. The group reports that \$15.1 billion in average annual funding needs for US airports is significantly higher than the funding available through annual AIP grants and new PFC revenue.

The airlines oppose the cap increase. Airlines for America (A4A), an airline trade group, calls the proposal "a historic tax hike" on the traveling public. In a letter to House and Senate leaders, airline CEOs said the PFC hike was not needed. The letter states that the proposal is "simply not necessary as significant airline investments combined with airports' resources and funding streams provide airports with the funds for improvement projects needed today and in the future."

In FY 2014, the Airport collected \$62.0 million in PFCs and received \$15.0 million in AIP capital contributions. Currently the Airport has a PFC eligible debt service short fall of approximately \$30 million.

## INDUSTRY OUTLOOK

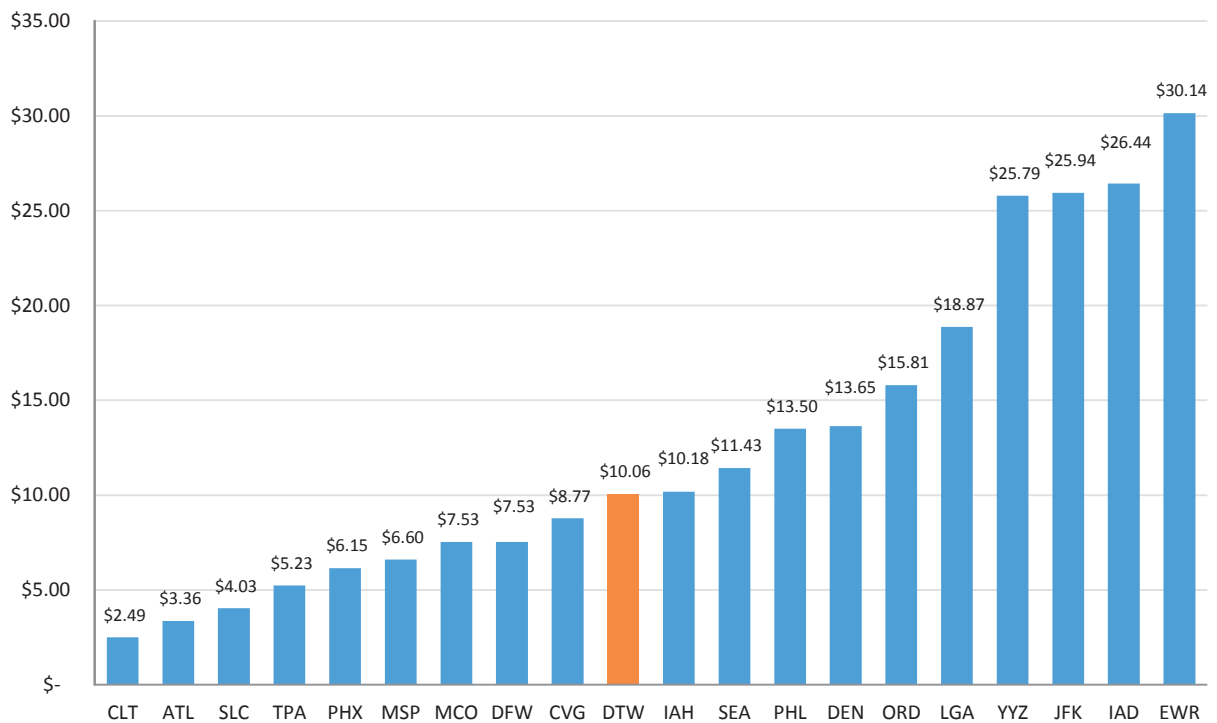
The financial outlook for the aviation industry is positive. Driven by US economic growth and consumer spending, demand for air service is very strong pushing system-wide enplanement growth to 3 percent - 4 percent in the coming year, according to Moody's investor services. To airports, enplanement growth translates into high parking and concessions revenue.



While the outlook is optimistic, the landscape for the year ahead is not without challenges, or risk. Hub airports vie for connecting passengers in a financially competitive landscape among peers, as measured by Cost per Enplanement (CPE). Capital needs are requiring airports to take on more debt which in turn is driving up CPE system-wide. Federal grants and Passenger Facility Charges (PFCs) contribute substantial resources toward airport capital improvements, however, the future of these programs is uncertain.

The Authority’s financial goal focuses on remaining cost competitive among peer airports which compete for connecting passengers. Across the airport industry, substantial capital improvements and the associated rise of debt expense are driving CPE increases. With two relatively new terminals, DTW is at a competitive advantage to peers undergoing massive terminal projects and assuming more debt. As illustrated below, the Airport’s CPE is competitive among peers. A plan of financial austerity that manages operating costs will help the Airport sustain its competitiveness.

Figure C - 12: Cost per Enplanement at Peer Airports FY 2014



Source: ACI-NA 2015 (FY 2014) Benchmarking Survey

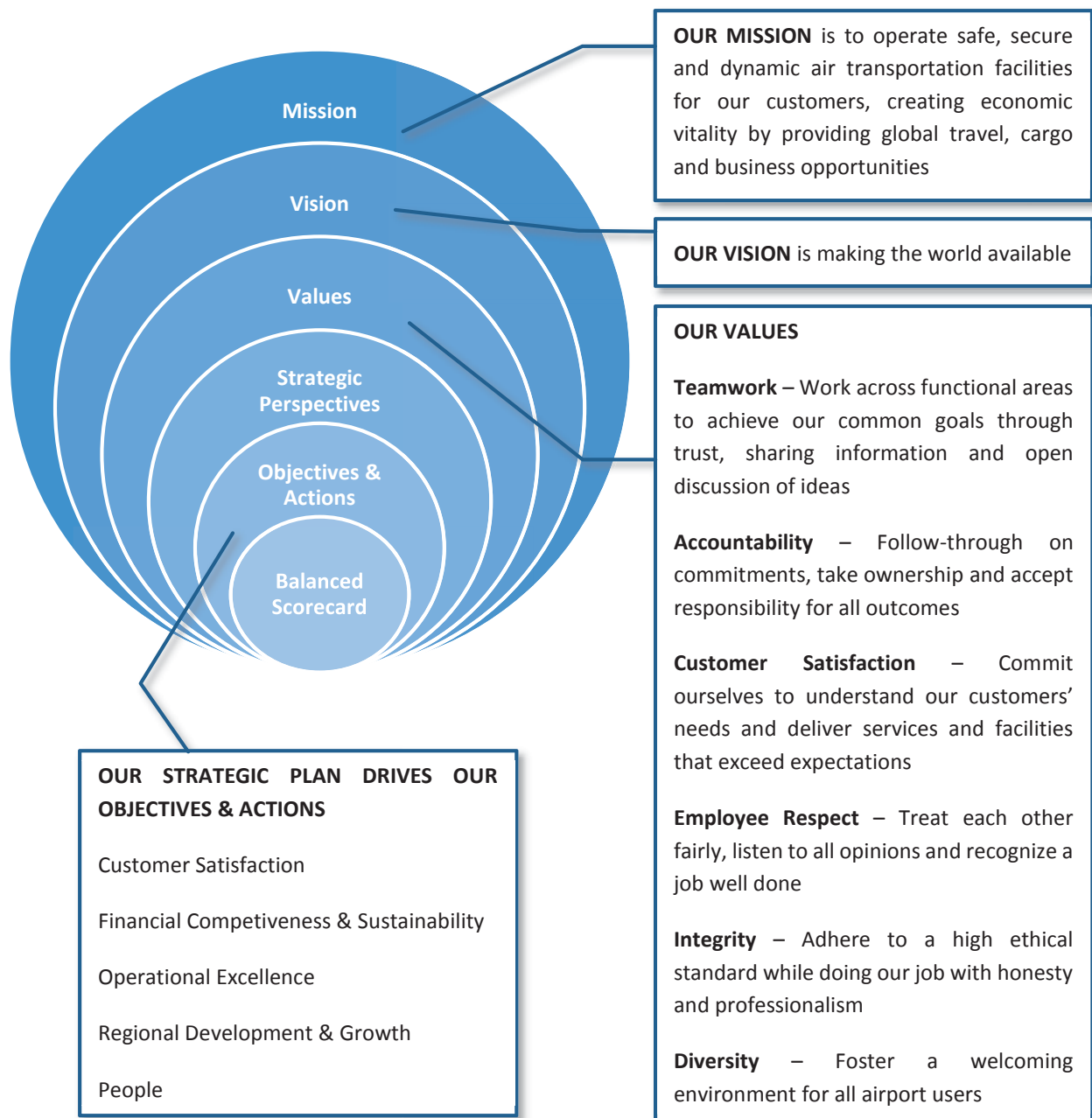
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# STRATEGIC PLAN & BALANCED SCORECARD

This section provides a cohesive explanation of the Authority’s strategy including the Mission, Vision and Values. It includes a complete description of the organization’s goals and the short and long term initiatives to achieve them.

## STRATEGIC PLAN

The Authority’s Mission, Vision, and Values drives the Strategic Plan and identifies five strategic focus areas used to align objectives with actions. The Strategic Plan provides a balanced approach, focusing on the current and future needs of customers and stakeholders to provide exceptional facilities, allows future growth and a gateway to the world. Airlines and travelers have many options regarding airports, routes, destinations and facilities to conduct their business. The Authority focuses on providing safe and secure facilities, world class amenities and services aimed at retaining current customers, attracting new ones and making Detroit Metropolitan Airport the airport of choice.



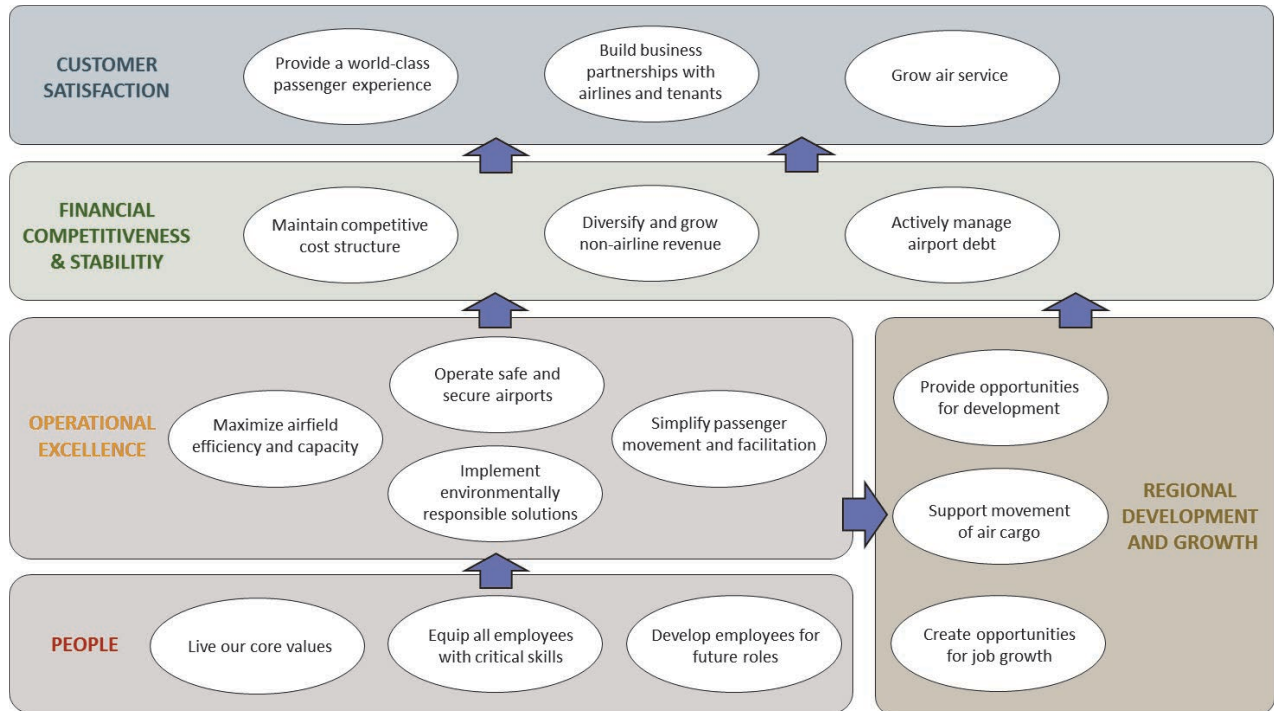
## FY 2016 CEO PERFORMANCE GOALS

The Airport Authority's CEO has developed performance goals to guide the organization in FY 2016. The goals are focused on customer satisfaction, operational excellence, people and regional development and growth.

- 1) Enrich Passenger Experiences – Implement new terminal events, programs and/or projects to further enhance the passenger experience in both terminals. Develop airport campus design criteria and standards to guide future roadway, landscaping and wayfinding improvements.
- 2) Advance Cost-Effective Environmental Sustainability Program Implementation – Make application to Airport Council International (ACI) Airport Carbon Accreditation Program to become a certified airport at the carbon mapping level. Implement additional cost-effective environmental sustainability projects including a coordinated Wayne County Airport Authority and Delta Air Lines recycling program for paper, plastics and cardboard.
- 3) Enhance Regional and Community Engagement – Conduct robust stakeholder and resident engagement and involvement during the Detroit Metropolitan Airport (DTW) and Willow Run Airport (YIP) Master Plan update processes. Explore and evaluate opportunities to create a unique brand for DTW that recognizes the qualities and strength of our region and airport.
- 4) Assist and Support Small Business Enterprises (SBE) and Disadvantaged Business Enterprises (DBE) – Enlist the support of regional organizations, entities and other resources to enhance outreach and collaboration activities, increase awareness of airport contract opportunities, identify and remove barriers affecting participation and develop enhanced SBE and DBE participation reporting.
- 5) Expand Employee Recruitment Program – Participate in additional inclusive events and programs to enhance outreach and recruitment of local residents for positions at the Airport Authority. Develop improved recruitment tools and programs focused on attracting talented people who support the Airport Authority's values of Teamwork, Accountability, Integrity, Customer Service, Employee Respect and Diversity.
- 6) Encourage Airport Development – Identify additional development sites and enhance the readiness of sites to accommodate future expansion of commercial, cargo, corporate and MRO activities. Expand the toolbox of site data and information to improve the effectiveness of marketing development opportunities at DTW and YIP.

STRATEGIC PERSPECTIVES & GOALS

Developed by the Senior Leadership Team, the Authority has identified five strategic perspectives to guide and shape the organization’s philosophy, culture and goals. The chart below illustrates the Authority’s goals by perspective and interconnectivity.



The Authority’s FY 2016 goals are grouped by strategic perspective and illustrated below.

CUSTOMER SATISFACTION

**Provide a World-Class Passenger Experience**

- Establish a cohesive "Oasis" airport campus
- Incorporate a sense of place in the terminals
- Advance airport wayfinding through use of mobile/digital means
- Concessions redevelopment and expanded customer amenities

FINANCIAL COMPETITIVENESS AND STABILITY

**Maintain Competitive Cost Structure**

- Engage and support national Passenger Facility Charge (PFC) reauthorization
- Advocate aviation fuel tax changes
- Actively manage and control employee pension plans and funding obligations
- Successfully complete upcoming cycle of labor contract negotiations

OPERATIONAL EXCELLENCE

<b>Implement Environmentally Responsible Solutions</b>	<ul style="list-style-type: none"><li>• Reduce carbon footprint</li><li>• Expand recycling program</li></ul>
<b>Operate Safe and Secure Airports</b>	<ul style="list-style-type: none"><li>• Build digital workplace; leverage digital technology in airport operations</li></ul>

REGIONAL DEVELOPMENT AND GROWTH

<b>Create Opportunities for Job Growth</b>	<ul style="list-style-type: none"><li>• Expand regional engagement and involvement (e.g., SBE/DBEs, internships, local community)</li></ul>
<b>Provide Opportunities for Development</b>	<ul style="list-style-type: none"><li>• Enhance readiness of development sites and make real estate available for development</li></ul>

PEOPLE

<b>Equip All Employees with Critical Skills</b>	<ul style="list-style-type: none"><li>• Adopt a continuous improvement methodology</li></ul>
<b>Develop Employees for Future Roles</b>	<ul style="list-style-type: none"><li>• Manage succession planning and employee development programs</li></ul>

**THE BALANCED SCORECARD APPROACH**

The Balanced Scorecard methodology was developed in the early 1990’s by Harvard professor Robert Kaplan and Boston-area consultant David Norton. It was originally devised as a performance measurement system that encompassed not only financial metrics, but also non-financial measures such as customer service, process improvement and learning and growth. Most organizations have separate strategic planning and budget development processes. Often, resources are allocated to meet financial goals but bear little relation to the strategic plan. Since its introduction, the Balanced Scorecard has evolved to become a widely-used method of linking an organization’s vision to its day-to-day operations.

The Authority utilizes the Balance Scorecard method to ensure success in achieving long term goals and maintaining balance of the strategic perspectives. The Authority has selected measures of progress from five scorecard perspectives: (1) customer satisfaction, (2) operational excellence, (3) financial competitiveness and sustainability, (4) regional development and (5) people. Performance targets for each measure are set for the coming years and the Authority’s performance targets are determined by the following:

- Benchmarking peer airports or comparable organizations
- Acknowledging the current fiscal year budget
- Improving upon historical performance
- Meeting an industry or comparable standard
- Recognizing current fiscal year projects that may impact performance
- Ensuring longer-term progress toward strategic objectives

A key component of the Balanced Scorecard is the integration of the budgeting and strategic planning processes so that resource allocation supports the organization’s strategic directions. Utilizing the Balanced Scorecard, the budget process focuses on (1) analyzing which actions or initiatives will be necessary to reach the above mentioned targets and (2) establishing the short-term milestones that will illustrate progress. The result establishes a link between strategic and financial decisions. Throughout the fiscal year, the Balanced Scorecard is reviewed by leadership to make strategic or financial management adjustments. Further, the Authority has implemented performance based salary incentives for staff and the Balanced Scorecard is used as a tool to determine merit pay.

The Authority first began using the Balanced Scorecard approach in FY 2008 and revised its strategic projections and goals during FY 2013. Implementation of the revised Scorecard was completed during FY 2014 and expansion of new measures that cascade down from the Authority and Division levels into the Department levels will continue in FY 2016. The Key Performance Measures are illustrated below.

Key Performance Measures	FY 2014 Actual	FY 2015 Target	FY 2016 Target
<b>Customer Satisfaction</b>			
Passengers: ASQ Survey - Overall Customer Satisfaction Rating (Out of Five)	4.25	4.25	4.35
Region/Community: # of Scheduled Non-Stop Travel Opportunities	192	183	188
<b>Operational Excellence</b>			
Airfield Efficiency: Average On-Time Airport Departure	82.1%	74.0%	83.0%

Key Performance Measures	FY 2014 Actual	FY 2015 Target	FY 2016 Target
Airfield Safety: Number of Airfield Incidents (DTW)	62	70	60
Employee Safety: WCAA OSHA Incident Rating	3.8	3.0	3.0
Passenger Facilitation: Average Customs & Border Patrol (CBP) Wait Time (in minutes)	17.3	15.5	15.8
<b>Financial Competiveness &amp; Sustainability</b>			
Airline Cost per Enplaned Passenger	\$10.42	\$10.50	\$10.32
Airport Debt Rating (S&P)	A Stable	A Stable	A Stable
Gross Parking Revenue per O&D Passenger	\$10.52	\$10.26	\$12.03
Gross Food, Beverage & Retail Revenue per Enplanement	\$10.41	\$10.22	\$10.99
Operating Cost per Enplanement (DTW)	\$12.32	\$12.43	\$12.72
Net Debt Service as % of Operating Revenue	28%	29%	29%
<b>Regional Development</b>			
Overall cargo tonnage handled at DTW	208,839	207,400	191,000
Overall cargo tonnage handled at YIP	89,504	90,340	84,000
Job creation as measured by the number of badged employees	18,977	19,000	19,000
<b>People</b>			
Core Values: Employee Satisfaction Survey	3.4	3.5	3.5
Employee Development: Time spent per employee on development for future roles (hours)	9.4	8.0	10.0
Employee Development: Total % execution on critical Skill Development Plans	24.5%	55.0%	100.0%
Succession Planning: Total % of positions with Succession Plans	19.6%	22.0%	46.0%



# BUDGET PROCESS & FISCAL POLICIES

This section contains an overview of the budget process followed by a detailed review of the Airport's revenues, expenses and assumptions used to develop the FY 2016 Budget.

As required by the Master Bond Ordinance and Public Act 90, the Authority is required to prepare and adopt a budget for the Airport, Willow Run Airport and the Airport Hotel prior to the commencement of each fiscal year (October 1 to September 30). The budget covers operation and maintenance expenses, debt service and other known monetary requirements of the Master Bond Ordinance and the Airport for each Operating Year.

## BUDGET PROCESS

### OVERVIEW

Budgeting serves as an important management tool to plan, control and evaluate the operations of the Authority. The Airport and Willow Run O&M budgets and the Airport Hotel's budget create the Authority's annual financial plan. These budgets must be sufficient to cover the operation and maintenance expenses of the airports, the debt service payable on bonds and other known financial requirements for the ensuing fiscal year. The Five-Year Capital Improvement Plan (CIP) is developed and approved on the same timeline.

### BUDGET PROCESS FOR FISCAL YEAR 2016

The Financial Planning & Analysis Department (FP&A) began the budget process by developing a White Paper to communicate the state of the aviation industry including economic challenges and opportunities. The Paper also focused on the Authority's operational challenges for the year ahead and was presented to the Authority Board and Senior Leadership team in May as a primer to the FY 2016 Budget.

The next task was to reach out to the Airlines for their forecasted FY 2016 activity, the key driver of landing fees and non-airline revenue for the Airport. The submitted landed weight and enplanement projections were compared against the published airline schedules, current load factors, Federal Aviation Administration (FAA) forecasts and historical trends for reasonableness.

Cooperatively, FP&A and the Authority's operating divisions developed a base budget to estimate revenues and expenses. The base budget:

- Assumed all Authority departments would enhance their level of service and find operational and process improvement efficiencies to support CEO initiatives
- Provided for known contractual or staffing changes
- Developed non-airline revenues (e.g. parking, car rental, concessions, etc.) with the assumption that rates, charges and fees would either stay consistent with the current fiscal year or include growth assumptions based on new contracts or historical trends
- Included input from both McNamara and North Terminal tenants, along with their representatives, for terminal related expenses

Budget initiatives submitted by departments to accomplish the Authority's goals and objectives were analyzed by FP&A and reviewed by the Senior Leadership team. Approved initiatives were added to the budget and presented to the Board for review.

Once the preliminary budget was established, it was presented to representatives from each of the Airlines at the annual budget meeting to help them understand the financial priorities and plan for the upcoming fiscal year and,

most importantly, to inform them of the preliminary rates and charges. The landing fees and rental rates are used by the Airlines to help determine their respective fiscal budgets. The meeting provides a forum to discuss concerns and suggestions that the Airlines may have in relation to the operation of the Airport. Recommendations from the Airlines were taken into consideration and modifications to the budget were made, where necessary.

The final budget and resolution was presented to the Board on September 16<sup>th</sup> for their review and adoption. The new fiscal year landing fees and rental rates were mailed to the Signatory Airlines on September 21<sup>st</sup>.

**BUDGET PROCESS CALENDAR**

The following chart summarizes the budget process:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Preparation</b>												
Develop White Paper				→								
Establish Timeline/Milestones				→								
Submit Aviation Forecast request to Airlines				→								
Budget/Munis Training				→								
Departments prepare draft budget & forms					→							
<b>Budget Development</b>												
Department Meetings					→							
Update 5-year Capital Improvement Plan					→							
Enplanements & Landed Weights Forecast					→							
Revenue & Expenses Forecast					→							
Budget staff prepares budget					→	→	→	→	→			
Develop Scorecard					→	→	→	→	→			
Calculate Rates & Charges					→	→	→	→	→			
Review Budget Initiatives & Technology Service Requests						→						
Budget review with the Board and Airlines							→	→	→			
<b>Finalize and Adopt</b>												
CEO finalizes recommendations									→			
Proposed budget presented to the Board at Public Hearing									→			
Adoption of the budget									→			
Notice to Airlines submitted									→			

**FISCAL POLICIES**

The financial operation of the Authority is governed primarily by the Master Bond Ordinance and by the Airline Use and Lease Agreements (the Agreements). The Master Bond Ordinance provides conditions for the issuance of bonds and the application of revenues to the payment of operating expenses and debt service.

**BASIS OF BUDGETING**

The Airport’s basis of budgeting is the same as the basis of accounting, except that the budget strictly conforms to the applicable provisions of the Master Bond Ordinance and the Agreements with the Airlines, which defines the full

cost recovery or residual rate setting methodology of the Airport. Airport budget methodologies throughout the United States are usually characterized as either compensatory or residual, although some airports have a hybrid model that combines features from both. The Airport does not budget for depreciation and has additional funds that are audited but only the Operation and Maintenance funds are budgeted.

For consistency, the basis of budgeting for the Airport’s O&M fund, Willow Run’s O&M fund and the Airport Hotel’s O&M fund are the same, and the budget for each entity is approved and adopted by the Board. However, Willow Run Airport is a compensatory airport, meaning it does not have Signatory Agreements and therefore no year-end adjustments are made for their airlines.

The main purpose of the annual budget is to prepare an itemized statement of the estimated current operational expenses and the expenses for capital outlay including amounts necessary to pay the principal and interest of any outstanding bonds or other obligations of the Airport, as well as estimate the revenue generated from non-airline sources to ultimately determine the additional airline revenue needed to balance revenues to expenses. Airline revenues are comprised of airline rental rates, international facility use fees and landing fees.

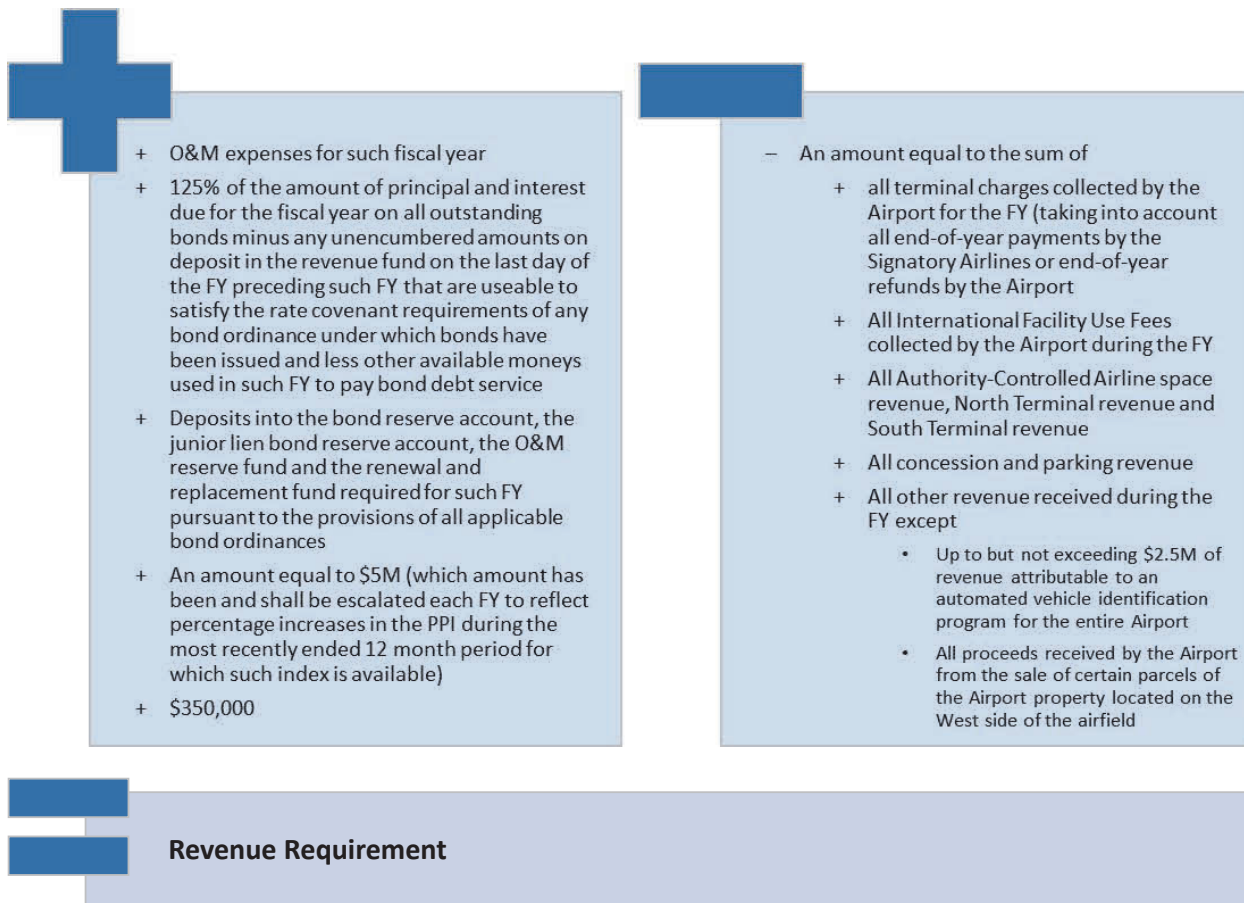
The airline rental rates are determined by a cost center allocation methodology as defined in Exhibit E of the Airport Use and Lease Agreement (Figure E - 1) for the purpose of allocating the cost of O&M expenses, bond debt service and other available money each year between the South Terminal, North Terminal and Airport cost centers.

Figure E - 1: Exhibit E of the Airport Use and Lease Agreement - Cost Center Allocation Methodology

North Terminal	South Terminal	Rest of Airport
<p>O&amp;M Expenses attributable to the operations and maintenance of the North Terminal (Preferential, Shared Use, public and Authority controlled airline space), including any passenger bridges and connectors to parking garages as well as immediate curbside. These expenses include, but are not limited to, the following:</p> <ul style="list-style-type: none"> <li>• Costs of janitorial services, cleaning and minor repairs of all North Terminal space and the mechanical equipment therein (including conveyance systems and baggage handling systems)</li> <li>• Costs of operation and maintenance of all building-wide services such as heating, cooling, lighting, and electrical services</li> <li>• Costs of maintenance and repairs of the interior and exterior floors, walls, ceilings and roof</li> <li>• Property insurance costs</li> </ul>	<p>O&amp;M Expenses attributable to the operations and maintenance of the South Terminal (Preferential, Shared Use and public space), including any passenger bridges and connectors to parking garages as well as immediate curbside. These expenses include, but are not limited to, the following:</p> <ul style="list-style-type: none"> <li>• Costs of janitorial services, cleaning and minor repairs of all South Terminal space and the mechanical equipment therein (including conveyance systems and baggage handling systems)</li> <li>• Costs of operation and maintenance of all building-wide services such as heating, cooling, lighting, and electrical services</li> <li>• Costs of maintenance and repairs of the interior and exterior floors, walls, ceilings and roof</li> <li>• Costs of utilities (includes HVAC, water, sewage, electric, etc.)</li> <li>• Property insurance costs</li> </ul>	<p>O&amp;M Expenses not allocated to either the North Terminal Cost Center or the South Terminal Cost Center. These expenses include, but are not limited to, the following:</p> <ul style="list-style-type: none"> <li>• Payroll and fringe benefit costs of Authority employees</li> <li>• Costs associated with all parking garages, lots and facilities</li> <li>• All costs associated with Airport access roadways, including Airport signage</li> <li>• Shuttle bus costs</li> <li>• General Airport costs (i.e. landscaping, insurance not allocated to the North Terminal Costs Center or the South Terminal Cost Center, fire &amp; rescue, etc.)</li> <li>• Cost of utilities (including HVAC, water, sewage, electric, etc.) not allocated to the North Terminal Cost Center or the South Terminal Cost Center</li> <li>• County chargebacks</li> <li>• Cost of capital items procured from O&amp;M budget</li> <li>• All airfield costs, including expense attributable to the North Terminal and South Terminal aprons and taxiways</li> <li>• Professional services contracts and costs</li> </ul>

Landing fee revenue is defined as the “Revenue Requirement” in the Airport Use and Lease agreement and is the amount of revenue needed to produce total net revenue equal to the sum of:

Figure E - 2: Airport Use and Lease Agreement - Revenue Requirement



The Airport divides the Revenue Requirement by the aggregate amount of approved maximum landing weight of aircraft of all Signatory Airlines for the fiscal year to determine the Landing Fee to be paid by the Signatory and Non-Signatory Airlines.

At the conclusion of each fiscal year, the Authority must provide the Signatory Airlines with a report of terminal rentals and landing fee revenues. If the revenues do not adequately cover the operational expenses and debt obligations, the Signatory Airlines are required to pay the difference. Alternatively, if the revenues exceed expenses after all operational and debt needs are met, the Authority is required to refund airline overpayments.

**BASIS OF ACCOUNTING**

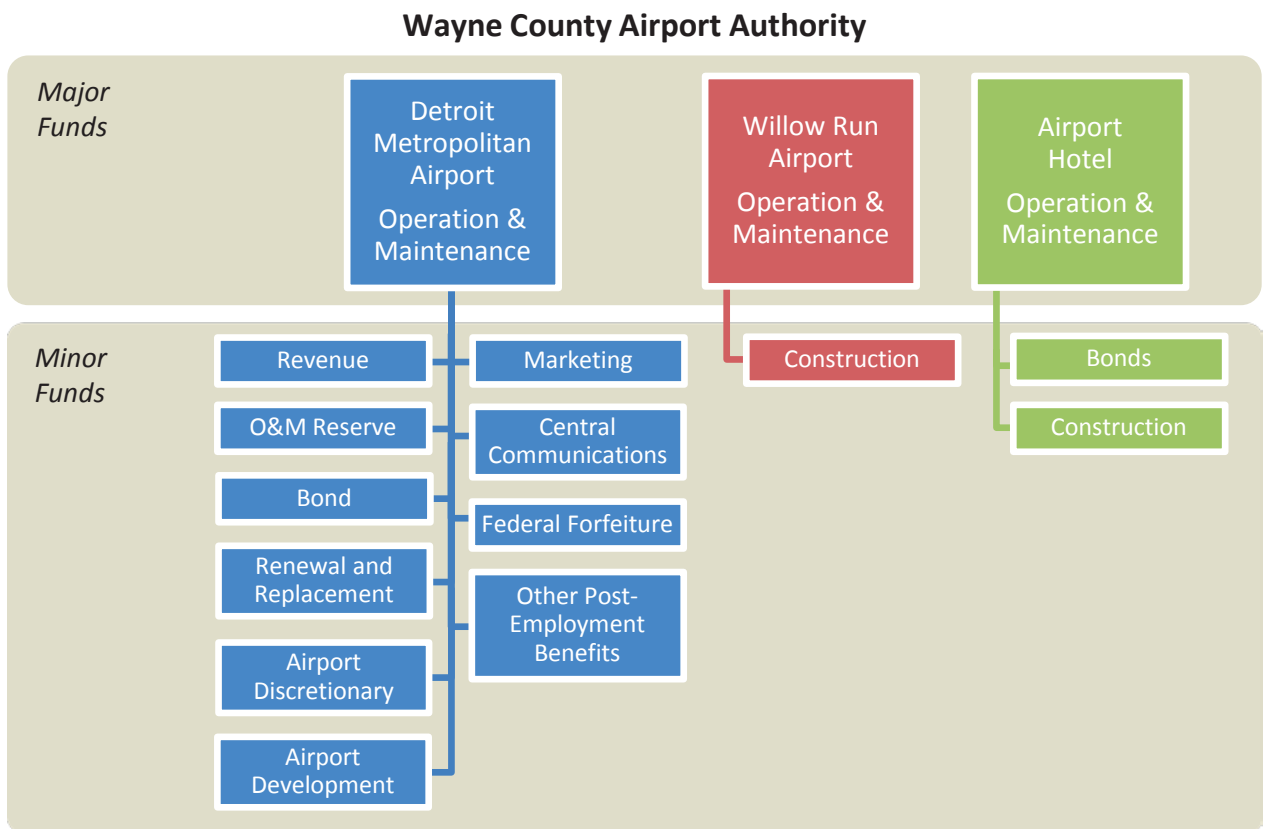
The Authority’s financial statements are prepared in accordance with Generally Accepted Accounting Principles (GAAP) as promulgated by Governmental Accounting Standards Board (GASB) principles. The financial statements of the Authority are presented on the full accrual basis of accounting and are accounted for on the flow-of-economic-resources measurement focus as applicable to governmental units; revenues are recorded when earned and expenses are recorded as incurred.

FUND STRUCTURES & DEFINITIONS

There are three separate operating funds used to manage the Authority’s day-to-day finances: the Airport O&M Fund, the Willow Run Airport O&M Fund and the Airport Hotel O&M Fund. The largest fund is the Airport O&M fund which covers the operations of the Airport and accounts for 100 percent of all of the Airport’s departmental expenses. The Board of Directors only approve budgets for the three O&M funds.

The Authority manages various designated and construction funds to account for specific activities and projects. The terms “designated” and “construction funds” are categories used internally for the management and operation of the Authority. The matrix below illustrates the relationships between the Authority’s fund structures. As noted, the major funds are used to account for all financial transactions and resources for the Authority for all divisions and departments.

Figure E - 3: WCAA Fund Structure



REVENUE FUND

The Master Bond Ordinance defines “Revenues” to mean the general revenues derived from the operation of the Airport, which includes all amounts deposited in the Revenue Fund, from whichever source, and all income derived from, but not necessarily limited to, the following:

- Charges, fees, rentals, and rates, charged for services, facilities, and commodities furnished by the Airport, whether such income is derived from its function as an Airport or not
- Concessions, rentals, auto parking fees, service charges derived from the operation of the terminal complex buildings and facilities
- Airplane landing fees

- Non-airline gasoline fees
- Miscellaneous charges and rentals from other facilities and services
- Investment earnings or general revenues derived from the operation of the Airport accumulated by the Authority prior to deposit to the Revenue Fund

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#### O&M RESERVE FUND

The O&M Reserve Fund is funded to an amount equal to one-twelfth of estimated annual O&M expenses in the most recent Authority budget for the Airport. Via transfers from the Revenue Fund, the fund is adjusted to reflect changes in O&M expenses as they are estimated by the Authority in its budget for the Airport.

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#### BOND FUND

Except as otherwise provided in the Master Bond Ordinance, moneys on deposit in the Bond Fund are used for the purpose of paying the principal, redemption price, or interest on bonds.

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#### RENEWAL AND REPLACEMENT FUND

The Renewal and Replacement Fund is intended for paying:

- Costs of completing or replacing capital improvements at the Airport
- Making repairs, replacements, or renovations at the Airport

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#### AIRPORT DISCRETIONARY FUND

At the discretion of the CEO, and subject to applicable agreements, balances in the Airport Discretionary Fund can be applied to the payment of any cost or expense of the Authority incurred for any lawful purpose at the Airport or Willow Run Airport.

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#### AIRPORT DEVELOPMENT FUND

At the written discretion of the CEO, balances in the Airport Development Fund can be applied to the payment of any capital cost or expense of the Authority incurred for any lawful airport system related purposes.

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#### MARKETING FUND

The Marketing Fund represents fees paid to the Authority on a monthly basis equal to 0.25 percent of each Concessionaire's gross sales which can be used for advertising, publicity and/or other promotional materials and activities to market concessions and other services offered at the Airport.

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#### CENTRAL COMMUNICATIONS FUND

Prior to 2008, the Central Communications Fund collected revenues and was used for most expenses related to central communications for facilities, maintenance and public safety. This fund is closed to revenue inflow and is being used for approved communication purchases.

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#### FEDERAL FORFEITURE FUND

Federal Forfeiture Fund represents receipts for asset forfeitures and can be used for specific expenses that are allowable under the guide to equitable sharing for state and local law enforcement agencies.

## OTHER POSTEMPLOYMENT BENEFITS FUND

In accordance with GASB Statement No. 43, 'Financial Reporting for Postemployment Benefit Plans Other than Pension Plans' and GASB No. 45, 'Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions', the Authority created in September 2008 an Act 149 Health Care Trust. This trust provides a funding mechanism for post-2002 retiree health, dental, and life insurance coverage and other postemployment benefits other than pensions. The Authority began funding the trust and fully implemented GASB Statements No. 43 and No. 45 in September 2008. In September 2012, the Authority transferred these funds into a Municipal Employees' Retirement System (MERS) of Michigan Retiree Health Funding Vehicle, which is held in a separate reserve, but invested on a pooled basis by MERS with other governmental units.

## REVENUE RECOGNITION

Operating revenues are recorded as revenues at the time that services are rendered. Non-exchange transactions, in which the Authority receives value without directly giving equal value in return, include grants and capital contributions. Federal and state grants and capital contributions are recognized as revenues when the eligibility requirements, if any, are met.

## OPERATING & NON-OPERATING REVENUES AND EXPENDITURES

The Authority has classified its revenues and expenses as either operating or non-operating according to the following criteria:

**Operating** – Operating revenues and expenses include activities that have the characteristics of exchange transactions such as revenues from landing and related fees, concession fees and expenses paid to employees and vendors for goods and services.

**Non-operating** – Non-operating revenues and expenses include activities that have the characteristics of non-exchange transactions that are defined as non-operating by GASB No. 9, Reporting Cash Flows of Proprietary and Nonexpendable Trust Funds and Governmental Entities That Use Proprietary Fund Accounting, such as revenue from federal and state grants, contributions, investment income and expenses for capital debt.

## NET POSITION

Net position equity is displayed in three components as follows:

- **Net Investment in Capital Assets** – This consists of capital assets, net of accumulated depreciation, less the outstanding balances of any bonds, notes or other borrowings that are attributable to the acquisition, construction or improvement of those assets.
- **Restricted** – This consists of net position that is legally restricted by outside parties or by law through constitutional provisions or enabling legislation. When both restricted and unrestricted resources are available for use, generally it is the Authority's policy to use restricted resources first and then unrestricted resources when they are needed.
- **Unrestricted** – this consists of net position that does not meet the definition of "restricted" or "net investment in capital assets".

Assets and liabilities are generally measured using current values. One exception is capital assets, which are stated at historical cost less an allowance for depreciation. Figure E-4 presents the forecast for FY 2016 operating results of the Authority, including restricted and unrestricted resources, non-operating revenues and expenses and revenues and expense estimates of funds that are not budgeted (i.e. discretionary, fiduciary and restricted). The estimate also

includes all funds in the Authority’s audited financial statements including, but not limited to, the O&M funds for the Airport, Willow Run and Airport Westin Hotel.

The Authority’s estimated change in net position for FY 2016 is a decrease of \$33.1 million (-9.6 percent).

Figure E - 4: Estimated Change in Net Position FY 2016

<i>(\$ in thousands)</i>	Detroit Metropolitan Airport Fund	Willow Run Airport Fund	Airport Westin Hotel Fund	Wayne County Airport Authority Total
<b>Estimated Net Position - Start of the Year (10/1/2015)</b>	\$ 305,579	\$ 87,797	\$ (49,868)	\$ 343,509
<b>Airline Revenue</b>				
Landing Fees	76,795	642	-	77,436
Airline Rents and Other Fees	86,726	267	-	86,993
Facility Use Fee	7,782	297	-	8,078
<b>Non-Airline Revenue</b>				
Parking	68,887	-	-	68,887
Car Rental	22,700	-	-	22,700
Concessions	35,398	-	-	35,398
Ground Transportation	5,149	-	-	5,149
Shuttle Bus	2,150	-	-	2,150
Utility Service Fee	5,151	126	-	5,277
Rent	3,304	937	-	4,241
Other Revenue	1,565	19	-	1,583
Charges For Services	1,964	687	-	2,651
Hotel Operating Expenses	-	-	31,078	31,078
<b>Total Operating Revenue</b>	<b>317,570</b>	<b>2,974</b>	<b>31,078</b>	<b>351,621</b>
<b>Operating Expenses by Category</b>				
Salaries, Wages & Employee Benefits	83,071	1,405	-	84,476
Materials & Supplies	9,241	174	-	9,415
Professional & Contractual Services	50,766	856	-	51,622
Hotel Expenses	-	-	20,001	20,001
Insurance	2,184	34	-	2,218
Utilities	26,465	710	-	27,175
Repair & Maintenance	36,423	593	-	37,016
Other Operating Expense	4,258	450	-	4,708
Depreciation	135,217	2,492	3,881	141,589
<b>Total Operating Expenses</b>	<b>347,625</b>	<b>6,714</b>	<b>23,882</b>	<b>378,221</b>
<b>Operating Income (Loss)</b>	<b>(30,055)</b>	<b>(3,741)</b>	<b>7,196</b>	<b>(26,600)</b>
<b>Non-Operating Revenue (Expenses)</b>				
PFC Revenue	64,858	-	-	64,858
CFC Revenue	3,331	-	-	3,331
Interest Income	574	5	28	608
Interest & Financing	(79,405)	-	(5,405)	(84,810)
Grants	819	21	-	840
<b>Total Non-Operating Revenues (Expenses)</b>	<b>(9,823)</b>	<b>27</b>	<b>(5,377)</b>	<b>(15,173)</b>
Capital Contributions	8,110	570	-	8,680
Transfers In (Out)	(3,000)	3,000	-	-
<b>Change in Net Position</b>	<b>(34,768)</b>	<b>(144)</b>	<b>1,819</b>	<b>(33,093)</b>
<b>Estimated Net Position - End of Year (9/30/2016)</b>	<b>\$ 270,812</b>	<b>\$ 87,653</b>	<b>\$ (48,049)</b>	<b>\$ 310,416</b>

May not sum to total due to rounding

Schedule encompasses all funds in the Authority’s audited financial statements including, but not limited to, the O&M funds.



## CAPITAL IMPROVEMENT PLAN GUIDELINES

### ALIGNMENT

The Authority coordinates the development of the Capital Improvement Plan (CIP) with the development of the 20 Year Master Plan, Strategic Plan and O&M Budget. Projects are selected based on their alignment to the long-term goals and strategic priorities.

### CAPITAL BUDGET DEVELOPMENT

The five-year plans for the Capital Improvement Program at the Airport and Willow Run Airport are analyzed and updated to reflect active and future capital projects that are scheduled to begin within the next five years. They proactively plan for the replacement or reconstruction of essential infrastructure components that are nearing the end of their service life and take advantage of scheduling and coordinating execution of multiple projects to minimize operational impact and maximize fiscal efficiency. The plans are important tools used for formulating future bond issues and maximizing federal and state grant opportunities.

This is discussed further in the Capital Improvement Program chapter (page H-1).

## DEBT FINANCING PRINCIPLES

### ISSUANCE

The Authority issues General Airport Revenue Bonds (GARBs) to finance a major portion of the CIP. The bonds are revenue obligations of the Authority and do not constitute indebtedness to the County of Wayne or the State of Michigan within the meaning of any constitutional, statutory or charter provision or limitation. Neither the credit nor the taxing power of the County or the State is pledged for the payment of principal, premium (if any) or interest on the bonds. The Authority pledges its net revenues, as defined in the Authority's Master Airport Revenue Bond Ordinance, toward the repayment of the bonds.

The Authority has established the following guidelines for managing the long-term debt program:

- Debt financing is undertaken for required capital projects after all reasonable financing alternatives, including the use of Passenger Facility Charges (PFCs) and grants are considered
- Pay-as-you-go mode of financing is utilized to fund capital improvement projects to the extent feasible
- Long-term debt is not used to finance current non-capital expenditures
- Debt issues are structured based on attributes of the types of projects financed and market conditions at the time of issuance
- Financial advisors are retained for advice on debt structuring
- Policy on required continuing disclosure is maintained, including filing certain financial information and operating data with Nationally Recognized Municipal Securities Information Depositories and with the relevant State Information Depository
- The Authority defers the difference between the reacquisition price and the net carrying amount of the old debt in refundings in accordance with the provisions of GASB Statement No. 23, Accounting and Financial Reporting for Refundings of Debt Reported by Proprietary Activities. The deferred amount is amortized and recorded as a component of interest expense in accordance with the standard.

## DEBT LIMITS

The Authority has no legal debt limit, however, GARBs cannot be issued without Weighted Majority approval of the Signatory Airlines.

## FINANCIAL RESERVE POLICIES

The Authority maintains financial reserves to:

- Have funds available for an emergency or unexpected event
- Maintain or enhance the Authority's financial position and bond ratings
- Provide cash flow for operations prior to the receipt of airline and non-airline revenues

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## THE AIRPORT FUND RESERVES

The Detroit Metropolitan Airport Operating Fund is required (pursuant to Michigan Public Act 90) to maintain an operating reserve equal to one-twelfth of operating expenses. The reserve must be funded quarterly as needed and based on budgeted operating expenses.

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## WILLOW RUN AIRPORT FUND RESERVES

The Willow Run Airport Operating Fund is not required to maintain any operating reserve.

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## AIRPORT HOTEL FUND RESERVES

The Airport Hotel Operating Fund is required (pursuant to Michigan Public Act 90) to maintain three reserves. The first is an operating reserve of \$3.0 million, the second allows for centralized service fees equal to one-twelfth of the fixed centralized service fees for any year and the third covers the replacement of furniture, fixtures and equipment equal to 5.0 percent of hotel gross revenue for the year.

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## SURPLUS & DEFICIT PROCEDURES

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### THE AIRPORT FUND

The residual funding methodology stipulates that Signatory Airlines are required to fund any deficit of the Airport and the Authority is required to refund any surplus each fiscal year.

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### WILLOW RUN AIRPORT FUND

Excess operational surpluses may be used to pay down debt, fund capital improvement projects or support ongoing operations. If need be, operational deficits are made whole by transfers from Authority discretionary funds.

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### AIRPORT HOTEL FUND

After the Airport Hotel funds operating needs, Furniture, Fixtures & Equipment (FF&E) investments, reserve requirements and debt obligations, excess proceeds may be transferred to the Airport Development Fund (ADF). The Airport Hotel Fund will draw on reserve balances to manage cash short-falls if there is an operational deficit.

## INVESTMENT POLICIES

### CASH & INVESTMENTS

Cash resources of the individual funds of the Authority, except as specifically stated by ordinance, are pooled and invested. Interest on pooled investments is allocated monthly among the respective funds based on average investment balances. Interest earned, but not received, at year end is accrued. Investments are stated at fair market value, which is based on quoted market prices.

Michigan Compiled Laws Section 129.9 1 (Public Act 20 of 1943, as amended), authorizes the Authority to make deposits and invest in the accounts of federally insured banks, credit unions and savings and loan associations that have offices in Michigan. The Authority may invest in bonds, securities and other direct obligations of the United States or any agency or instrumentality of the United States, repurchase agreements, bankers' acceptances of United States banks, commercial paper rated within the two highest classifications, which matures not more than 270 days after the date of purchase, obligations of the State of Michigan or its political subdivisions, which are rated as investment grade and mutual funds composed of investment vehicles that are legal for direct investment by local units of government in Michigan.

The investment policy adopted by the Authority in accordance with Public Act 20 of 1943, as amended, authorizes investments in US Treasuries, US agencies and instrumentalities (date specific maturities only), non-negotiable certificates of deposits, commercial paper (rated A2/P2 or above), bankers' acceptances, repurchase agreements, overnight deposits or mutual funds. For overnight deposits, the treasurer may invest in overnight or short-term liquid assets to cover cash flow requirements in the following types of pools: investment pools organized under the Surplus Funds Investment Pool Act of 1982, PA 367, 1 MCL 129.111 to MCL 129.118 or investment pools organized under the Urban Cooperation Act of 1967, PA 7, MCL 124.501 to 124.512. For mutual funds, the treasurer may invest in no-load fixed income mutual funds composed of investment vehicles, which are legal for direct investment by local units of government in Michigan, either taxable or tax-exempt. This authorization is limited to mutual funds whose intent is to maintain a net asset value of \$1.00 per share.

### CASH FLOWS

For purposes of the statement of cash flows, the Authority considers all highly liquid investments, including restricted assets, with a maturity of three months or less when purchased to be cash equivalents. All pooled investments qualify as cash equivalents.

## FIXED ASSET ACCOUNTING PROCEDURES

### DEFINITION OF A FIXED ASSET

Capital assets are stated at the estimated historical cost. Depreciation is computed using the straight line method over the following estimated useful lives of the assets:

- Buildings & Improvements 10 – 50 years
- Equipment & Vehicles 3 – 12 years
- Infrastructure 10 – 40 years

Expenditures with a cost of \$5,000 or more for capital assets and for major renewals and betterments that extend the estimated useful life of the assets are capitalized; routine maintenance and repairs are charged to expense as incurred. All costs relating to the construction of property and equipment owned by the Authority are capitalized, including salaries, employee benefits and interest costs during construction. At the time fixed assets are sold, retired

or disposed of, the costs of such assets and related accumulated depreciation are removed from the accounts and any gain or loss is reflected in the results of operations.

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#### ACQUISITION OF FIXED ASSETS

Assets may be acquired through many methods including purchases, project construction, capital leases, donations, exchanges, fabrication, loans, grants, contract receipts or rent credits.

Capital items (fixed assets) are identified as either:

- **New** – Through the initiative of the approved budget and/or the Capital Improvement Plan that justifies its purchase and alignment with the Authority’s strategic plan
- **Replacement** – Through capital asset maintenance programs or, as budgeted funds allow, for items already in the inventory
- **Emergency** – Ad-hoc needs are addressed at the discretion of the Chief Executive Officer

The procedures for purchasing fixed assets are:

- New and replacement capital items must be identified in the approved budget or the Capital Improvement Plan (CIP)
- The departments must coordinate with the Department of Financial Planning & Analysis to ensure that funding is secured before initiating the procurement sequence
- The departments initiate the purchase of an item in accordance with the Authority’s procurement ordinance

Once the item has been ordered or received, the vendors forward any invoices to accounts payable. The capitalization and subsequent addition to the inventory is made on payment date.

# BUDGET OVERVIEW

This section contains detailed information about the Airport's revenues, expenses and assumptions used to develop the FY 2016 Budget. It begins with the Airport Authority Three Year Consolidated Financial Summary followed by the Summary of DTW Revenues and Expenses. An explanation of the assumptions used to develop the FY 2016 Budget and an Airport Authority Staffing Summary round out the chapter.

AIRPORT AUTHORITY THREE YEAR CONSOLIDATED FINANCIAL SUMMARY

(\$ in thousands)	Detroit Metropolitan Airport			Willow Run Airport			Westin Hotel			Total		
	FY 2014 Actual	FY 2015 Budget	FY 2016 Budget	FY 2014 Actual	FY 2015 Budget	FY 2016 Budget	FY 2014 Actual	FY 2015 Budget	FY 2016 Budget	FY 2014 Actual	FY 2015 Budget	FY 2016 Budget
<b>Revenues</b>												
<b>Airline Revenues</b>												
Landing Fees	\$ 75,780	\$ 71,515	\$ 76,795	\$ 627	\$ 630	\$ 642	\$ -	\$ -	\$ -	\$ 76,406	\$ 72,145	\$ 77,436
Rent	84,915	88,847	86,726	254	244	267	-	-	-	85,169	89,091	86,993
Facility Use Fee	8,362	8,750	7,782	247	255	297	-	-	-	8,609	9,005	8,078
<b>Total Airline Revenues</b>	<b>169,057</b>	<b>169,112</b>	<b>171,303</b>	<b>1,128</b>	<b>1,129</b>	<b>1,205</b>	-	-	-	<b>170,184</b>	<b>170,241</b>	<b>172,507</b>
<b>Non-Airline Revenues</b>												
Parking	61,187	63,761	68,887	-	-	-	-	-	-	61,187	63,761	68,887
Car Rental	21,909	22,020	22,700	-	-	-	-	-	-	21,909	22,020	22,700
Concessions	31,874	31,568	35,000	-	-	-	-	-	-	31,874	31,568	35,000
Ground Transportation	5,453	5,316	5,149	-	-	-	-	-	-	5,453	5,316	5,149
Shuttle Bus	2,032	2,050	2,150	-	-	-	-	-	-	2,032	2,050	2,150
Utility Service Fee	4,904	5,287	5,151	123	120	126	-	-	-	5,027	5,407	5,277
Rent	2,975	2,810	3,304	996	914	937	-	-	-	3,971	3,723	4,241
Other Revenue	1,742	1,090	1,280	68	36	19	-	-	-	1,811	1,126	1,299
Charges For Services	2,100	1,867	1,964	618	591	687	-	-	-	2,718	2,458	2,651
Hotel Operating Revenue	-	-	-	-	-	-	29,620	27,745	31,078	29,620	27,745	31,078
<b>Total Non-Airline Revenues</b>	<b>134,177</b>	<b>135,768</b>	<b>145,584</b>	<b>1,805</b>	<b>1,661</b>	<b>1,769</b>	<b>29,620</b>	<b>27,745</b>	<b>31,078</b>	<b>165,602</b>	<b>165,174</b>	<b>178,431</b>
<b>Non-Operating Revenues</b>												
Grants	1,030	865	819	-	-	21	-	-	-	1,030	865	840
Interest Income	76	100	100	0	2	1	16	47	26	93	149	127
Insurance Recovery	281	-	-	-	-	-	-	-	-	281	-	-
<b>Total Non-Operating Revenues</b>	<b>1,387</b>	<b>965</b>	<b>919</b>	<b>0</b>	<b>2</b>	<b>23</b>	<b>16</b>	<b>47</b>	<b>26</b>	<b>1,403</b>	<b>1,014</b>	<b>968</b>
<b>Total Revenues</b>	<b>\$ 304,621</b>	<b>\$ 305,845</b>	<b>\$ 317,806</b>	<b>\$ 2,933</b>	<b>\$ 2,792</b>	<b>\$ 2,996</b>	<b>\$ 29,636</b>	<b>\$ 27,792</b>	<b>\$ 31,104</b>	<b>\$ 337,190</b>	<b>\$ 336,429</b>	<b>\$ 351,906</b>
<b>Expenses</b>												
<b>Operating Expenses</b>												
Salaries & Wages	\$ 46,661	\$ 43,498	\$ 48,191	\$ 850	\$ 780	\$ 908	\$ -	\$ -	\$ -	\$ 47,511	\$ 44,277	\$ 49,099
Employee Benefits	27,027	25,451	29,644	463	464	497	-	-	-	27,490	25,915	30,141
Materials & Supplies	8,769	7,943	9,206	137	114	174	-	-	-	8,906	8,057	9,380
Parking Management	6,630	7,119	5,543	-	-	-	-	-	-	6,630	7,119	5,543
Shuttle Bus	6,123	6,498	6,839	-	-	-	-	-	-	6,123	6,498	6,839
Janitorial	11,792	12,037	12,125	18	25	45	-	-	-	11,810	12,062	12,170
Security	2,511	2,638	2,793	-	-	-	-	-	-	2,511	2,638	2,793
Contractual Services	24,490	21,490	22,465	766	716	811	-	-	-	25,256	22,205	23,276
Hotel Expenses	-	-	-	-	-	-	19,006	18,930	20,001	19,006	18,930	20,001
Insurance	2,200	2,172	2,184	36	42	34	-	-	-	2,237	2,214	2,218
Utilities	28,441	27,083	26,465	851	673	710	-	-	-	29,292	27,756	27,175
Buildings & Grounds	15,092	18,820	18,265	414	277	314	-	-	-	15,506	19,097	18,579
Equipment Repair	16,051	17,402	19,158	113	277	279	-	-	-	16,164	17,679	19,437
Other Operating Expense	4,460	4,202	4,066	437	438	450	-	-	-	4,897	4,640	4,516
O&M Capital	3,371	3,797	4,148	212	22	22	-	-	-	3,583	3,797	4,170
<b>Total Operating Expenses</b>	<b>203,619</b>	<b>200,149</b>	<b>211,093</b>	<b>4,298</b>	<b>3,805</b>	<b>4,244</b>	<b>19,006</b>	<b>18,930</b>	<b>20,001</b>	<b>226,922</b>	<b>222,884</b>	<b>235,338</b>
<b>Non-Operating Expenses</b>												
Net Debt Service	85,855	89,481	92,101	-	-	-	7,454	7,454	7,146	93,309	96,935	99,247
Funding Requirements	15,147	16,215	14,613	(1,364)	(1,013)	(1,248)	1,864	1,803	2,020	15,647	17,006	15,385
<b>Total Non-Operating Expenses</b>	<b>101,002</b>	<b>105,696</b>	<b>106,714</b>	<b>(1,364)</b>	<b>(1,013)</b>	<b>(1,248)</b>	<b>9,318</b>	<b>9,258</b>	<b>9,166</b>	<b>108,956</b>	<b>113,941</b>	<b>114,631</b>
<b>Total Expenses</b>	<b>\$ 304,621</b>	<b>\$ 305,845</b>	<b>\$ 317,806</b>	<b>\$ 2,934</b>	<b>\$ 2,792</b>	<b>\$ 2,996</b>	<b>\$ 28,324</b>	<b>\$ 28,187</b>	<b>\$ 29,167</b>	<b>\$ 335,878</b>	<b>\$ 336,825</b>	<b>\$ 349,970</b>
<b>Change in Net Assets</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,312</b>	<b>\$ (396)</b>	<b>\$ 1,936</b>	<b>\$ 1,312</b>	<b>\$ (396)</b>	<b>\$ 1,936</b>

May not sum to total due to rounding

## SUMMARY OF DTW AIRPORT REVENUES AND EXPENSES

(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Revenues</b>					
<b>Airline Revenues</b>					
Landing Fees	\$ 75,780	\$ 71,515	\$ 76,795	\$ 5,280	7.4%
Rent	84,915	88,847	86,726	(2,121)	- 2.4%
Facility Use Fees	8,362	8,750	7,782	(969)	- 11.1%
<b>Total Airline Revenues</b>	<b>169,057</b>	<b>169,112</b>	<b>171,303</b>	<b>2,191</b>	<b>1.3%</b>
<b>Non-Airline Revenues</b>					
Parking	61,187	63,761	68,887	5,126	8.0%
Car Rental	21,909	22,020	22,700	680	3.1%
Concessions	31,874	31,568	35,000	3,432	10.9%
Ground Transportation	5,453	5,316	5,149	(168)	- 3.2%
Shuttle Bus	2,032	2,050	2,150	100	4.9%
Utility Service Fee	4,904	5,287	5,151	(136)	- 2.6%
Rent	2,975	2,810	3,304	495	17.6%
Other Revenue	1,742	1,090	1,280	190	17.4%
Charges For Services	2,100	1,867	1,964	97	5.2%
<b>Total Non-Airline Revenues</b>	<b>134,177</b>	<b>135,768</b>	<b>145,584</b>	<b>9,816</b>	<b>7.2%</b>
<b>Non-Operating Revenues</b>					
Grants	1,030	865	819	(46)	- 5.3%
Interest Income	76	100	100	-	0.0%
Capital Contribution	281	-	-	-	n/a
<b>Total Non-Operating Revenues</b>	<b>1,387</b>	<b>965</b>	<b>919</b>	<b>(46)</b>	<b>- 4.8%</b>
<b>Total Revenues</b>	<b>\$ 304,621</b>	<b>\$ 305,845</b>	<b>\$ 317,806</b>	<b>\$ 11,961</b>	<b>3.9%</b>
<b>Expenses</b>					
<b>Operating Expenses</b>					
Salaries & Wages	\$ 46,661	\$ 43,498	\$ 48,191	\$ 4,693	10.8%
Employee Benefits	27,027	25,451	29,644	4,193	16.5%
Materials & Supplies	8,769	7,943	9,206	1,262	15.9%
Parking Management	6,630	7,119	7,193	74	1.0%
Shuttle Bus	6,123	6,498	6,839	341	5.3%
Janitorial	11,792	12,037	12,125	88	0.7%
Security	2,511	2,638	2,793	155	5.9%
Contractual Services	24,490	21,490	21,815	326	1.5%
Insurance	2,200	2,172	2,184	12	0.6%
Utilities	28,441	27,083	26,465	(618)	- 2.3%
Buildings & Grounds	15,092	18,820	17,265	(1,555)	- 8.3%
Equipment Repair	16,051	17,402	19,158	1,756	10.1%
Other Operating Expense	4,460	4,202	4,066	(136)	- 3.2%
O&M Capital	3,371	3,797	4,148	351	9.2%
<b>Total Operating Expenses</b>	<b>203,619</b>	<b>200,149</b>	<b>211,093</b>	<b>10,943</b>	<b>5.5%</b>
<b>Non-Operating Expenses</b>					
Interest & Financing	182	173	124	(49)	- 28.4%
Debt Service & Coverage	85,855	89,481	92,101	2,620	2.9%
Funding Requirements	14,965	16,042	14,490	(1,553)	- 9.7%
<b>Total Non-Operating Expenses</b>	<b>101,002</b>	<b>105,696</b>	<b>106,714</b>	<b>1,018</b>	<b>1.0%</b>
<b>Total Expenses</b>	<b>\$ 304,621</b>	<b>\$ 305,845</b>	<b>\$ 317,806</b>	<b>\$ 11,961</b>	<b>3.9%</b>

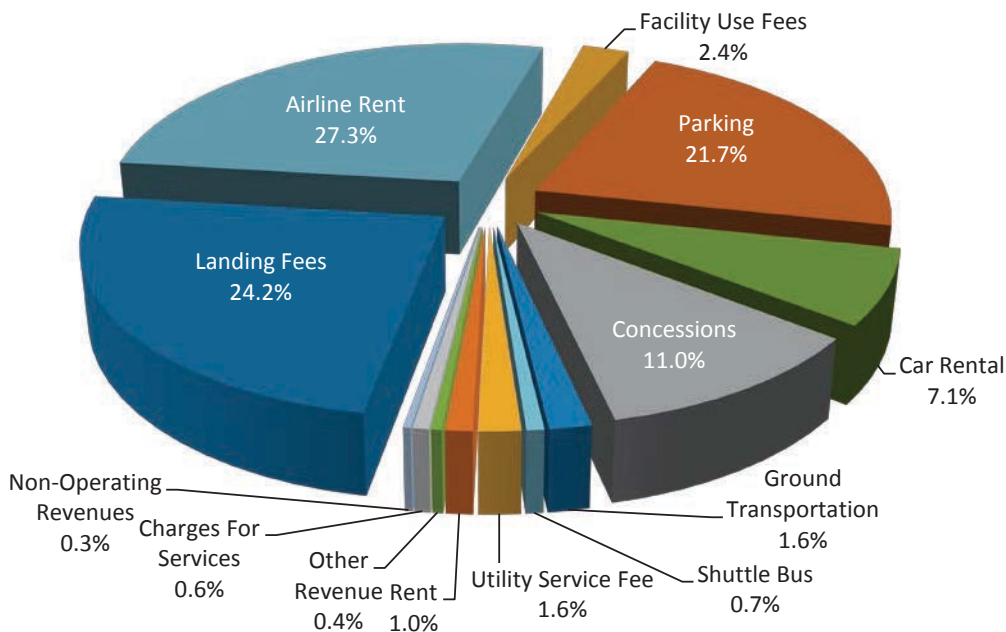
May not sum to total due to rounding

**REVENUE PROFILE**

(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Revenues</b>					
<b>Airline Revenues</b>					
Landing Fees	\$ 75,780	\$ 71,515	\$ 76,795	\$ 5,280	7.4%
Rent	84,915	88,847	86,726	(2,121)	- 2.4%
Facility Use Fees	<u>8,362</u>	<u>8,750</u>	<u>7,782</u>	<u>(969)</u>	<u>- 11.1%</u>
<b>Total Airline Revenues</b>	<b>169,057</b>	<b>169,112</b>	<b>171,303</b>	<b>2,191</b>	<b>1.3%</b>
<b>Non-Airline Revenues</b>					
Parking	61,187	63,761	68,887	5,126	8.0%
Car Rental	21,909	22,020	22,700	680	3.1%
Concessions	31,874	31,568	35,000	3,432	10.9%
Ground Transportation	5,453	5,316	5,149	(168)	- 3.2%
Shuttle Bus	2,032	2,050	2,150	100	4.9%
Utility Service Fee	4,904	5,287	5,151	(136)	- 2.6%
Rent	2,975	2,810	3,304	495	17.6%
Other Revenue	1,742	1,090	1,280	190	17.4%
Charges For Services	<u>2,100</u>	<u>1,867</u>	<u>1,964</u>	<u>97</u>	<u>5.2%</u>
<b>Total Non-Airline Revenues</b>	<b>134,177</b>	<b>135,768</b>	<b>145,584</b>	<b>9,816</b>	<b>7.2%</b>
<b>Non-Operating Revenues</b>					
Grants	1,030	865	819	(46)	- 5.3%
Interest Income	76	100	100	-	0.0%
Capital Contribution	<u>281</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>n/a</u>
<b>Total Non-Operating Revenues</b>	<b>1,387</b>	<b>965</b>	<b>919</b>	<b>(46)</b>	<b>- 4.8%</b>
<b>Total Revenues</b>	<b>\$ 304,621</b>	<b>\$ 305,845</b>	<b>\$ 317,806</b>	<b>\$ 11,961</b>	<b>3.9%</b>

May not sum to total due to rounding

**Where the money comes from...**





ACTIVITY ASSUMPTIONS

ENPLANED PASSENGERS

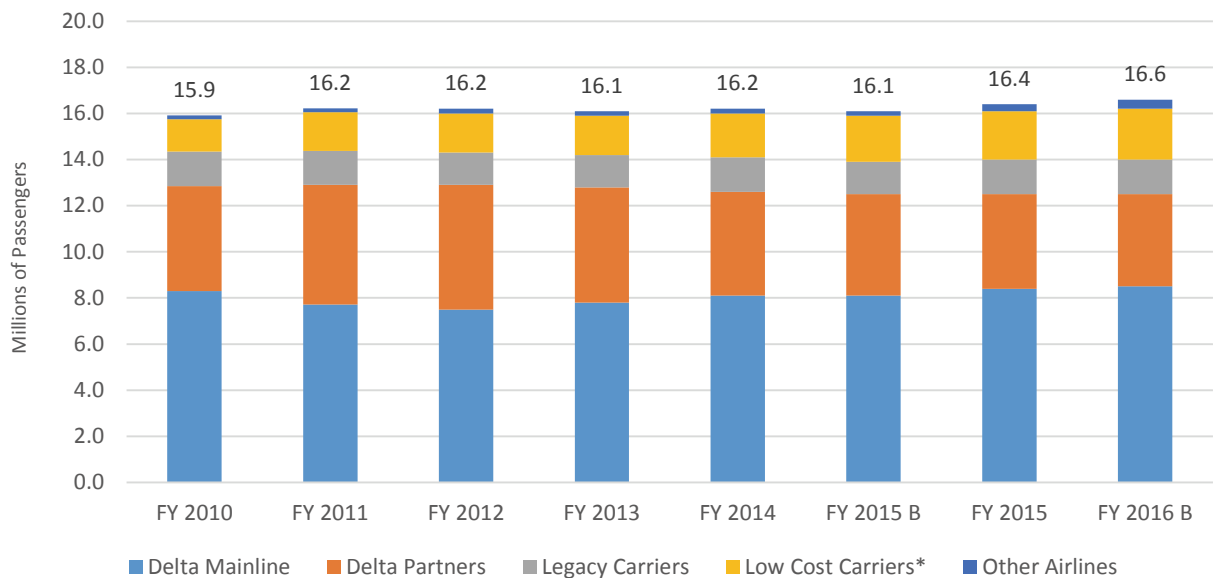
Driven by new routes added since FY 2014 and equipment “up-gauging”, the FY 2016 Budget assumes passenger enplanements will grow by approximate 500,000 (3.1 percent) over the FY 2015 Budget. As illustrated in Figure F - 1, enplanements at the Airport have been stable since FY 2010. The compounded average growth rate (CAGR) from FY 2010 to FY 2014 is 0.6 percent. Enplanements in FY 2015 exceeded budget by approximately 340,000 (2.1 percent) and the Authority estimates continued growth of approximately 250,000 enplanements (1.6 percent).

In the period between FY 2012 and FY 2014, a trend of airline mergers and “capacity discipline”, as termed by Delta Air Lines’ CEO Richard Anderson, resulted in route consolidation among airlines and fewer operations system-wide. The strategy has been successful as increased load factors have contributed to higher airline profit margins. The Airport experienced a drop in total enplanements over this same period.

Demand for air travel in FY 2015 has been resilient and the airlines have added back seats and flights. In FY 2014, the Airport attracted three new carriers – JetBlue, Air Alaska and Virgin Atlantic, providing non-stop service to Boston, Seattle and London-Heathrow, respectively. Spirit added service, and expanded current service, to Atlanta, Kansas City, Los Angeles, Minneapolis and New Orleans in FY 2014 and in FY 2015 also added routes to Boston. In June 2015, Southwest added service to Dallas-Love Field, a non-stop destination previously not served. The additional routes added competition to the local O&D market, lowering fares and increasing enplanements (see the State of the Airline Industry chapter for greater detail).

The second driver to enplanement growth is equipment “up-gauging”, whereby the airlines have been phasing-out small, regional jets (50 seats or less) in favor of larger and more fuel efficient aircraft. Consequently, the total number of operations have decreased, however seat capacity increased. This practice has reduced frequency to some small markets but added seat capacity to others. The net impact to the Airport is enplanement growth.

Figure F - 1: DTW Enplanements FY 2010 to FY 2016 Budget

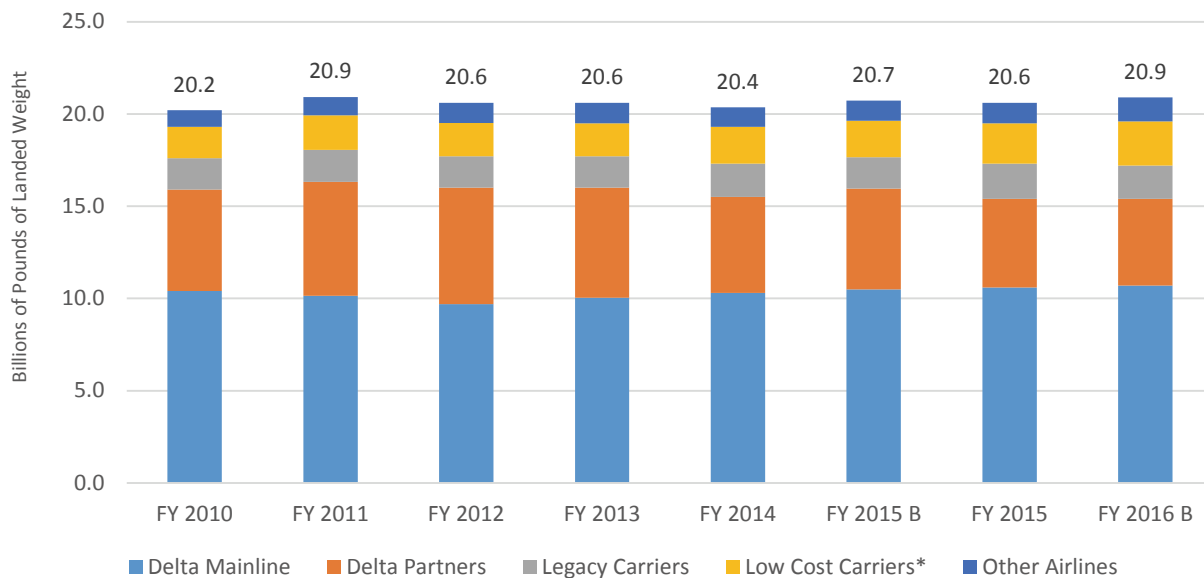


\* Low Cost Carriers include Frontier Airlines, Southwest Airlines, Spirit Airlines, JetBlue  
 Source: WCAA

## LANDED WEIGHTS

Likewise, the FY 2016 budget forecasts an increase in landed weights of two hundred million pounds (1.0 percent) over the FY 2015 budget. Similarly, the growth is attributed to the full-year impact of new routes and carriers added since FY 2014. As compared to the FY 2016 Budget, total landed weight has been essentially flat since FY 2010, a CAGR of 0.6 percent.

Figure F - 2: DTW Landed Weight FY 2010 to FY 2016 Budget



\* Low Cost Carriers include Frontier Airlines, Southwest Airlines, Spirit Airlines, JetBlue

Source: WCAA

## REVENUE ASSUMPTIONS

### AIRLINE REVENUES

#### LANDING FEES

As a residual airport, landing fee revenue is determined by the total budgeted operating expenses of the airport less rent, non-airline and non-operating revenues. The overall landing fee requirement for FY 2016 is \$76.8 million, a 7.4 percent increase over FY 2015.

#### AIRLINE RENT

Rent paid by the airlines includes lease agreements for terminal and non-terminal facilities. Terminal rent is paid on a residual basis. Rental rates are based on the total expense to operate each terminal and debt service requirements, less facility use fees and other non-airline revenues. The rental requirements for the South and North Terminals are \$55.4 million and \$25.5 million, respectively.

Budget assumptions for non-terminal airline revenue, primarily the facilities rented by the airlines for cargo, maintenance and other operational needs, are based on known rental space lease agreements in place. For FY 2016 this amount is \$5.7 million.

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## FACILITY USE FEES

The airlines pay a Facility Use Fee of \$5.50 for each international passenger who deplanes at Detroit Metro Airport for use of the Federal Inspection Station (FIS), the holding area that includes customs processing. Revenue is estimated by multiplying the budgeted FY 2016 international deplanements by \$5.50. This results in a year-over-year decrease of \$1.0 million.

## NON-AIRLINE REVENUES

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### PARKING

Parking revenue assumptions are based on a forecast for parking transactions, average length of stay and rates at the parking facilities. Revenues are expressed net of the 27 percent State of Michigan Parking Tax. The budget assumes that credit card transaction fees are 3 percent of gross revenues and an offsetting expense is budgeted in Other Operating Expenses.

The FY 2016 Budget assumes an increase of \$5.1 million (8.0 percent) over prior year. This is driven by the \$1.00 rate increase that was introduced on February 1, 2015. Despite this increase, parking transactions and average length of stay have continued to grow, as they did following the \$1.00 increase on May 19, 2014. This reflects the current robustness of the local economy and the steady increase in business travelers.

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### CAR RENTAL

All car rental agencies based at the Airport pay 10.0 percent of gross revenue or a minimum annual guarantee (MAG), whichever is greater. There is also one car rental agency based off-airport and they pay 9.5 percent of gross revenue with no MAG.

The FY 2016 Budget assumes a car rental revenue increase of \$0.7 million (3.1 percent) which is in-line with the budgeted FY 2016 deplanements increase of 3.0%.

Of the \$22.7 million budgeted, MAGs represent \$19.2 million (85 percent of the total) and excess revenue above the MAGs is \$3.5 million (15 percent of the total).

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### CONCESSIONS

The FY 2016 concessions revenue budget assumes a 10.9 percent increase over prior year which equates to \$3.4 million. This increase can be attributed to the new McNamara food and beverage program which has seen \$32 million in capital investment. Out of a total of 38 food and beverage concessions at the McNamara Terminal, 24 new concepts were bid and two new locations were added. Food and beverage at the McNamara Terminal is forecast to increase by 41.9 percent over prior year.

FY 2016 also sees strong growth (11.2 percent) in retail at the McNamara Terminal. This is following the opening of 37 new concepts as part of the retail program changeover which completed in June 2014.

The strong revenue projections for food and beverage and retail at the McNamara Terminal are offset by the following factors:

- Delta's strategic decision to close Concourse C has seen the loss of four concepts
- Duty Free is anticipated to close for four months for construction commencing in January 2016
- The loss of the pouring rights contract with PepsiCo Inc.
- The reduction in Clear Channel advertising locations

In addition to Duty Free closing for four months, two other top performing concepts, McDonalds and Sora, are also closing for construction at the McNamara Terminal. Below is an outline of 'how it works during changeover':

- i. Concessionaires operate the space under the old concept until their 'Phase' of construction commences
- ii. The amount paid to the Authority is based on a percentage of gross sales for the given time period until the new concept is fully in place. No MAG is paid during 'changeover'
- iii. Once construction starts for their 'Phase' the concept location is closed down completely for 120 days
- iv. Upon construction completion, the Concession Agreement, which includes details of the MAG and revenue component payable, is signed and the new concept is ready for business.

At the North Terminal, moderate growth of 2.7 percent is assumed for FY 2016. Although growth for food and beverage and retail is 7.9 percent and 3.7 percent, respectively, the North Terminal is also impacted by the loss of pouring rights and reduction in advertising revenue. The North Terminal retail changeover is due to commence in October 2016 and the food and beverage is scheduled for October 2018.

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## GROUND TRANSPORTATION

Ground Transportation revenues are comprised of the concession fees and permits paid by taxi and limousine services and a monthly access fee paid by off-airport parking lot and hotel shuttles. For FY 2016 a decrease of 3.2 percent is projected due to new contractual terms for the limousine services.

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## SHUTTLE BUS

The Authority operates shuttle bus service to transport both airline passengers between parking decks and lots and on-airport employees from designated employee parking lots to their work location. Revenue is collected from the purchase of decals by employers for employees who require the shuttle bus service. The FY 2016 Budget assumes a modest increase of 4.9 percent due to an increase in employees at the McNamara Terminal working in the new food and beverage concepts. The rates charged per decal (\$45.00 for the South Employee Lot and \$25.00 for the Blue Deck) remain the same.

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## UTILITY SERVICE FEES

Utility services fees are collected from concessionaires and other parties who operate on airport property for utility consumption. The budget assumes no change in utility consumption and that rates charged will decrease slightly during FY 2016 consistent with commodity price movements.

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## NON-AIRLINE RENT

Non-airline rent includes rental revenue collected from non-airline tenants on airport property including, but not limited to, hangars, cargo facilities, rental car locations and office space.

The FY 2016 Budget has increased by 17.6 percent over prior year (\$0.5 million) due to new leases with Signature Flight Support and G2 Secure Staff.

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## OTHER REVENUES & CHARGES FOR SERVICES

Other Revenue is comprised of miscellaneous revenue collected by the Authority such as employee credential fees and traffic violation ticket revenue. FY 2016 assumes a 17.4 percent increase (\$0.2 million) based on an upward trend in badging fee transactions. This is due to an increase in the number of employees working at the airport, for example

due to the new food and beverage program at the McNamara Terminal, and also reflects how the local economy is continuing to improve.

Charges for services are reimbursements from third-parties for the use of Authority resources. Examples include Fire Department services provided to Willow Run Airport, maintenance work order, and ambulance services. For FY 2016 a 5.2 percent (\$0.1 million) increase is assumed which can be attributed to an increase in licenses granted for aviation support services.

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## GRANTS

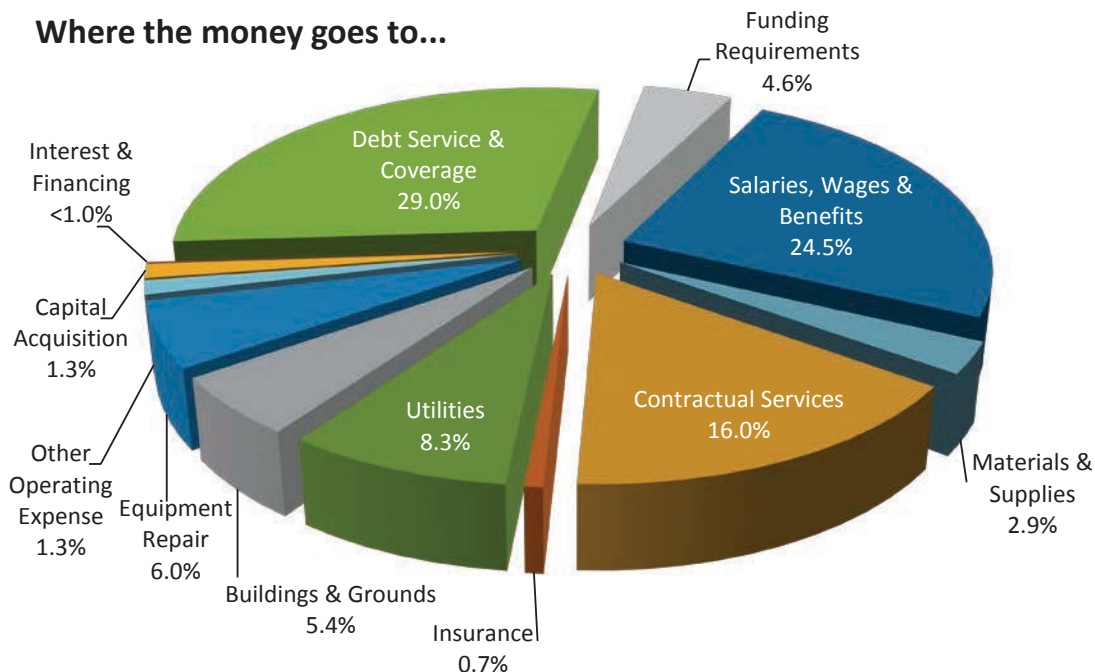
The FY 2016 Budget for grant revenue is a conservative estimate that only budgets for grants which the Authority has received commitments from federal, state or other granting entities.

**EXPENDITURE PROFILE**

(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Expenses</b>					
<b>Operating Expenses</b>					
Salaries & Wages	\$ 46,661	\$ 43,498	\$ 48,191	\$ 4,693	10.8%
Employee Benefits	27,027	25,451	29,644	4,193	16.5%
Materials & Supplies	8,769	7,943	9,206	1,262	15.9%
Parking Management	6,630	7,119	7,193	74	1.0%
Shuttle Bus	6,123	6,498	6,839	341	5.3%
Janitorial	11,792	12,037	12,125	88	0.7%
Security	2,511	2,638	2,793	155	5.9%
Contractual Services	24,490	21,490	21,815	326	1.5%
Insurance	2,200	2,172	2,184	12	0.6%
Utilities	28,441	27,083	26,465	(618)	- 2.3%
Buildings & Grounds	15,092	18,820	17,265	(1,555)	- 8.3%
Equipment Repair	16,051	17,402	19,158	1,756	10.1%
Other Operating Expense	4,460	4,202	4,066	(136)	- 3.2%
O&M Capital	3,371	3,797	4,148	351	9.2%
<b>Total Operating Expenses</b>	<b>203,619</b>	<b>200,149</b>	<b>211,093</b>	<b>10,943</b>	<b>5.5%</b>
<b>Non-Operating Expenses</b>					
Interest & Financing	182	173	124	(49)	- 28.4%
Debt Service & Coverage	85,855	89,481	92,101	2,620	2.9%
Funding Requirements	14,965	16,042	14,490	(1,553)	- 9.7%
<b>Total Non-Operating Expenses</b>	<b>101,002</b>	<b>105,696</b>	<b>106,714</b>	<b>1,018</b>	<b>1.0%</b>
<b>Total Expenses</b>	<b>\$ 304,621</b>	<b>\$ 305,845</b>	<b>\$ 317,806</b>	<b>\$ 11,961</b>	<b>3.9%</b>

May not sum to total due to rounding

**Where the money goes to...**



## EXPENDITURE ASSUMPTIONS

Operating expenses are budgeted with an assumption that all departments will provide a level of service consistent with the current fiscal year. The budget is adjusted for:

- All known contractual increases or decreases
- Economic enhancements specified in bargaining unit contracts
- Shifting trends in the consumption or rates for goods and services
- Adjustment for CEO Initiatives
- Removal of funding for one-time expenses from the prior fiscal year

The financial impact of changes to the level of service provided by the Authority, whether they are enhancements, modifications, or discontinuations, are added or subtracted after the base budget is established.

## OPERATING EXPENSES

### SALARIES & WAGES

The Salaries & Wages budget for FY 2016 assumes a 10.8 percent increase over prior year which equates to \$4.7 million. This increase reflects a 4.4 percent increase in the staffing plan (607 employees in FY 2015 Budget to 635 in FY 2016) and also provides for economic enhancements. Overtime is budgeted as a percentage of total salaries of classified employees who are eligible for overtime pay.

### EMPLOYEE BENEFITS

Employee benefits include expenses for active and retired employee health care, pension contributions, Federal Insurance Contributions Act (FICA) taxes, workers compensation insurance, disability insurance, unemployment insurance, and tuition reimbursements.

Funding for Other Post-Employment Benefits (OPEB) is now included in employee benefits, whereas it was previously charged to funding requirements. The budgeted contribution for FY 2016 is \$4.3 million.

Health care insurance costs for the Authority, which is self-insured, are budgeted based on the results of an actuarial analysis. The budget takes into account cost saving measures, including active employee co-pays.

Pursuant to Public Act 54 of 2011, effective June 8, 2011, municipal employees are obliged to pay for 100 percent of the increase in their health insurance benefit cost upon the expiration of a collective bargaining agreement (with the exception of Local 3317 and Local 324).

Employee and retiree healthcare plans cost sharing includes:

- \$500 Individual/\$1,000 Family Deductible In-Network; \$1,000 Individual/\$2,000 Family Deductible Out-of-Network
- 15 percent In-Network Co-insurance after Deductible is met with \$1,000 Individual/\$2,000 Family Annual Out-of-Pocket Maximum; 25 percent Out-of-Network Coinsurance after Deductible is met with \$2,000 Individual/\$4,000 Family Annual Out-of-Pocket Maximum
- \$20 Office Visit Co-pay In-Network - \$200 Emergency Room Co-pay (waived if admitted)
- 50 percent Mental Health Co-pay

- Prescription Drug Co-pay: \$10 Generic/ \$30 Formulary Brand/ \$50 Non-Formulary Brand and Managed Pharmacy Program (Mandatory generic, Prior Authorization, and Step-Therapy)

Pension obligations are budgeted based on an actuarial study that estimates the Authority's required contribution.

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## MATERIALS & SUPPLIES

The materials and supplies budget assumes that the Authority will provide a level of service consistent with the current year.

The most significant components of the materials and supplies budget are bulk chemicals for snow and ice removal, gasoline and diesel fuel, and janitorial supplies for the terminals.

The FY 2016 Budget assumes a \$1.3 million increase (15.9 percent) over prior year, \$0.9 million of which is due to additional liquid deicer being used on AOA service roads and previously untreated AOA areas based on an FAA Letter of Corrections requirement. The remainder of the \$2.4 million bulk chemicals budget is based on a three-year average of consumption and a forecast of pricing trends.

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## PARKING MANAGEMENT

Operation of all public parking facilities is contracted to a vendor who provides professional services, janitorial and some maintenance functions. The budget provides for annual increases for salaries in accordance with the terms of the current contract. Further, the budget for parking management services assumes the full-year operation of the Blue Parking Deck, McNamara Parking Deck and the Green Lot and seasonal use of the Green Lot #2.

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## SHUTTLE BUS

Shuttle bus service includes transportation for employees (both airside and landside) and passengers between parking locations, terminals and the Westin Hotel. The FY 2016 Budget has grown by 5.3 percent due to contractual increases. Under the terms of the current contract, the Authority provides fuel to the shuttle bus operator.

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## JANITORIAL SERVICES

Janitorial Services covers cleaning for the terminals, ground transportation center and all Authority administration buildings and support facilities. The budget is set in accordance with contractual agreements and FY 2016 includes a 3.0 percent increase in the service contract for the North Terminal.

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## SECURITY

Security guard services are budgeted at the contracted rate. The 5.9 percent increase in FY 2016 is due to the Authority taking over responsibility for an extra guard position at the McNamara Terminal.

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## CONTRACTUAL SERVICES

Contractual Services covers a wide range of specialist and professional functions both operational and administrative. The largest components are technology services, management and dockmaster for both terminals, and snow removal.

FY 2016 sees significant increases for new monthly parking deck inspections (\$0.6 million), real estate tool kit enhancements (\$0.4 million) and a rise in the scope of service for technology services help desk support (\$0.4 million). These increases are tempered by the removal of one-time expenses such as employee development



programs (\$0.2 million) and technology services consultants, who are now being hired as full-time employees by the Authority (\$0.5 million).

Overall, the FY 2016 Budget for Contractual Services has grown by a modest 1.5 percent (\$0.3 million) but still represents one of the highest expense categories for the Authority with a total budget of \$21.8 million.

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## INSURANCE

An increase in the total insurable value for the 2015/2016 renewal is offset by a reduction in the property premium. Therefore the insurance for airport properties for the FY 2016 Budget assumes only a slight increase of 0.6 percent.

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## UTILITIES

Utility expenses for electricity, gas, water and HVAC are budgeted at the rate and volume of historic trends. The FY 2016 Budget assumes that utility consumption will be relatively consistent with FY 2015 levels with an overall decrease of 2.3 percent (\$0.6 million). This decrease can be attributed to a slight reduction in rate and volume for electric and HVAC and to the costs payable to the City of Detroit for water and sewerage treatment (\$0.3 million).

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## BUILDINGS & GROUNDS

The FY 2016 Budget includes costs associated with the Authority's five-year infrastructure plan for bridges and non-AOA roads on the Airport's campus.

Due to a number of one-time expenses in FY 2015, the FY 2016 Budget assumes an 8.3 percent reduction which equates to \$1.6 million.

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## EQUIPMENT REPAIR & MAINTENANCE

Corrective maintenance expenses are budgeted by identifying necessary projects prior to the budget formulation while preventative maintenance expenses are budgeted at known contractual amounts. There is also a provision for unexpected repairs which is based on historical trends.

For FY 2016 the Equipment Repair budget has been enhanced by 10.1 percent or \$1.8 million. This increase is mainly due to the carpeting and painting of the jet bridges at the North Terminal (\$1.2 million) and an increase in the maintenance costs for the Security Access Card System (\$0.4 million).

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## OTHER OPERATING EXPENSES

The other operating expenses category includes miscellaneous expenses not specified in the aforementioned categories. Among these expenses are property taxes, telephone charges, travel and professional development, and advertising. The largest expense included in the other operating expenses category is credit card transaction fees charged at the parking facilities. The budget assumes that these fees are 3.0 percent of gross parking revenues which equates to a 14 percent increase (\$0.2 million) in FY 2016. This increase is offset by a reduction in rental recovery expenses paid due to the closure of the Credentials Office at the North Terminal (\$0.4 million). Overall, the total other operating expenses for FY 2016 are down 3.2 percent over prior year.

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## CAPITAL ACQUISITION

The capital acquisitions category includes expenditures to either: (1) buy fixed assets with an individual unit value of \$5,000 or greater and a useful life beyond one year, or (2) add to the value of an existing fixed asset with a useful

life that extends beyond one year. The capital acquisition budget is developed through the estimated cost of specific projects or fixed asset acquisitions, including routine life cycle replacements.

The FY 2016 Budget provides funding for:

- Rolling stock including vehicles, trailers, mowers and other equipment
- Purchase of a foam resupply trailer and hose replacement for the Fire Department
- Information technology life-cycle replacements of switches, servers and network upgrades
- Renovations to the McNamara Terminal
- Lease payments for heavy equipment

## NON-OPERATING EXPENSES

### NET DEBT SERVICE

Debt service expenses budgeted in the O&M fund represents the transfer requirement from airline rates and charges to the Bond Fund for payment of interest and principal on existing debt. The O&M requirement is calculated by subtracting other sources of funding from the gross debt service obligation. The greatest among these other sources of funding are Passenger Facility Charges (PFCs) which are collected on a per-enplanement basis by the airlines, who pass the funds through to the Authority less an administrative fee.

### FUNDING REQUIREMENTS

The annual transfer from the O&M Budget to the Airport Development Fund (ADF) is adjusted annually by the producer price index (PPI). Based on current trending, the budget assumes the PPI will be relatively flat.

The \$2.5 million contribution to ADF from Automated Vehicle Identification (AVI) revenues assumed a slight increase from FY 2015. Transfers for the Renewal & Replacement Fund and the Discretionary Fund contributions are fixed amounts of \$0.5 million and \$0.35 million, respectively.

Included in the funding requirements line is \$1.1 million of post-retirement healthcare costs for County employees who retired prior to the Transfer Date with service credit in the County's former Division of Airports (the "Pre-2002 Airport Retirees"). These employee costs are pooled with the post-retirement healthcare costs of all other County retirees who retired prior to September 1, 2002. The Authority's estimated Actuarial Accrued Liability (AAL) does not include an estimate of the post-retirement healthcare costs for the Pre-2002 Airport Retirees, who are recognized on the books of the County; however, the Authority pays 11.25 percent of the actual costs of this pool of retirees on a pay-as-you-go basis. As this pool is a closed group, and the retirees whose healthcare costs are in the pool are approaching 100 percent Medicare eligibility, the Authority expects its annual required payments to the County for this closed pool to decrease over time.

In addition to healthcare costs, the Authority is also responsible for a portion of the pension funding for the Pre-2002 employees. Based upon an actuarial evaluation and County historical payroll data, the Authority has determined that its share of the pension funding requirements for the Pre-2002 Retirees is 10.25 percent of the actuarial required contribution. Based on the current 26 year amortization schedule, the Authority has budgeted \$1.6 million for this obligation in FY 2016.

## AIRPORT AUTHORITY STAFFING SUMMARY

Full-Time Employees (FTEs)	FY 2012 Budget	FY 2013 Budget	FY 2014 Budget	FY 2015 Budget	FY 2016 Budget	Five-Year CAGR
<b>Detroit Metropolitan Airport</b>						
Office of the Chief Executive Officer	2	1	1	1	1	-12.9%
Public Affairs	7	5	5	6	8	2.7%
Internal Audit	3	3	3	3	3	0.0%
Legal Affairs	6	5	5	5	5	-3.6%
Authority Governance	5	2	2	2	2	-16.7%
Planning & Strategic Management	1	9	11	4	5	38.0%
Procurement & Business Diversity	18	13	14	15	17	-1.1%
<b>Total Chief Executive Officer Division</b>	<b>42</b>	<b>38</b>	<b>41</b>	<b>36</b>	<b>41</b>	<b>-0.5%</b>
<b>Finance &amp; Administration Division</b>						
Office of the Chief Financial Officer	2	2	2	2	2	0.0%
Controller	23	21	21	18	19	-3.7%
Risk Management	2	2	2	3	3	8.4%
Financial Planning & Analysis	7	6	7	8	8	2.7%
Human Resources	14	11	11	13	13	-1.5%
Technology Services	13	13	15	14	18	6.7%
<b>Total Finance &amp; Administration Division</b>	<b>61</b>	<b>55</b>	<b>58</b>	<b>58</b>	<b>63</b>	<b>0.6%</b>
<b>Operations Division</b>						
Chief Operating Officer	-	2	2	3	3	N/A
Airfield Operations	44	40	39	41	46	0.9%
Landside Services	23	23	23	23	23	0.0%
Maintenance	175	161	161	142	150	-3.0%
Environmental & Sustainability	5	5	5	9	9	12.5%
Energy	12	12	12	41	43	29.1%
<b>Total Operations Division</b>	<b>259</b>	<b>243</b>	<b>242</b>	<b>259</b>	<b>274</b>	<b>1.1%</b>
<b>Public Safety Division</b>						
Public Safety Administration	5	3	3	3	3	-9.7%
Fire	60	60	61	61	61	0.3%
Police	113	107	107	107	98	-2.8%
Security	29	30	30	31	17	-10.1%
Special Services	3	3	3	3	26	54.0%
<b>Total Public Safety Division</b>	<b>210</b>	<b>203</b>	<b>204</b>	<b>205</b>	<b>205</b>	<b>-0.5%</b>

Full-Time Employees (FTEs)	FY 2012 Budget	FY 2013 Budget	FY 2014 Budget	FY 2015 Budget	FY 2016 Budget	Five-Year CAGR
<b>Detroit Metropolitan Airport, cont.</b>						
<b>Facilities, Design &amp; Construction</b>						
Facilities & Development Administration	3	1	1	1	-	-100.0%
Infrastructure & Engineering	14	12	14	-	-	-100.0%
Facilities, Design & Construction	20	10	13	3	3	-31.6%
Facility Design	-	5	5	7	8	N/A
Facility Construction	-	-	-	9	9	N/A
Facility Alteration & Support	-	-	-	5	6	N/A
<b>Total Facilities &amp; Development Division</b>	<b>37</b>	<b>28</b>	<b>33</b>	<b>25</b>	<b>26</b>	<b>-6.8%</b>
<b>Business Development &amp; Real Estate</b>						
Business Development & Real Estate	4	3	3	8	9	17.6%
Air Service Development	1	1	1	1	1	0.0%
Concessions and Quality Services	6	4	4	4	4	-7.8%
<b>Total Business Development &amp; Real Estate</b>	<b>11</b>	<b>8</b>	<b>8</b>	<b>13</b>	<b>14</b>	<b>4.9%</b>
<b>Total Detroit Metropolitan Airport</b>	<b>620</b>	<b>575</b>	<b>586</b>	<b>596</b>	<b>623</b>	<b>0.1%</b>
<b>Willow Run Airport</b>						
Administration	3	3	3	3	4	5.9%
Maintenance	7	7	7	7	7	0.0%
Operations	1	1	1	1	1	0.0%
<b>Total Willow Run Airport</b>	<b>11</b>	<b>11</b>	<b>11</b>	<b>11</b>	<b>12</b>	<b>1.8%</b>
<b>Total Airport Authority</b>	<b>631</b>	<b>586</b>	<b>597</b>	<b>607</b>	<b>635</b>	<b>0.1%</b>

# COST CENTER, DIVISION & DEPARTMENT SUMMARIES

This chapter contains summaries of all Authority Cost Centers, Divisions and the Department sub-divisions.

## COST CENTER SUMMARIES

A cost center is any unit of activity, group of employees, line of products, etc., isolated or arranged in order to allocate and assign costs more easily. Cost center accounting attempts to report results (actual performance) in such a way that:

- Significant variances from planned performance can be identified
- Reasons for variances can be determined
- Responsibility can be fixed
- Timely action can be taken to correct problems

The five basic components of cost center accounting are:

1. Labor (personnel)
2. Contractual Services
3. Materials & Supplies
4. Equipment Expenses
5. Overhead or Indirect Costs

### Detroit Metropolitan Airport Cost Centers

- North Terminal
- South Terminal
- Airfield
- Facilities & Maintenance
- North Power Plant
- Cargo & Hangar
- Ground Transportation
- Public Safety
- Fire & EMS
- Administration

## DIVISION & DEPARTMENT SUMMARIES

Each Division summary includes an organizational chart and historical employee chart by Department. The Department summaries include the following:

- Overview of functions and responsibilities
- Description of resource allocation
- Three-year financial tables with budget to budget variance explanations
- Operating expense pie chart by budget category
- Three-year bar chart of total operating expenses

Willow Run Airport is treated like an operating division and is also illustrated in this chapter of the Budget Book. The Westin Airport Hotel is not included in this chapter. Management of the Hotel is contracted by the Authority to the Starwood Hotels & Resorts, the corporation that owns the Westin brand. The contract and relationship with Starwood is managed by the Finance & Administration Division.

**NORTH TERMINAL COST CENTER**

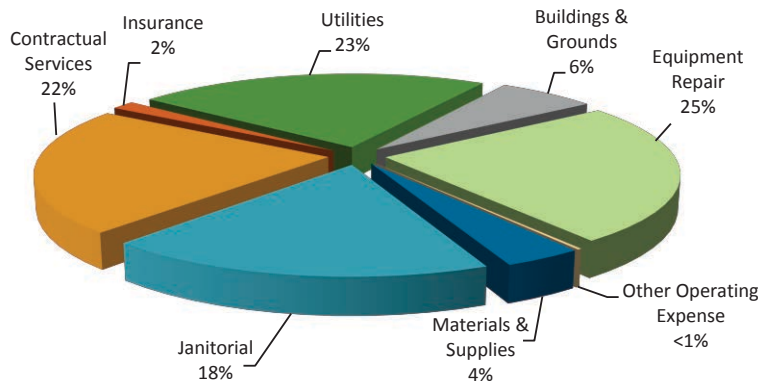
(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Operating Expenses by Category</b>					
Materials & Supplies	\$ 451	\$ 495	\$ 585	\$ 90	18.2%
Janitorial	2,729	2,786	2,869	83	3.0%
Contractual Services	3,581	3,575	3,524	(51)	-1.4%
Insurance	257	241	241	-	0.0%
Utilities	4,105	3,589	3,695	106	3.0%
Buildings & Grounds <sup>1</sup>	1,119	1,415	1,024	(391)	-27.6%
Equipment Repair <sup>2</sup>	2,764	2,762	3,897	1,135	41.1%
Other Operating Expense	34	31	31	(0)	-1.4%
O&M Capital	9	-	-	-	n/a
<b>Total</b>	<b>\$ 15,049</b>	<b>\$ 14,894</b>	<b>\$ 15,866</b>	<b>\$ 973</b>	<b>6.5%</b>

May not sum to total due to rounding

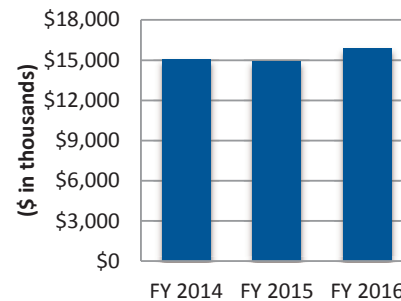
<sup>1</sup> FY 2016 decrease due to the completion of the terminal carpet replacement project

<sup>2</sup> FY 2016 increase due to painting and carpeting the jet bridges

**FY 2016 Operating Budget**



**Operating Expenses FY 2014 to FY 2016**



**Key Performance Measures: North Terminal**

Objectives & Measures	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
Operating Expense per Terminal Enplanement	\$ 4.27	\$ 4.20	\$ 4.06	\$ (0.14)	-3.3%
Operating Expense per Square Foot of Terminal Space	\$ 17.68	\$ 17.50	\$ 18.64	\$ 1.14	6.5%

SOUTH TERMINAL COST CENTER

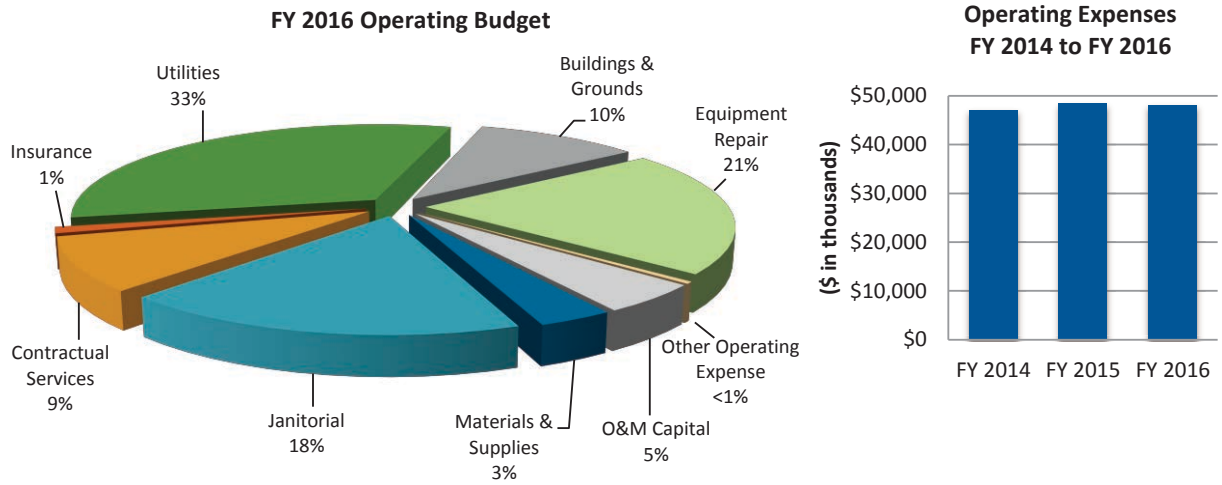
(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Operating Expenses by Category</b>					
Materials & Supplies	\$ 1,366	\$ 1,574	\$ 1,575	\$ 1	0.1%
Janitorial	8,464	8,499	8,504	5	0.1%
Contractual Services	4,141	4,276	4,286	10	0.2%
Insurance	489	500	502	2	0.4%
Utilities <sup>1</sup>	16,074	16,276	15,713	(563)	-3.5%
Buildings & Grounds	6,470	5,021	5,013	(8)	-0.2%
Equipment Repair <sup>2</sup>	9,369	9,947	10,120	173	1.7%
Other Operating Expense	159	165	167	2	1.2%
O&M Capital <sup>3</sup>	630	2,120	2,282	162	7.6%
<b>Total</b>	<b>\$ 47,161</b>	<b>\$ 48,378</b>	<b>\$ 48,161</b>	<b>\$ (217)</b>	<b>-0.4%</b>

May not sum to total due to rounding

<sup>1</sup> FY 2016 decrease due to reduced rate for HVAC natural gas and rate reduction in electricity

<sup>2</sup> FY 2016 contractual increases for the elevator/escalator contract

<sup>3</sup> FY 2016 increase due to public address system equipment replacement



**Key Performance Measures: South Terminal**

Objectives & Measures	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
Operating Expense per Terminal Enplanement	\$ 3.72	\$ 3.85	\$ 3.79	\$ (0.06)	-1.5%
Operating Expense per Square Foot of Terminal Space	\$ 19.43	\$ 19.93	\$ 19.84	\$ (0.09)	-0.4%

**AIRFIELD COST CENTER**

(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Operating Expenses by Category</b>					
Salary & Benefits <sup>1</sup>	\$ 11,646	\$ 10,881	\$ 12,336	\$ 1,455	13.4%
Materials & Supplies <sup>2</sup>	2,151	1,481	2,415	934	63.1%
Contractual Services <sup>3</sup>	6,262	3,283	3,682	399	12.2%
Utilities <sup>4</sup>	3,963	3,474	3,097	(377)	-10.9%
Buildings & Grounds	4,181	5,576	5,765	189	3.4%
Equipment Repair	547	672	688	16	2.4%
Other Operating Expense	725	85	136	51	59.8%
O&M Capital	46	-	-	-	n/a
<b>Total</b>	<b>\$ 29,520</b>	<b>\$ 25,452</b>	<b>\$ 28,119</b>	<b>\$ 2,667</b>	<b>10.5%</b>

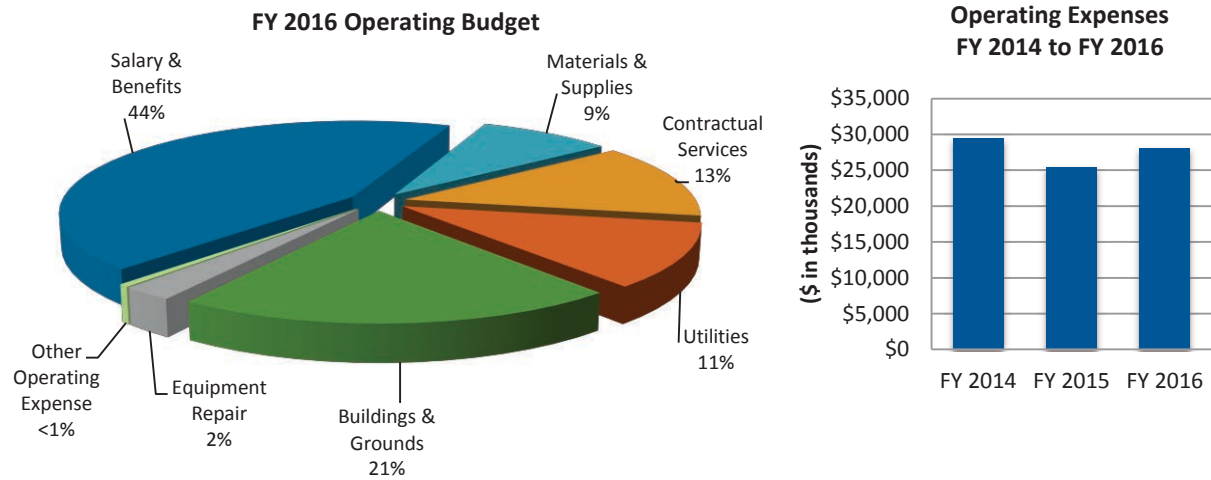
May not sum to total due to rounding

<sup>1</sup> FY 2016 includes 14 additional employees

<sup>2</sup> FY 2016 increase in deicing fluid cost

<sup>3</sup> FY 2016 increase in snow removal contract

<sup>4</sup> FY 2016 decrease in both rate and volume for electric



**Key Performance Measures: Airfield**

Objectives & Measures	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
Operating Expense per Terminal Enplanement	\$ 1.82	\$ 1.58	\$ 1.69	\$ 0.11	7.1%
Operating Expense per Airfield Acre	\$ 21,980	\$ 18,952	\$ 20,937	\$ 1,986	10.5%
Operating Expense per Operation	\$ 73.82	\$ 66.95	\$ 74.74	\$ 7.79	11.6%



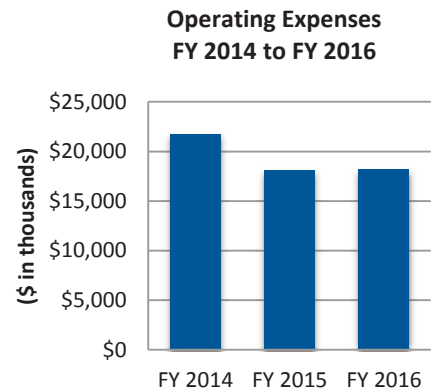
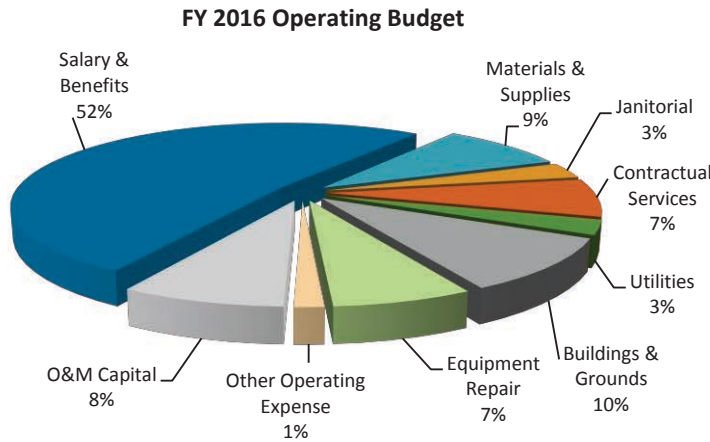
FACILITIES & MAINTENANCE COST CENTER

(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Operating Expenses by Category</b>					
Salary & Benefits	\$ 13,817	\$ 9,272	\$ 9,399	\$ 127	1.4%
Materials & Supplies <sup>1</sup>	1,639	1,530	1,657	127	8.3%
Janitorial	384	557	557	-	0.0%
Contractual Services	1,038	1,275	1,320	46	3.6%
Utilities	528	589	503	(86)	-14.6%
Buildings & Grounds <sup>2</sup>	1,843	2,223	1,805	(417)	-18.8%
Equipment Repair	1,025	1,163	1,231	68	5.9%
Other Operating Expense	130	171	262	91	53.0%
O&M Capital	1,370	1,364	1,437	73	5.4%
<b>Total</b>	<b>\$ 21,774</b>	<b>\$ 18,143</b>	<b>\$ 18,172</b>	<b>\$ 29</b>	<b>0.2%</b>

May not sum to total due to rounding

<sup>1</sup> FY 2016 increase in road salt provision

<sup>2</sup> FY 2016 focus on capital projects reduces operating costs for the year



**Key Performance Measures: Facilities & Maintenance**

Objectives & Measures	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
Operating Expense per Terminal Enplanement	\$ 1.34	\$ 1.13	\$ 1.09	\$ (0.03)	-2.9%

**NORTH POWER PLANT COST CENTER**

**North Power Plant Cost Center**

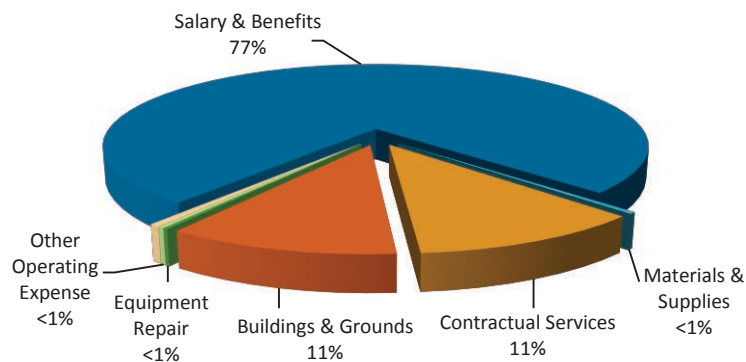
(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Operating Expenses by Category</b>					
Salary & Benefits <sup>1</sup>	\$ 1,836	\$ 5,497	\$ 6,027	\$ 531	9.7%
Materials & Supplies	31	56	27	(29)	-51.8%
Contractual Services	649	810	871	61	7.6%
Utilities	(1,134)	(979)	(979)	-	0.0%
Buildings & Grounds <sup>2</sup>	505	1,041	850	(192)	-18.4%
Equipment Repair	15	19	18	(1)	-5.3%
Other Operating Expense	5	39	22	(18)	-45.0%
O&M Capital	-	-	41	41	n/a
<b>Total</b>	<b>\$ 1,906</b>	<b>\$ 6,484</b>	<b>\$ 6,877</b>	<b>\$ 393</b>	<b>6.1%</b>

May not sum to total due to rounding

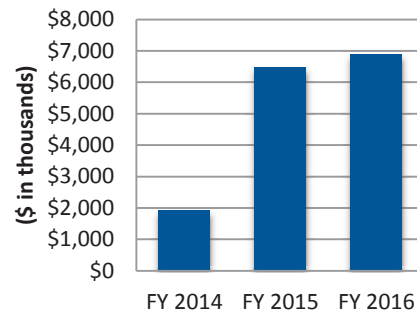
<sup>1</sup> FY 2016 includes two additional employees

<sup>2</sup> FY 2015 includes one-time cost for catch basin replacement, vactoring and sealing

**FY 2016 Operating Budget**



**Operating Expenses  
FY 2014 to FY 2016**



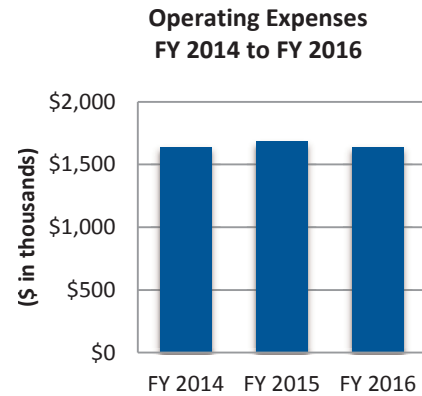
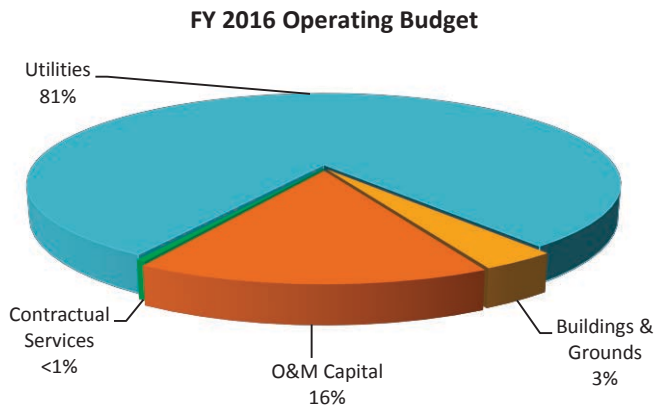
**Key Performance Measures: North Power Plant**

Objectives & Measures	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
Operating Expense per Terminal Enplanement	\$ 0.12	\$ 0.40	\$ 0.41	\$ 0.01	2.9%
Operating Expense per Square Foot	\$ 0.58	\$ 1.98	\$ 2.10	\$ 0.12	6.1%

CARGO & HANGAR COST CENTER

(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Operating Expenses by Category</b>					
Contractual Services	\$ 11	\$ 8	\$ 7	\$ (1)	-13.4%
Utilities	1,370	1,364	1,324	(40)	-2.9%
Buildings & Grounds	4	56	56	-	0.0%
O&M Capital	255	256	256	-	0.0%
<b>Total</b>	<b>\$ 1,640</b>	<b>\$ 1,684</b>	<b>\$ 1,643</b>	<b>\$ (41)</b>	<b>-2.4%</b>

May not sum to total due to rounding



**Key Performance Measures: Cargo & Hangar**

Objectives & Measures	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
Operating Expense per Terminal Enplanement	\$ 0.10	\$ 0.10	\$ 0.10	\$ (0.01)	-9.6%
Operating Expense per Square Foot	\$ 0.50	\$ 0.51	\$ 0.50	\$ (0.02)	-3.9%

**GROUND TRANSPORTATION COST CENTER**

Ground Transportation Cost Center						
(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change		
	Actual	Budget	Budget	\$	%	
<b>Operating Expenses by Category</b>						
Salary & Benefits	\$ 2,287	\$ 2,116	\$ 2,235	\$ 119	5.6%	
Materials & Supplies	704	742	719	(24)	-3.2%	
Parking Management	6,630	7,119	7,193	74	1.0%	
Shuttle Bus <sup>1</sup>	6,123	6,498	6,839	341	5.3%	
Janitorial	215	195	195	-	0.0%	
Contractual Services <sup>2</sup>	3,484	1,646	2,405	759	46.1%	
Utilities	2,497	1,916	2,209	293	15.3%	
Buildings & Grounds <sup>3</sup>	932	3,461	2,797	(664)	-19.2%	
Equipment Repair	776	737	737	-	0.0%	
Other Operating Expense <sup>4</sup>	1,900	1,757	2,008	251	14.3%	
<b>Total</b>	<b>\$ 25,548</b>	<b>\$ 26,186</b>	<b>\$ 27,337</b>	<b>\$ 1,150</b>	<b>4.4%</b>	

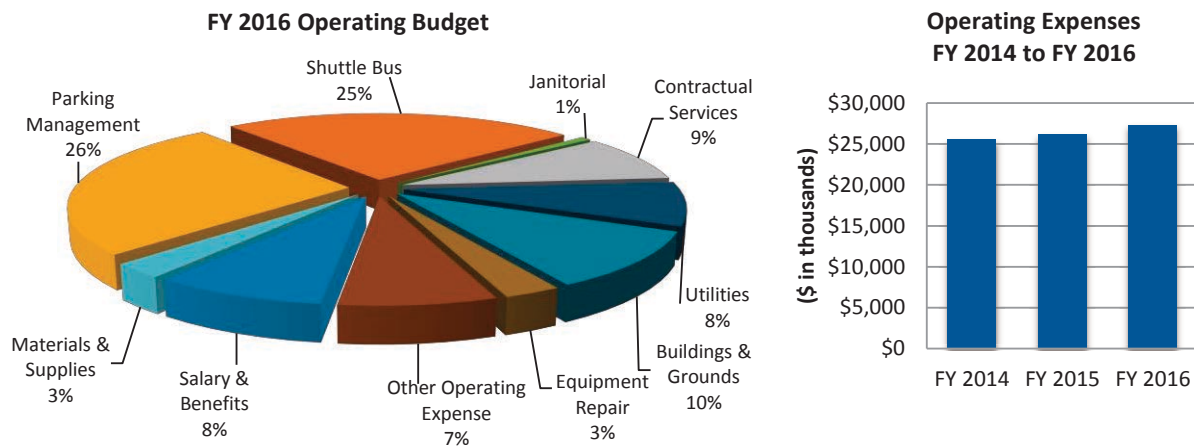
May not sum to total due to rounding

<sup>1</sup> FY 2016 contractual increases

<sup>2</sup> FY 2016 includes a new contract for monthly parking deck inspections and costs for Payment Industry Card compliance

<sup>3</sup> FY 2016 decrease in parking deck maintenance due to parking deck capital project reconstruction

<sup>4</sup> FY 2016 increase in credit card transaction fees in-line with growth in parking revenue



**Key Performance Measures: Ground Transportation**

Objectives & Measures	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
Operating Expense per Terminal Enplanement	\$ 1.58	\$ 1.63	\$ 1.65	\$ 0.02	1.2%
Parking Expense per Parking Space	\$ 364.82	\$ 391.71	\$ 395.81	\$ 4.09	1.0%

**PUBLIC SAFETY COST CENTER**

(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Operating Expenses by Category</b>					
Salary & Benefits	\$ 17,515	\$ 16,286	\$ 16,888	\$ 602	3.7%
Materials & Supplies	538	539	569	30	5.5%
Security <sup>1</sup>	2,511	2,638	2,793	155	5.9%
Contractual Services <sup>2</sup>	233	565	718	153	27.1%
Utilities	127	113	117	5	4.1%
Buildings & Grounds	19	22	25	3	13.8%
Equipment Repair <sup>3</sup>	1,499	1,939	2,309	370	19.1%
Other Operating Expense <sup>4</sup>	696	512	136	(376)	-73.5%
O&M Capital	28	-	-	-	n/a
<b>Total</b>	<b>\$ 23,165</b>	<b>\$ 22,614</b>	<b>\$ 23,554</b>	<b>\$ 941</b>	<b>4.2%</b>

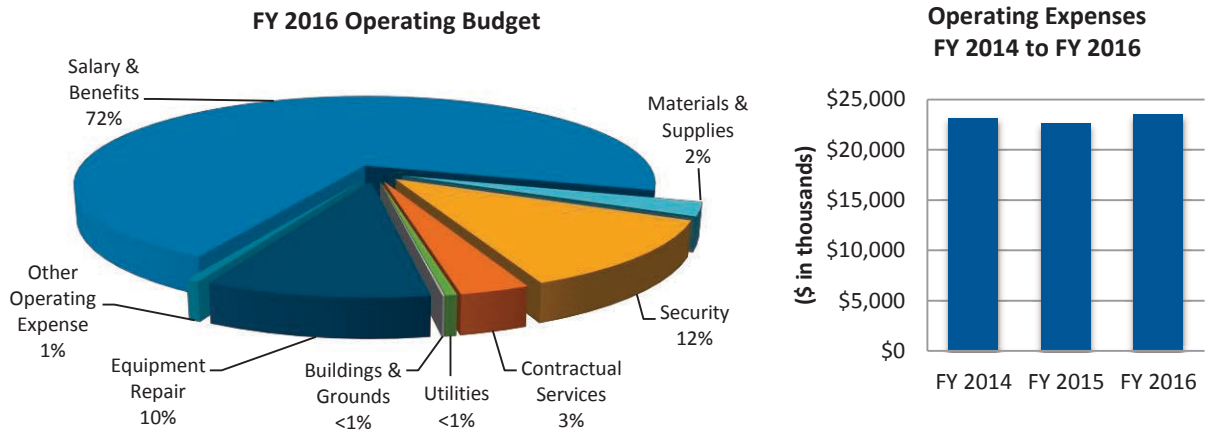
May not sum to total due to rounding

<sup>1</sup> FY 2016 increase due to a new guard position at the South Terminal

<sup>2</sup> FY 2016 increase due to new TSA fingerprinting directive

<sup>3</sup> FY 2016 increase in Security Card Access System maintenance

<sup>4</sup> FY 2016 decrease due to closure of the North Terminal Credentials Office



**Key Performance Measures: Public Safety**

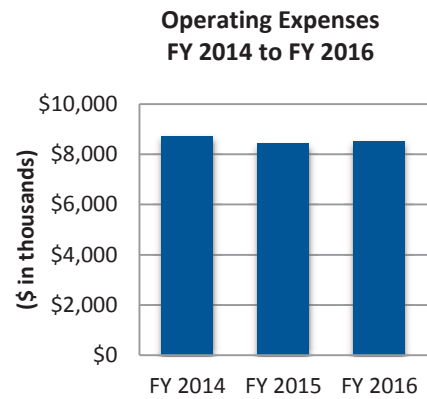
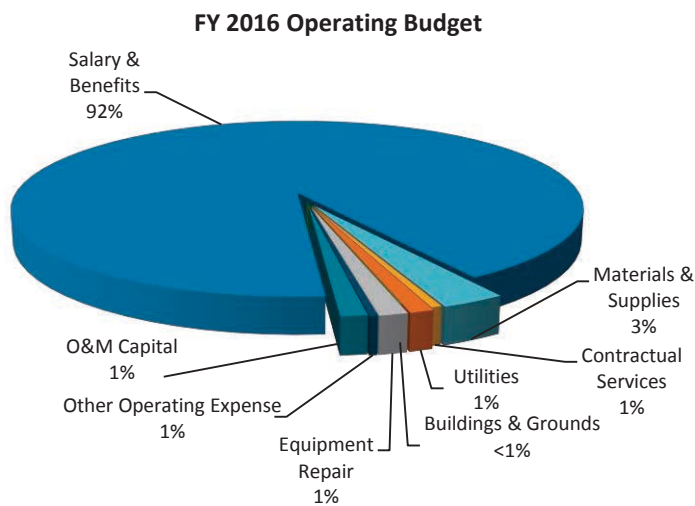
Objectives & Measures	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
Operating Expense per Terminal Enplanement	\$ 1.43	\$ 1.40	\$ 1.42	\$ 0.01	1.0%
Operating Expense per Square Foot	\$ 7.07	\$ 6.90	\$ 7.19	\$ 0.29	4.2%

**FIRE & EMS COST CENTER**

(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Operating Expenses by Category</b>					
Salary & Benefits	\$ 8,049	\$ 7,838	\$ 7,877	\$ 39	0.5%
Materials & Supplies	391	288	257	(31)	-10.7%
Contractual Services	13	28	43	15	51.9%
Utilities	114	89	95	6	6.6%
Buildings & Grounds	13	3	3	-	0.0%
Equipment Repair	82	118	115	(3)	-2.2%
Other Operating Expense	22	25	31	6	24.1%
O&M Capital <sup>1</sup>	43	32	107	75	>100%
<b>Total</b>	<b>\$ 8,726</b>	<b>\$ 8,421</b>	<b>\$ 8,529</b>	<b>\$ 108</b>	<b>1.3%</b>

May not sum to total due to rounding

1 FY 2016 increase due to new foam resupply trailer and hose replacement



**Key Performance Measures: Fire & EMS**

Objectives & Measures	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
Operating Expense per Terminal Enplanement	\$ 0.54	\$ 0.52	\$ 0.51	\$ -	0.0%
Operating Expense per Square Foot	\$ 2.66	\$ 2.57	\$ 2.60	\$ 0.03	1.3%

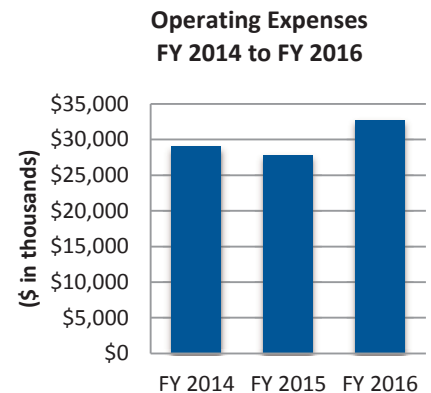
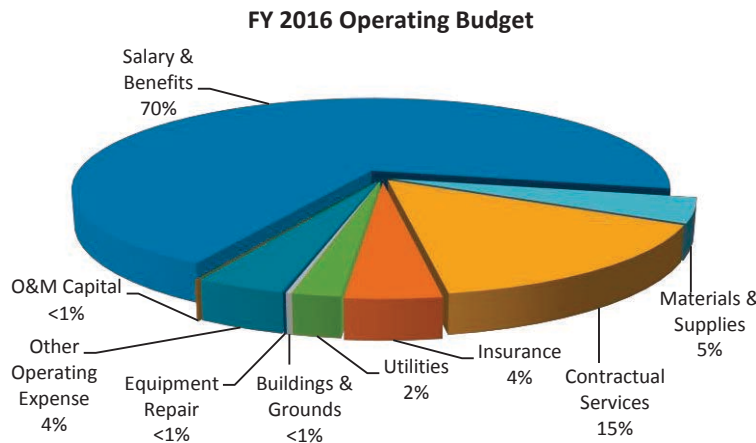
ADMINISTRATION COST CENTER

(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Operating Expenses by Category</b>					
Salary & Benefits <sup>1</sup>	\$ 18,538	\$ 17,060	\$ 23,072	\$ 6,012	35.2%
Materials & Supplies	1,500	1,238	1,402	164	13.3%
Contractual Services <sup>2</sup>	5,167	6,024	4,958	(1,065)	-17.7%
Insurance	1,307	1,370	1,375	5	0.4%
Utilities	797	651	691	39	6.0%
Buildings & Grounds	7	-	(75)	(75)	n/a
Equipment Repair	(25)	45	43	(2)	-4.4%
Other Operating Expense	790	1,418	1,275	(143)	-10.1%
O&M Capital	990	25	25	-	0.0%
<b>Total</b>	<b>\$ 29,070</b>	<b>\$ 27,830</b>	<b>\$ 32,766</b>	<b>\$ 4,936</b>	<b>17.7%</b>

May not sum to total due to rounding

<sup>1</sup> FY 2016 includes 10 additional employees and other post employment benefits (OPEB) reclassification from non-operating expense to operating

<sup>2</sup> FY 2016 decrease due to four Technology Services contractors becoming full-time employee positions



**Key Performance Measures: Administration**

Objectives & Measures	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
Operating Expense per Terminal Enplanement	\$ 1.79	\$ 1.73	\$ 1.97	\$ 0.25	14.2%
Operating Expense per Square Foot	\$ 8.87	\$ 8.49	\$ 10.00	\$ 1.51	17.7%
Operating Expense per FTE	\$ 48,940	\$ 45,848	\$ 51,681	\$ 5,833	12.7%

## WILLOW RUN AIRPORT

(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Revenues</b>					
<b>Airline Revenues</b>					
Landing Fees	\$ 627	\$ 630	\$ 642	\$ 12	1.8%
Airline & Non-Airline Rent	1,250	1,158	1,204	46	4.0%
Customs Inspection Fees	247	255	297	42	16.4%
Utility Service Fee	123	120	126	6	4.6%
Other Revenue	68	36	19	(17)	- 48.1%
Fuel Flow Fees	618	591	687	96	16.3%
<b>Total Non-Airline Revenues</b>	<b>2,933</b>	<b>2,790</b>	<b>2,974</b>	<b>184</b>	<b>6.6%</b>
Non-Operating Revenues	0	2	23	21	1030.0%
<b>Total Revenues</b>	<b>\$ 2,933</b>	<b>\$ 2,792</b>	<b>\$ 2,996</b>	<b>\$ 204</b>	<b>7.3%</b>
<b>Expenses</b>					
<b>Operating Expenses</b>					
Salaries, Wages & Benefits	\$ 1,314	\$ 1,244	\$ 1,405	\$ 162	13.0%
Materials & Supplies	137	114	174	60	53.1%
Janitorial	18	25	45	20	80.0%
Contractual Services	766	716	811	95	13.3%
Insurance	36	42	34	(8)	- 19.0%
Utilities	851	673	710	37	5.5%
Buildings & Grounds	414	277	314	38	13.6%
Equipment Repair	113	277	279	2	0.7%
Other Operating Expense	437	438	450	12	2.7%
O&M Capital	212	-	22	22	n/a
<b>Total Operating Expenses</b>	<b>4,298</b>	<b>3,805</b>	<b>4,244</b>	<b>440</b>	<b>11.6%</b>
Non-Operating Expenses	(1,364)	(1,013)	(1,248)	(236)	23.3%
<b>Total Expenses</b>	<b>\$ 2,933</b>	<b>\$ 2,792</b>	<b>\$ 2,996</b>	<b>\$ 204</b>	<b>7.3%</b>

May not sum to total due to rounding

## Key Performance Measures: Willow Run Airport

Objectives & Measures	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
Annual Operations	68,060	58,344	54,500	(3,844)	-6.6%
Cargo Landings	3,576	3,161	3,890	729	23.1%
Annual Landed Weights (in thousands)	323,941	286,307	292,905	6,598	2.3%
Fuel Sold (gallons)	6,282,738	5,870,000	6,831,100	961,100	16.4%



**AIRPORT WESTIN HOTEL**

(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Revenues</b>					
<b>Operating Revenues</b>					
Rooms	\$ 18,514	\$ 17,414	\$ 19,610	\$ 2,196	12.6%
Food & Beverages	9,754	9,091	10,062	971	10.7%
Minor Operating Departments & Other	1,352	1,239	1,405	166	13.4%
<b>Total Operating Revenues</b>	<b>29,620</b>	<b>27,745</b>	<b>31,078</b>	<b>3,333</b>	<b>12.0%</b>
Non-Operating Revenues	16	47	26	(21)	- 44.0%
<b>Total Revenues</b>	<b>\$ 29,636</b>	<b>\$ 27,792</b>	<b>\$ 31,104</b>	<b>\$ 3,312</b>	<b>11.9%</b>
<b>Expenses</b>					
<b>Operating Expenses</b>					
Department Operating Expenses	\$ 10,963	\$ 10,687	\$ 10,998	\$ 311	2.9%
Administrative & General	2,185	2,074	1,891	(183)	- 8.8%
Marketing	2,012	2,117	2,410	292	13.8%
Information & Telecom Systems <sup>1</sup>	-	-	568	568	n/a
Repair & Maintenance	907	883	912	29	3.2%
Utilities	683	711	669	(42)	- 5.9%
Management Fee	2,063	2,263	2,371	107	4.7%
Rent, Taxes & Insurance	193	194	184	(11)	- 5.5%
<b>Total Operating Expenses</b>	<b>19,006</b>	<b>18,930</b>	<b>20,001</b>	<b>1,071</b>	<b>5.7%</b>
Non-Operating Expenses	9,318	9,258	9,166	(92)	- 1.0%
<b>Total Expenses</b>	<b>\$ 28,324</b>	<b>\$ 28,187</b>	<b>\$ 29,167</b>	<b>\$ 980</b>	<b>3.5%</b>
<b>Change in Net Assets</b>	<b>\$ 1,312</b>	<b>\$ (396)</b>	<b>\$ 1,936</b>	<b>\$ 2,332</b>	<b>- 589.1%</b>

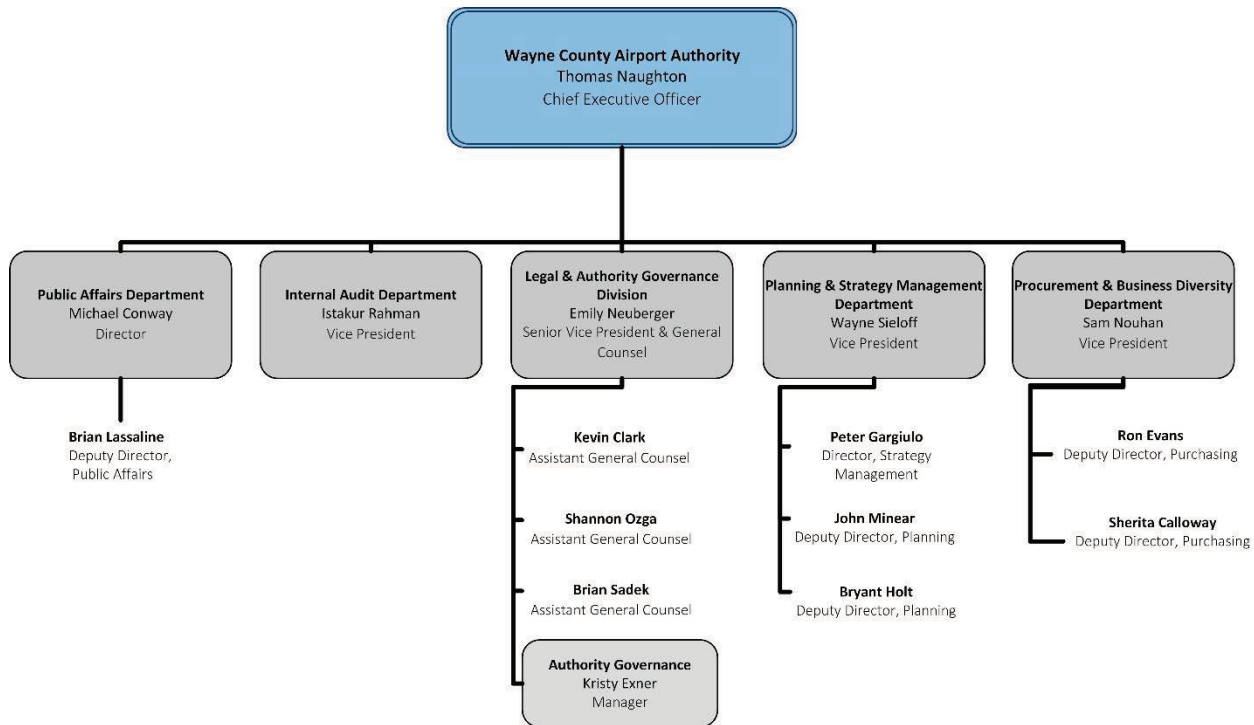
May not sum to total due to rounding

<sup>1</sup> Represents a change in Starwood Reporting

**Key Performance Measures: Westin Hotel**

Objectives & Measures	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
Occupancy Rate	78.6%	76.0%	81.9%	4 pts	0.5%
Average Daily Rate	\$ 159.40	\$ 155.31	\$ 161.99	\$ 6.68	4.3%
Revenue Per Available Room	\$ 125.58	\$ 118.09	\$ 132.62	\$ 14.53	12.3%
Westin Hotel EBITDA	\$ 10,172,839	\$ 8,741,659	\$ 11,102,469	\$ 2,360,810	27.0%

**CHIEF EXECUTIVE OFFICER DIVISION**



	FY 2012 Budget	FY 2013 Budget	FY 2014 Budget	FY 2015 Budget	FY 2016 Budget	Five-Year CAGR
<b>Full-Time Employees (FTEs)</b>						
<b>Detroit Metropolitan Airport</b>						
Office of the Chief Executive Officer	2	1	1	1	1	-12.9%
Public Affairs	7	5	5	6	8	2.7%
Internal Audit	3	3	3	3	3	0.0%
Legal Affairs	6	5	5	5	5	-3.6%
Authority Governance	5	2	2	2	2	-16.7%
Planning & Strategic Management	1	9	11	4	5	38.0%
Procurement & Business Diversity	18	13	14	15	17	-1.1%
<b>Total Chief Executive Officer Division</b>	<b>42</b>	<b>38</b>	<b>41</b>	<b>36</b>	<b>41</b>	<b>-0.5%</b>

Chief Executive Officer Division

(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Operating Expenses by Category</b>					
Salary & Benefits	\$ 5,420	\$ 5,049	\$ 5,823	\$ 774	15.3%
Materials & Supplies	419	538	656	118	22.0%
Contractual Services	1,203	1,836	1,961	125	6.8%
Equipment Repair	0	2	0	(2)	-87.0%
Other Operating Expense	279	409	467	59	14.3%
<b>Total</b>	<b>\$ 7,321</b>	<b>\$ 7,834</b>	<b>\$ 8,907</b>	<b>\$ 1,073</b>	<b>13.7%</b>
<b>Operating Expenses by Cost Centers</b>					
North Terminal	\$ 26	\$ 25	\$ 25	\$ -	0.0%
South Terminal	32	40	40	-	0.0%
Administration	7,263	7,769	8,842	1,073	13.8%
<b>Total</b>	<b>\$ 7,321</b>	<b>\$ 7,834</b>	<b>\$ 8,907</b>	<b>\$ 1,073</b>	<b>13.7%</b>
<i>May not sum to total due to rounding</i>					

Key Performance Measures	FY 2014 Actual	FY 2015 Target	FY 2016 Target
<b>Customer Satisfaction</b>			
Passengers: ASQ Survey - Overall Customer Satisfaction Rating (Out of Five)	4.25	4.25	4.35

CHIEF EXECUTIVE OFFICER

OVERVIEW

The Office of the Chief Executive Officer (CEO) consists of the CEO and oversees several departments that report directly to the CEO. These functions consist of Internal Audit, General Counsel, Public Affairs, Government Affairs, Purchasing, and Planning and Strategy Management.

RESOURCE ALLOCATION

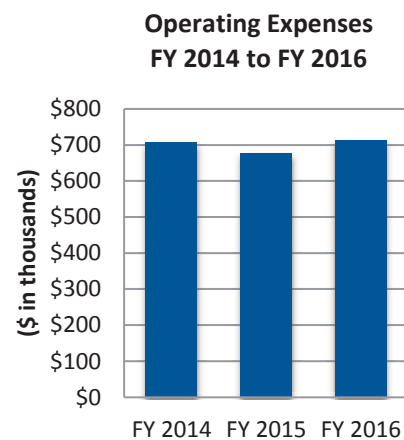
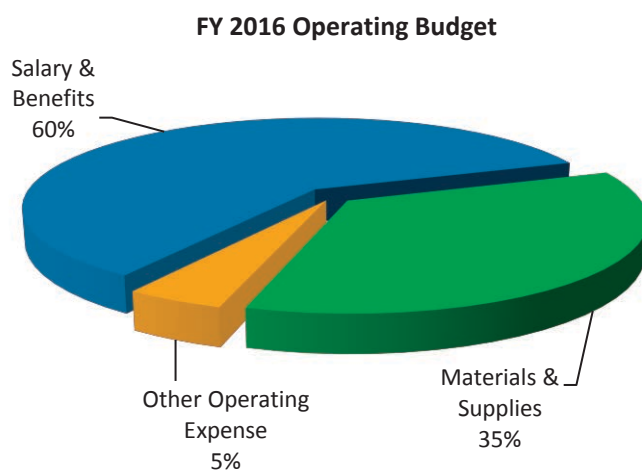
Salaries & Wages and Employee Benefits support a staff of one full-time employee.

Funds budgeted for **Materials & Supplies** are primarily used for membership dues and subscriptions. The Authority’s membership in the Airports Council International – North America (ACI-NA) costs approximately \$165,000 per year.

(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Operating Expenses by Category</b>					
Salary & Benefits	\$ 505	\$ 435	\$ 432	\$ (2)	-0.5%
Materials & Supplies <sup>1</sup>	149	214	251	37	17.3%
Contractual Services	24	-	-	-	n/a
Other Operating Expense	29	30	32	2	6.6%
<b>Total</b>	<b>\$ 707</b>	<b>\$ 678</b>	<b>\$ 715</b>	<b>\$ 37</b>	<b>5.4%</b>
<b>Operating Expenses by Cost Centers</b>					
Administration	\$ 707	\$ 678	\$ 715	\$ 37	5.4%
<b>Total</b>	<b>\$ 707</b>	<b>\$ 678</b>	<b>\$ 715</b>	<b>\$ 37</b>	<b>5.4%</b>

May not sum to total due to rounding

<sup>1</sup> FY 2016 increase due to additional subscriptions



PUBLIC AFFAIRS

OVERVIEW

Public Affairs is responsible for managing the Authority’s relationship with internal and external stakeholders. They accomplish this by providing the public and airport users with accurate and helpful information, managing media relations, managing the public’s involvement in Authority-related projects (e.g. airfield and terminal improvements, etc.), coordinating commercial filming and special events, providing community outreach and facilitating an excellent customer experience for all airport users including oversight of the Airport Ambassador volunteer program.

RESOURCE ALLOCATION

Salaries & Wages and Employee Benefits support a staff of eight full-time employees.

Funds budgeted for Materials & Supplies provide for the printing of promotional materials and new terminal service maps, catering for special events such as the Air Show, and other miscellaneous items.

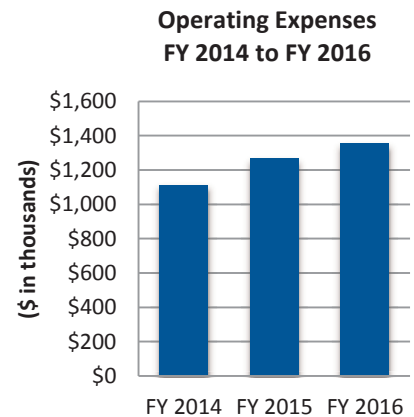
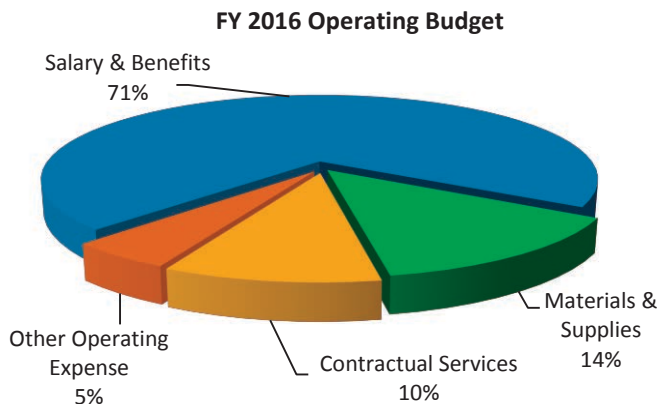
(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Operating Expenses by Category</b>					
Salary & Benefits <sup>1</sup>	\$ 837	\$ 772	\$ 964	\$ 192	24.9%
Materials & Supplies	91	183	186	3	1.7%
Contractual Services <sup>2</sup>	120	216	136	(80)	-37.1%
Other Operating Expense <sup>3</sup>	63	100	68	(32)	-32.1%
<b>Total</b>	<b>\$ 1,112</b>	<b>\$ 1,269</b>	<b>\$ 1,353</b>	<b>\$ 83</b>	<b>6.6%</b>
<b>Operating Expenses by Cost Centers</b>					
North Terminal	\$ 26	\$ 25	\$ 25	\$ -	0.0%
South Terminal	32	40	40	-	0.0%
Administration	1,053	1,204	1,288	83	6.9%
<b>Total</b>	<b>\$ 1,112</b>	<b>\$ 1,269</b>	<b>\$ 1,353</b>	<b>\$ 83</b>	<b>6.6%</b>

May not sum to total due to rounding

<sup>1</sup> FY 2016 includes two additional employees

<sup>2</sup> FY 2016 reduced by FY 2015 initiatives

<sup>3</sup> FY 2016 decrease due to new agreement for Air Show tent rental



**INTERNAL AUDIT**

**OVERVIEW**

Internal Audit provides independent and objective assurance and consulting services designed to add value and improve the Authority’s operations. Internal audit performs audit and consulting engagements, report observations, make recommendations and follow up on the implementation status of those recommendations. Internal audit is responsible for developing and implementing a comprehensive risk-based annual internal audit plan covering the Authority’s operations.

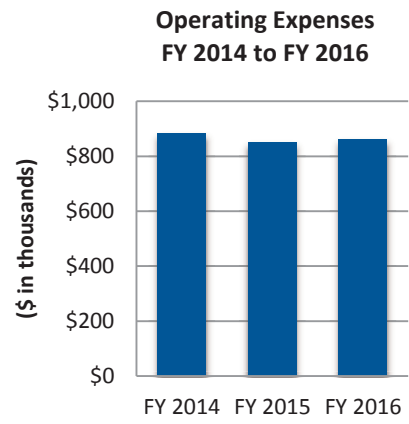
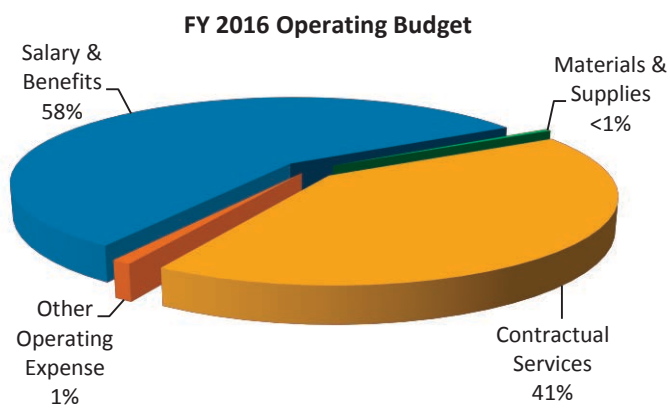
**RESOURCE ALLOCATION**

**Salaries & Wages and Employee Benefits** support a staff of three full-time employees.

Funds budgeted for **Contractual Services** are used for both external and internal audit services. External independent audit services are an essential requirement for the Authority’s financial reporting. Internal audit services are used to supplement the Authority’s staff with special expertise as needed.

<i>(\$ in thousands)</i>	<b>FY 2014 Actual</b>	<b>FY 2015 Budget</b>	<b>FY 2016 Budget</b>	<b>FY 2015 to FY 2016 Change</b>	
				<b>\$</b>	<b>%</b>
<b>Operating Expenses by Category</b>					
Salary & Benefits	\$ 509	\$ 486	\$ 496	\$ 10	2.1%
Materials & Supplies	7	3	4	1	16.7%
Contractual Services	359	354	354	-	0.0%
Other Operating Expense	7	8	8	-	0.0%
<b>Total</b>	<b>\$ 882</b>	<b>\$ 851</b>	<b>\$ 862</b>	<b>\$ 11</b>	<b>1.3%</b>
<b>Operating Expenses by Cost Centers</b>					
Administration	\$ 882	\$ 851	\$ 862	\$ 11	1.3%
<b>Total</b>	<b>\$ 882</b>	<b>\$ 851</b>	<b>\$ 862</b>	<b>\$ 11</b>	<b>1.3%</b>

*May not sum to total due to rounding*



LEGAL AFFAIRS

OVERVIEW

Legal Affairs serves all Authority departments by preparing all contracts, operating agreements and leases between the Authority and third parties, provides legal counsel as requested, handles litigation and other legal proceedings against or by the Authority, coordinates legal services provided by outside counsel, manages federal legislative consulting services and handles all legal matters related to the governance of the Authority.

RESOURCE ALLOCATION

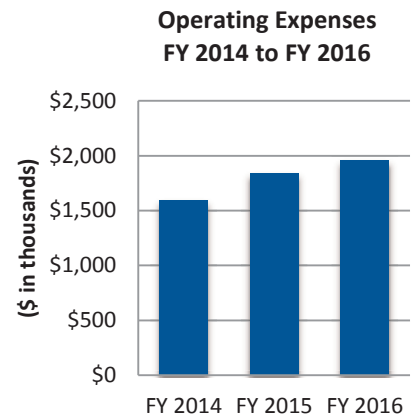
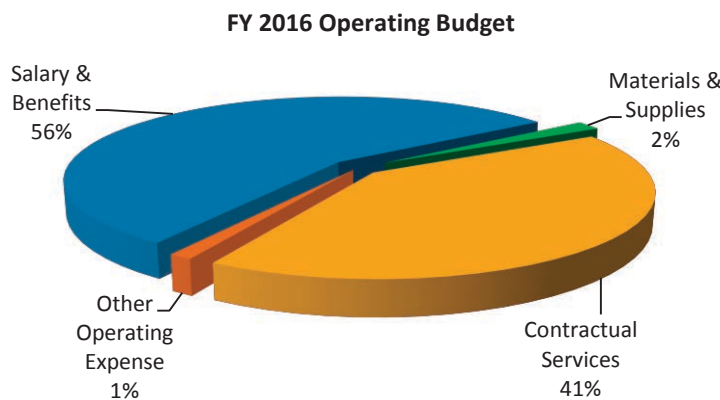
Salaries & Wages and Employee Benefits support a staff of five full-time employees.

Funds budgeted for **Contractual Services** are used for outside legal counsel and federal and state government affairs services.

(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Operating Expenses by Category</b>					
Salary & Benefits	\$ 1,179	\$ 1,058	\$ 1,101	\$ 43	4.0%
Materials & Supplies	26	35	34	(1)	-2.9%
Contractual Services <sup>1</sup>	374	725	800	75	10.3%
Other Operating Expense	12	21	23	2	7.1%
<b>Total</b>	<b>\$ 1,591</b>	<b>\$ 1,839</b>	<b>\$ 1,957</b>	<b>\$ 118</b>	<b>6.4%</b>
<b>Operating Expenses by Cost Centers</b>					
Administration	\$ 1,591	\$ 1,839	\$ 1,957	\$ 118	6.4%
<b>Total</b>	<b>\$ 1,591</b>	<b>\$ 1,839</b>	<b>\$ 1,957</b>	<b>\$ 118</b>	<b>6.4%</b>

May not sum to total due to rounding

<sup>1</sup> FY 2016 increase for additional budgeted legal services



**AUTHORITY GOVERNANCE**

**OVERVIEW**

Authority Governance coordinates Authority Board and committee meeting logistics and planning (including details of locations, schedules, agendas, correspondence, creation of resolution and minutes and follow up to the Board, management and staff) while supporting the CEO on a variety of matters in advance of meetings to ensure effective communication to all involved. Staff also coordinates Freedom of Information Act (FOIA) compliance activities by working with appropriate divisions to provide the required documents within prescribed deadlines.

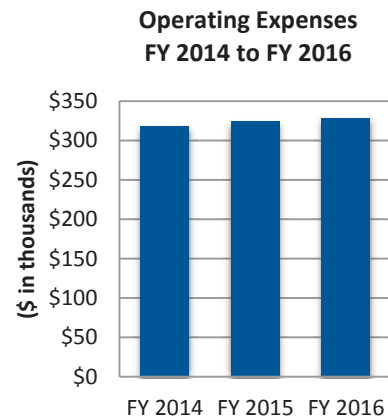
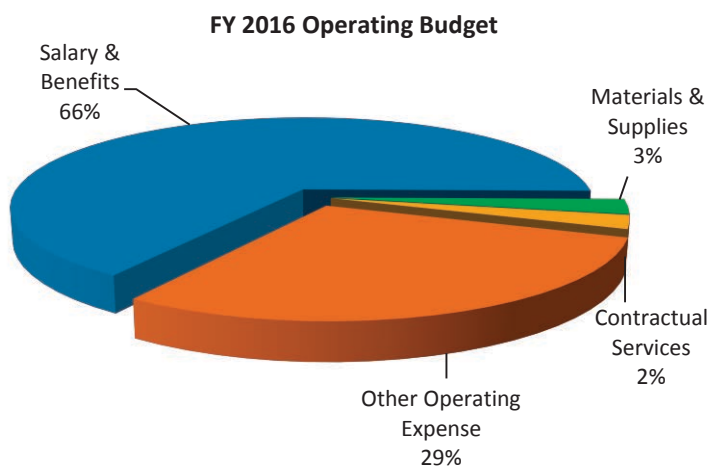
**RESOURCE ALLOCATION**

**Salaries & Wages and Employee Benefits** support a staff of two full-time employees.

All funds budgeted in **Other Operating Expense** are used for monthly Board Meetings.

(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Operating Expenses by Category</b>					
Salary & Benefits	\$ 230	\$ 213	\$ 217	\$ 4	2.1%
Materials & Supplies	7	8	9	0	3.6%
Contractual Services	6	8	8	-	0.0%
Other Operating Expense	75	95	95	-	0.0%
<b>Total</b>	<b>\$ 319</b>	<b>\$ 324</b>	<b>\$ 329</b>	<b>\$ 5</b>	<b>1.5%</b>
<b>Operating Expenses by Cost Centers</b>					
Administration	\$ 319	\$ 324	\$ 329	\$ 5	1.5%
<b>Total</b>	<b>\$ 319</b>	<b>\$ 324</b>	<b>\$ 329</b>	<b>\$ 5</b>	<b>1.5%</b>

*May not sum to total due to rounding*





PLANNING & STRATEGY MANAGEMENT

OVERVIEW

Planning and Strategy Management is responsible for the long-term planning of airport property and strategic organizational and performance planning.

**Planning** is responsible for updating the airport’s master plans, managing airport layout plans, land use and development plans, completing airport zoning analysis, and developing strategies, concepts and criteria associated with airport physical improvements.

**Strategy Management** is responsible for overseeing the overall strategy of the Authority, including developing the Authority’s scorecards, facilitating the initiative and business planning process, collecting and benchmarking passenger satisfaction data and developing organization-wide performance improvement programs.

RESOURCE ALLOCATION

**Salaries & Wages and Employee Benefits** support a staff of five full-time employees.

The **Contractual Services** budget includes funding for the DTW Master Plan definition, participation in the annual ACI-Airport Service Quality survey, and online customer experience analytics.

(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Operating Expenses by Category</b>					
Salary & Benefits <sup>1</sup>	\$ 700	\$ 614	\$ 799	\$ 185	30.1%
Materials & Supplies <sup>2</sup>	127	76	156	80	>100%
Contractual Services <sup>3</sup>	214	414	496	82	19.8%
Equipment Repair	-	2	-	(2)	-100.0%
Other Operating Expense <sup>4</sup>	49	38	85	47	>100%
<b>Total</b>	<b>\$ 1,090</b>	<b>\$ 1,143</b>	<b>\$ 1,535</b>	<b>\$ 392</b>	<b>34.3%</b>
<b>Operating Expenses by Cost Centers</b>					
Administration	\$ 1,090	\$ 1,143	\$ 1,535	\$ 392	34.3%
<b>Total</b>	<b>\$ 1,090</b>	<b>\$ 1,143</b>	<b>\$ 1,535</b>	<b>\$ 392</b>	<b>34.3%</b>

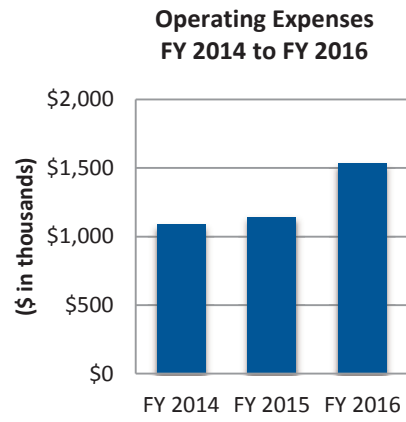
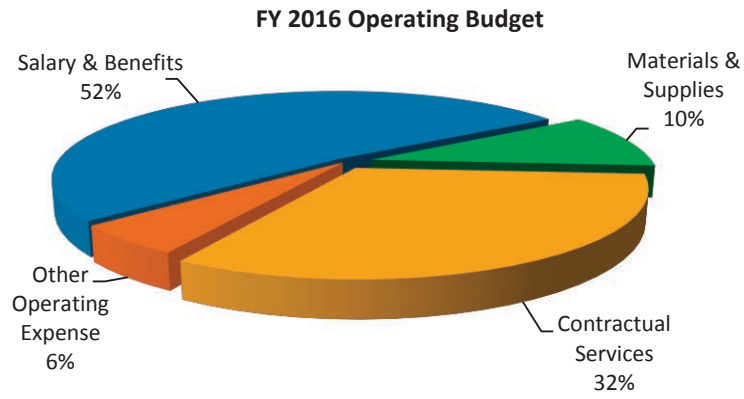
May not sum to total due to rounding

<sup>1</sup> FY 2016 includes one additional employee

<sup>2</sup> FY 2016 increase due to AAAE Conference sponsorship

<sup>3</sup> FY 2016 increase due to DTW Master Plan definition

<sup>4</sup> FY 2016 increase due to AAAE Conference sponsorship and quarterly staff leadership meetings



PROCUREMENT & BUSINESS DIVERSITY

OVERVIEW

The Procurement Department is responsible for overseeing and managing the process for purchasing goods and services, including contract compliance, handling surplus property disposal, and managing the business diversity programs related to Airport Authority contracts.

RESOURCE ALLOCATION

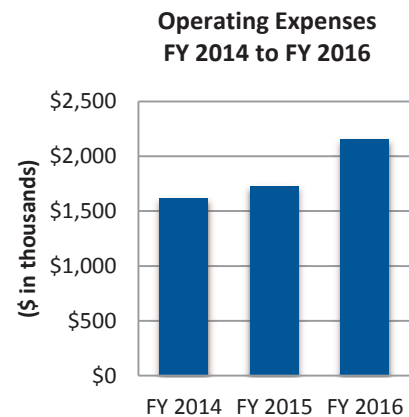
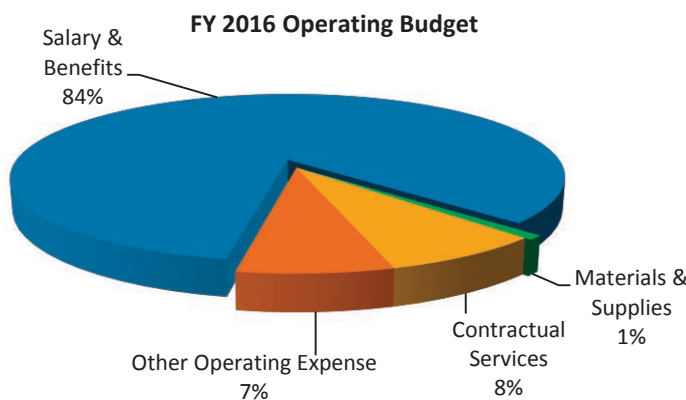
Salaries & Wages and Employee Benefits support a staff of 17 full-time employees.

Funds budgeted for **Contractual Services** include payment to the County of Wayne for Disadvantage Business (DBE) and Small Business Enterprise (SBE) Certification services.

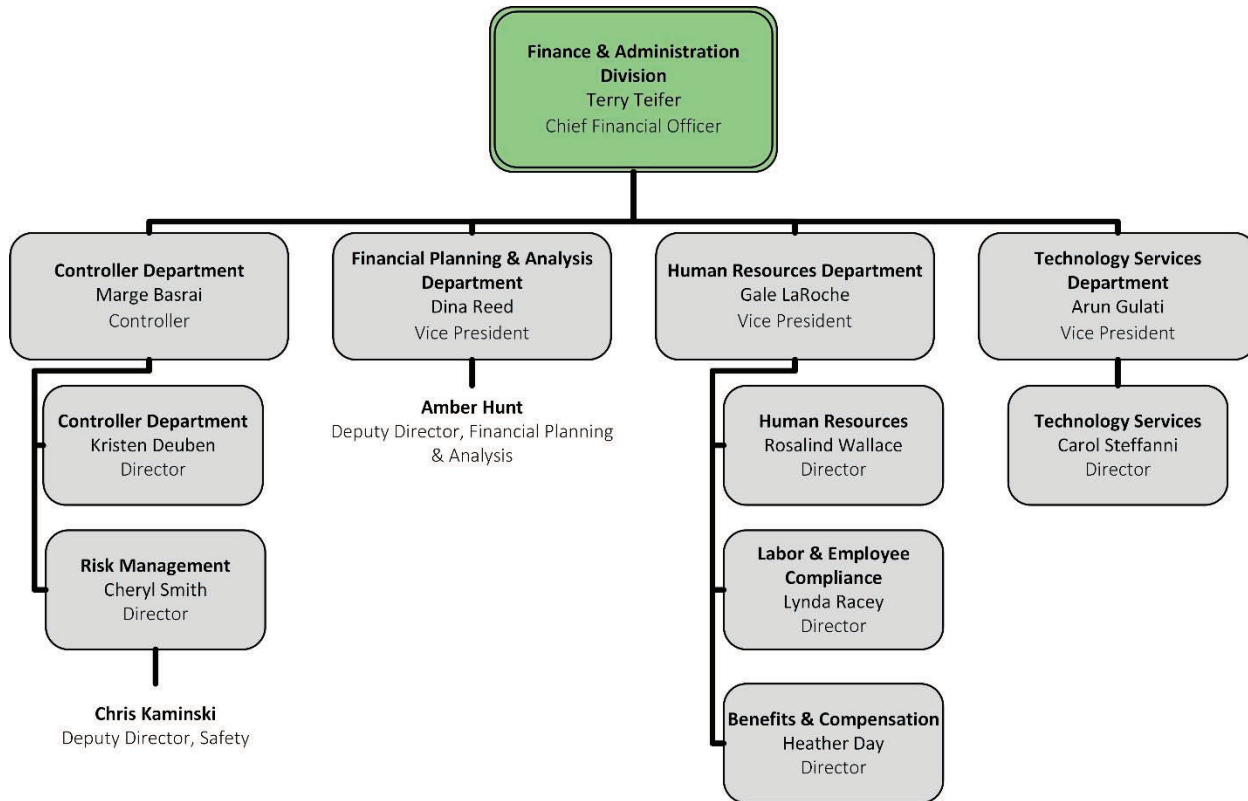
(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Operating Expenses by Category</b>					
Salary & Benefits <sup>1</sup>	\$ 1,461	\$ 1,473	\$ 1,814	\$ 341	23.2%
Materials & Supplies	12	20	18	(2)	-10.3%
Contractual Services	104	120	168	48	39.6%
Other Operating Expense	44	117	157	40	34.1%
<b>Total</b>	<b>\$ 1,621</b>	<b>\$ 1,730</b>	<b>\$ 2,157</b>	<b>\$ 427</b>	<b>24.7%</b>
<b>Operating Expenses by Cost Centers</b>					
Administration	\$ 1,621	\$ 1,730	\$ 2,157	427	24.7%
<b>Total</b>	<b>\$ 1,621</b>	<b>\$ 1,730</b>	<b>\$ 2,157</b>	<b>\$ 427</b>	<b>24.7%</b>

May not sum to total due to rounding

<sup>1</sup> FY 2016 includes two additional employees



**FINANCE & ADMINISTRATION DIVISION**



	FY 2012 Budget	FY 2013 Budget	FY 2014 Budget	FY 2015 Budget	FY 2016 Budget	Five-Year CAGR
<b>Full-Time Employees (FTEs)</b>						
<b>Detroit Metropolitan Airport</b>						
<b>Finance &amp; Administration Division</b>						
Office of the Chief Financial Officer	2	2	2	2	2	0.0%
Controller	23	21	21	18	19	-3.7%
Risk Management	2	2	2	3	3	8.4%
Financial Planning & Analysis	7	6	7	8	8	2.7%
Human Resources	14	11	11	13	13	-1.5%
Technology Services	13	13	15	14	18	6.7%
<b>Total Finance &amp; Administration Division</b>	<b>61</b>	<b>55</b>	<b>58</b>	<b>58</b>	<b>63</b>	<b>0.6%</b>

(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Operating Expenses by Category</b>					
Salary & Benefits <sup>1</sup>	\$ 8,506	\$ 8,110	\$ 13,215	\$ 5,105	62.9%
Materials & Supplies	1,004	565	571	6	1.1%
Contractual Services	4,566	5,199	5,028	(171)	-3.3%
Insurance	2,114	2,081	2,093	12	0.6%
Equipment Repair	15	283	283	-	0.0%
Other Operating Expense	587	757	825	67	8.9%
O&M Capital	875	25	25	-	0.0%
<b>Total</b>	<b>\$ 17,668</b>	<b>\$ 17,020</b>	<b>\$ 22,039</b>	<b>\$ 5,019</b>	<b>29.5%</b>
<b>Operating Expenses by Cost Centers</b>					
North Terminal	\$ 170	\$ 150	\$ 150	\$ -	0.0%
South Terminal	576	500	502	2	0.4%
Ground Transportation	784	946	1,246	300	31.7%
Administration	15,950	14,812	19,524	4,712	31.8%
Public Safety	126	552	552	-	0.0%
Westin Hotel	60	61	66	5	8.2%
<b>Total</b>	<b>\$ 17,668</b>	<b>\$ 17,020</b>	<b>\$ 22,039</b>	<b>\$ 5,019</b>	<b>29.5%</b>

May not sum to total due to rounding

<sup>1</sup> FY 2016 increase due to OPEB reclassification from non-operating expense to operating

Key Performance Measures	FY 2014 Actual	FY 2015 Target	FY 2016 Target
<b>Operational Excellence</b>			
Employee Safety: WCAA OSHA Incident Rating	3.8	3.0	3.0
<b>Financial Competiveness &amp; Sustainability</b>			
Airline Cost per Enplaned Passenger	\$10.42	\$10.50	\$10.32
Airport Debt Rating (S&P)	A Stable	A Stable	A Stable
Operating Cost per Enplanement (DTW)	\$12.32	\$12.43	\$12.72
Net Debt Service as % of Operating Revenue	28%	29%	29%

Key Performance Measures	FY 2014 Actual	FY 2015 Target	FY 2016 Target
<b>People</b>			
Core Values: Employee Satisfaction Survey	3.4	3.5	3.5
Employee Development: Time spent per employee on development for future roles (hours)	9.4	8.0	10.0
Employee Development: Total % execution on critical Skill Development Plans	24.5%	55.0%	100.0%
Succession Planning: Total % of positions with Succession Plans	19.6%	22.0%	46.0%

CHIEF FINANCIAL OFFICER

OVERVIEW

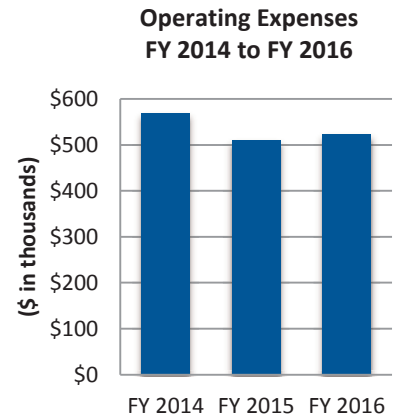
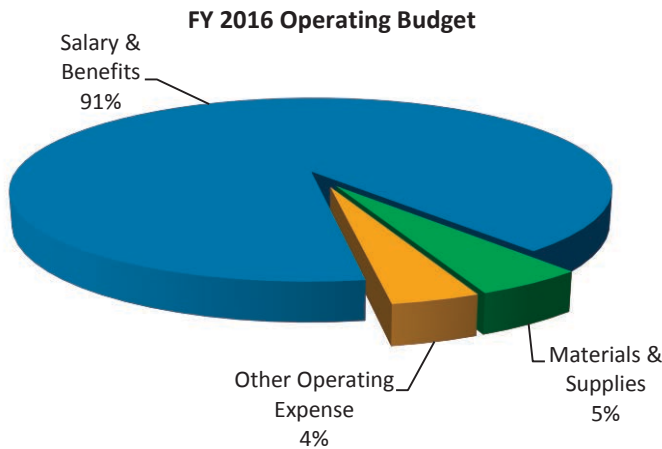
As head of the Finance & Administration Division, the Chief Financial Officer is responsible for the overall budgetary, fiscal and financial management of the Authority’s activities, including financial administration of the Capital Improvement Program (CIP), the annual operating budget, cash and debt management, risk management and payroll. The CFO also oversees the management of human resources, technology services and the Airport Westin Hotel.

RESOURCE ALLOCATION

Salaries & Wages and Employee Benefits support a staff of two full-time employees.

(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Operating Expenses by Category</b>					
Salary & Benefits	\$ 514	\$ 452	\$ 477	\$ 25	5.6%
Materials & Supplies	37	38	25	(13)	-33.2%
Other Operating Expense	18	20	20	-	0.0%
<b>Total</b>	<b>\$ 568</b>	<b>\$ 509</b>	<b>\$ 522</b>	<b>\$ 13</b>	<b>2.5%</b>
<b>Operating Expenses by Cost Centers</b>					
Administration	\$ 568	\$ 509	\$ 522	\$ 13	2.5%
<b>Total</b>	<b>\$ 568</b>	<b>\$ 509</b>	<b>\$ 522</b>	<b>\$ 13</b>	<b>2.5%</b>

*May not sum to total due to rounding*



**CONTROLLER**

**OVERVIEW**

The Controller’s Department is responsible for providing concise, accurate and timely financial information through accounting activities (e.g., general ledger, fixed asset, accounts receivable, accounts payable and grant management), disbursement management, billing and collection management, payroll, and coordination of the annual financial audit with the Authority’s external auditors. The Controller’s Department is also responsible for cash and debt management, and risk management.

**RESOURCE ALLOCATION**

**Salaries & Wages and Employee Benefits** support a staff of 19 full-time employees.

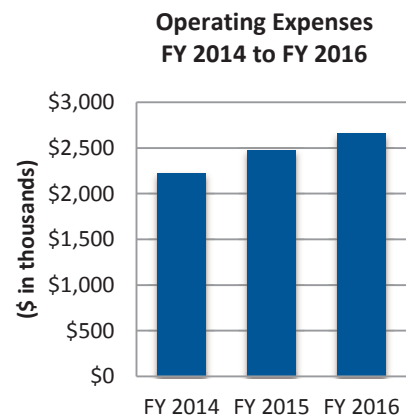
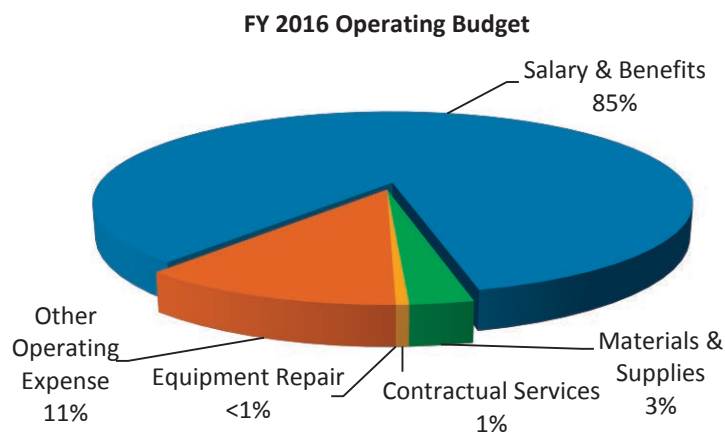
**Other Operating Expenses** includes funding for property tax expenses where applicable.

(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Operating Expenses by Category</b>					
Salary & Benefits <sup>1</sup>	\$ 1,968	\$ 2,165	\$ 2,268	\$ 103	4.8%
Materials & Supplies	46	54	73	20	36.7%
Contractual Services	12	15	15	-	0.0%
Equipment Repair	-	1	1	-	0.0%
Other Operating Expense <sup>2</sup>	204	248	305	57	23.0%
<b>Total</b>	<b>\$ 2,230</b>	<b>\$ 2,481</b>	<b>\$ 2,661</b>	<b>\$ 180</b>	<b>7.2%</b>
<b>Operating Expenses by Cost Centers</b>					
Administration	\$ 2,230	\$ 2,481	\$ 2,661	\$ 180	7.2%
<b>Total</b>	<b>\$ 2,230</b>	<b>\$ 2,481</b>	<b>\$ 2,661</b>	<b>\$ 180</b>	<b>7.2%</b>

May not sum to total due to rounding

<sup>1</sup> FY 2016 includes one additional employee

<sup>2</sup> FY 2016 includes property tax increases





RISK MANAGEMENT

OVERVIEW

Risk Management is responsible for the planning, organizing and administration of risk, safety and insurance programs to safeguard DTW's & YIP's assets through the use of various risk management techniques.

RESOURCE ALLOCATION

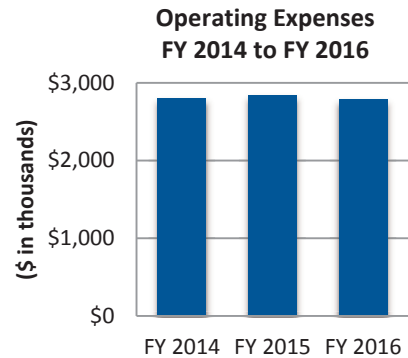
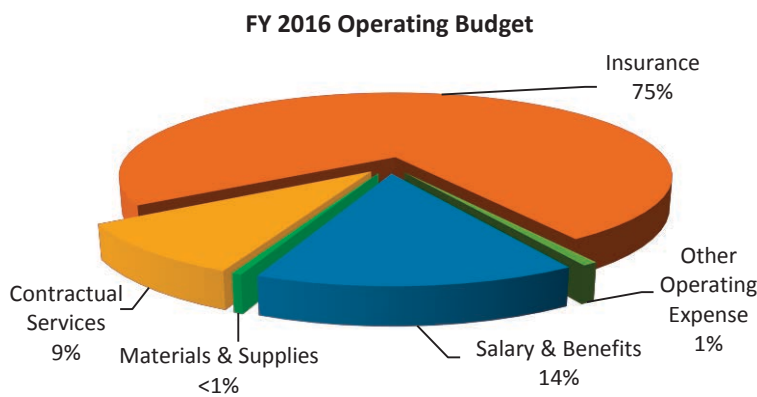
Salaries & Wages and Employee Benefits support a staff of three full-time employees.

Funds budgeted for **Contractual Services** provide for professional services contracts for general liability legal and claims services.

**Insurance** covers property and liability insurance at the Airport.

(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Operating Expenses by Category</b>					
Salary & Benefits	\$ 443	\$ 462	\$ 403	\$ (59)	-12.8%
Materials & Supplies	8	14	13	(1)	-5.1%
Contractual Services	246	262	262	-	0.0%
Insurance	2,114	2,081	2,093	12	0.6%
Other Operating Expense	(7)	13	20	7	55.5%
<b>Total</b>	<b>\$ 2,804</b>	<b>\$ 2,832</b>	<b>\$ 2,791</b>	<b>\$ (41)</b>	<b>-1.4%</b>
<b>Operating Expenses by Cost Centers</b>					
North Terminal	\$ 170	\$ 150	\$ 150	\$ -	0.0%
South Terminal	576	500	502	2	0.4%
Administration	1,997	2,121	2,073	(48)	-2.2%
Westin Hotel	60	61	66	5	8.2%
<b>Total</b>	<b>\$ 2,804</b>	<b>\$ 2,832</b>	<b>\$ 2,791</b>	<b>\$ (41)</b>	<b>-1.4%</b>

May not sum to total due to rounding



FINANCIAL PLANNING & ANALYSIS

OVERVIEW

Financial Planning & Analysis is responsible for development and administration of the Authority’s budgets and CIP. The group routinely provides detailed financial and operational information to the Senior Leadership Team and the Authority Board, including the annual operating budgets, monthly management reports, aviation industry statistical reports, financial analysis and special studies. The group also helps maximize the operational and financial performance of the Airport Westin Hotel.

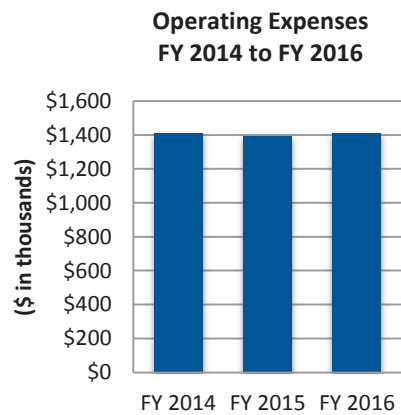
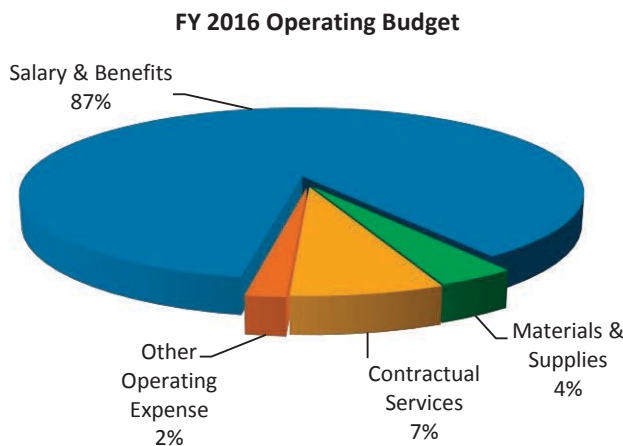
RESOURCE ALLOCATION

Salaries & Wages and Employee Benefits support a staff of eight full-time employees.

Funds budgeted for Contractual Services are primarily used for financial feasibility consulting services.

(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Operating Expenses by Category</b>					
Salary & Benefits	\$ 1,167	\$ 1,214	\$ 1,236	\$ 22	1.8%
Materials & Supplies	46	50	52	2	4.2%
Contractual Services	175	100	100	-	0.0%
Other Operating Expense	24	32	27	(5)	-16.7%
<b>Total</b>	<b>\$ 1,412</b>	<b>\$ 1,396</b>	<b>\$ 1,415</b>	<b>\$ 19</b>	<b>1.4%</b>
<b>Operating Expenses by Cost Centers</b>					
Administration	\$ 1,412	\$ 1,396	\$ 1,415	\$ 19	1.4%
<b>Total</b>	<b>\$ 1,412</b>	<b>\$ 1,396</b>	<b>\$ 1,415</b>	<b>\$ 19</b>	<b>1.4%</b>

May not sum to total due to rounding



HUMAN RESOURCES

OVERVIEW

Human Resources is responsible for providing managerial and employee coaching, recruiting and promotional opportunity services, new-hire on-boarding services, benefits strategy and administration, facilitating labor contract negotiations, administering grievance and arbitration procedures, interpreting collective bargaining agreements, leave management and employee organizational development (including training, performance management and succession planning).

RESOURCE ALLOCATION

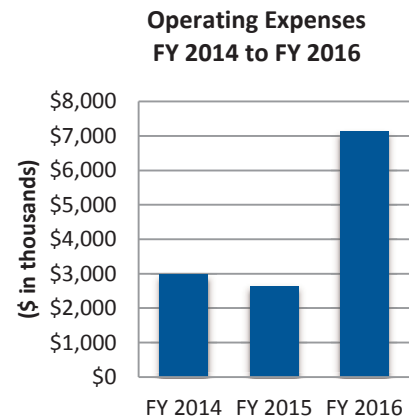
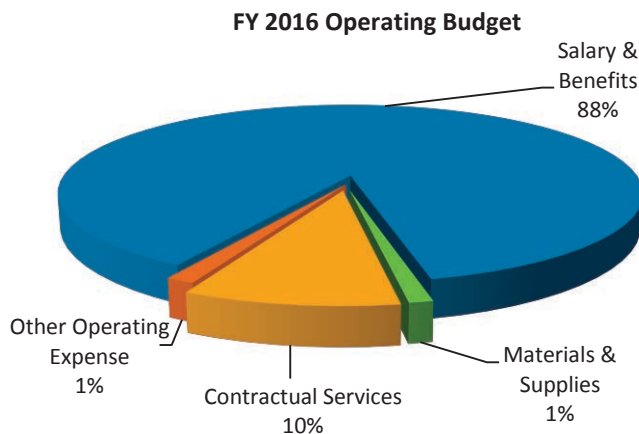
Salaries & Wages and Employee Benefits support a staff of 13 full-time employees.

Funds budgeted in **Contractual Services** are used for legal and associated services for employment related matters and labor negotiations, new-employee occupational health services, the employee assistance program, employee development software (Cornerstone On Demand) hosting and technical support, compensation and benefits analysis and other related services.

(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Operating Expenses by Category</b>					
Salary & Benefits <sup>1</sup>	\$ 2,208	\$ 1,800	\$ 6,279	\$ 4,480	>100%
Materials & Supplies	98	79	77	(3)	-3.2%
Contractual Services	575	679	680	1	0.1%
Other Operating Expense	91	85	93	8	9.9%
O&M Capital	5	-	-	-	n/a
<b>Total</b>	<b>\$ 2,977</b>	<b>\$ 2,643</b>	<b>\$ 7,129</b>	<b>\$ 4,486</b>	<b>&gt;100%</b>
<b>Operating Expenses by Cost Centers</b>					
Administration	\$ 2,977	\$ 2,643	\$ 7,129	\$ 4,486	>100%
<b>Total</b>	<b>\$ 2,977</b>	<b>\$ 2,643</b>	<b>\$ 7,129</b>	<b>\$ 4,486</b>	<b>&gt;100%</b>

May not sum to total due to rounding

<sup>1</sup> FY 2016 increase due to OPEB reclassification from non-operating expense to operating



## TECHNOLOGY SERVICES

## OVERVIEW

Technology Services is responsible for providing technology support to the business departments of the Airport Authority to enable them to be the best they can in effectively and efficiently conducting their business. Working in partnership with the departments, the areas of responsibility include design, implementation and maintenance of the technology infrastructure, developing and supporting software solutions and providing technical support 24 hours a day, 7 days a week for all technology and communications systems.

## RESOURCE ALLOCATION

**Salaries & Wages and Employee Benefits** support a staff of 18 full-time employees.

**Materials & Supplies** fund computer equipment life-cycle replacement purchases less than \$5,000.

**Contractual Services** includes help desk and computer support services, support and maintenance for the Authority's public safety, parking management and financial systems, terminal Wi-Fi, time and material staffing for projects and other technology needs.

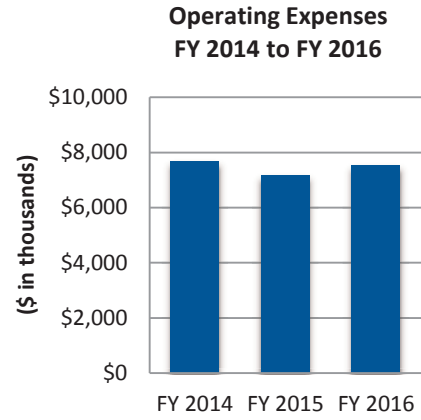
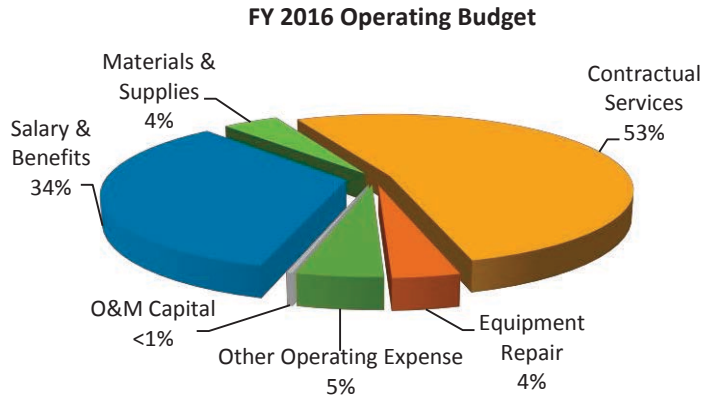
**Other Operating Expense** includes expense for all telephone and associated telecommunications circuitry.

**O & M Capital** are used for lifecycle replacement management of hardware and software acquisitions over \$5,000.

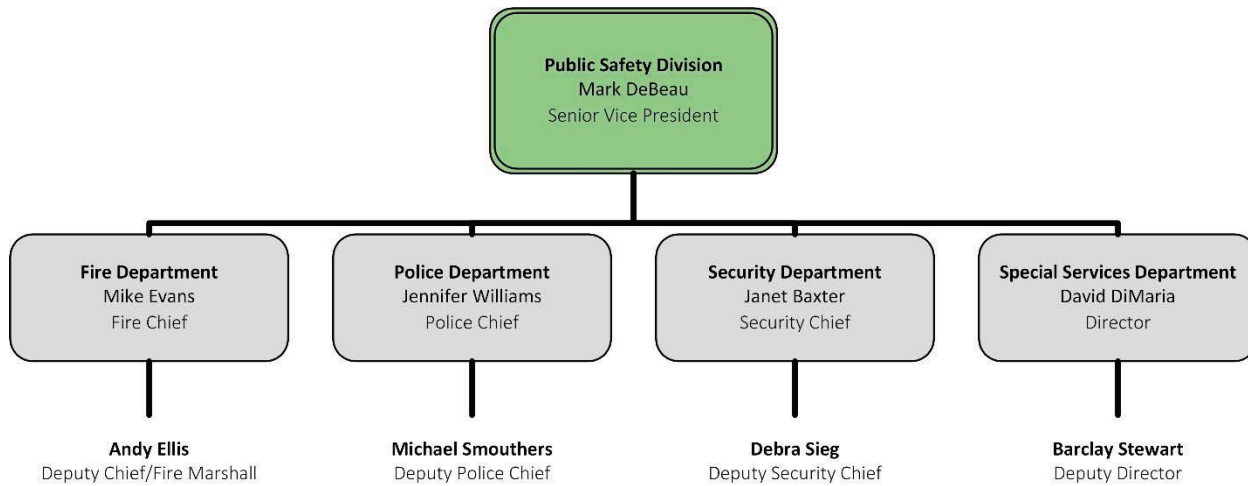
<i>(\$ in thousands)</i>	FY 2014 Actual	FY 2015 Budget	FY 2016 Budget	FY 2015 to FY 2016 Change	
				\$	%
<b>Operating Expenses by Category</b>					
Salary & Benefits <sup>1</sup>	\$ 2,205	\$ 2,018	\$ 2,552	\$ 533	26.4%
Materials & Supplies	770	331	331	-	0.0%
Contractual Services <sup>1</sup>	3,559	4,142	3,971	(172)	-4.1%
Equipment Repair	15	282	282	-	0.0%
Other Operating Expense	258	360	360	-	0.0%
O&M Capital	869	25	25	-	0.0%
<b>Total</b>	<b>\$ 7,676</b>	<b>\$ 7,159</b>	<b>\$ 7,521</b>	<b>\$ 362</b>	<b>5.1%</b>
<b>Operating Expenses by Cost Centers</b>					
Ground Transportation	784	946	1,246	300	31.7%
Administration	6,766	5,662	5,723	62	1.1%
Public Safety	126	552	552	-	0.0%
<b>Total</b>	<b>\$ 7,676</b>	<b>\$ 7,159</b>	<b>\$ 7,521</b>	<b>\$ 362</b>	<b>5.1%</b>

*May not sum to total due to rounding*

<sup>1</sup> FY 2016 variance due to four Technology Services contractors becoming full-time Authority employees



**PUBLIC SAFETY DIVISION**



Full-Time Employees (FTEs)	FY 2012 Budget	FY 2013 Budget	FY 2014 Budget	FY 2015 Budget	FY 2016 Budget	Five-Year CAGR
<b>Detroit Metropolitan Airport</b>						
<b>Public Safety Division</b>						
Public Safety Administration	5	3	3	3	3	-9.7%
Fire	60	60	61	61	61	0.3%
Police	113	107	107	107	98	-2.8%
Security	29	30	30	31	17	-10.1%
Special Services	3	3	3	3	26	54.0%
<b>Total Public Safety Division</b>	<b>210</b>	<b>203</b>	<b>204</b>	<b>205</b>	<b>205</b>	<b>-0.5%</b>

(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Operating Expenses by Category</b>					
Salary & Benefits	\$ 25,564	\$ 24,124	\$ 24,765	\$ 641	2.7%
Materials & Supplies	926	814	813	(1)	-0.1%
Security <sup>1</sup>	2,511	2,638	2,793	155	5.9%
Contractual Services <sup>2</sup>	174	295	464	169	57.1%
Buildings & Grounds	-	-	3	3	n/a
Equipment Repair <sup>3</sup>	1,469	1,665	2,035	370	22.3%
Other Operating Expense <sup>4</sup>	716	532	163	(370)	-69.5%
O&M Capital	71	32	107	75	>400%
<b>Total</b>	<b>\$ 31,430</b>	<b>\$ 30,100</b>	<b>\$ 31,143</b>	<b>\$ 1,043</b>	<b>3.5%</b>
<b>Operating Expenses by Cost Centers</b>					
Public Safety	\$ 22,844	\$ 21,811	\$ 22,750	\$ 940	4.3%
Fire & EMS	8,587	8,290	8,393	103	1.2%
<b>Total</b>	<b>\$ 31,430</b>	<b>\$ 30,100</b>	<b>\$ 31,143</b>	<b>\$ 1,043</b>	<b>3.5%</b>

May not sum to total due to rounding

<sup>1</sup> FY 2016 increase due to a new guard position at the South Terminal

<sup>2</sup> FY 2016 increase due to new TSA fingerprinting directive

<sup>3</sup> FY 2016 increase in Security Card Access System maintenance

<sup>4</sup> FY 2016 decrease due to the closure of the North Terminal Credentials Office

Key Performance Measures	FY 2014 Actual	FY 2015 Target	FY 2016 Target
<b>Customer Satisfaction</b>			
Job creation as measured by the number of badged employees	18,977	19,000	19,000

**PUBLIC SAFETY ADMINISTRATION**

**OVERVIEW**

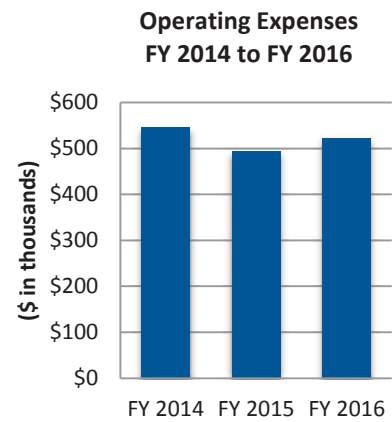
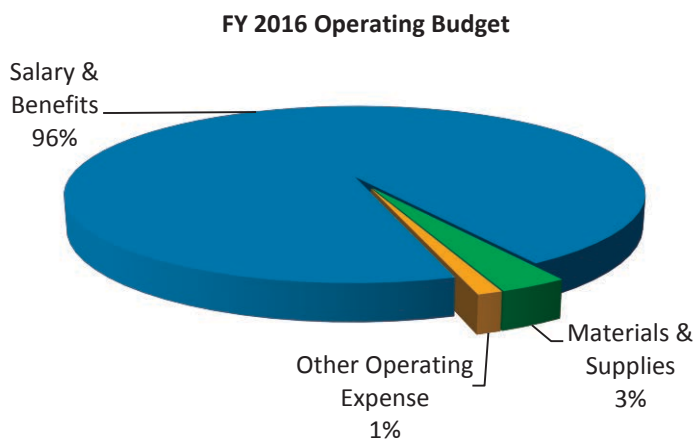
Public Safety Administration oversees the Public Safety division which provides safety and security for all airport users and preserves Authority assets through deployment of police, fire, security and special services.

**RESOURCE ALLOCATION**

**Salaries & Wages and Employee Benefits** support a staff of three full-time employees.

(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Operating Expenses by Category</b>					
Salary & Benefits	\$ 533	\$ 480	\$ 502	\$ 21	4.4%
Materials & Supplies	7	8	16	8	>100%
Other Operating Expense	6	6	6	-	0.0%
<b>Total</b>	<b>\$ 546</b>	<b>\$ 494</b>	<b>\$ 524</b>	<b>\$ 29</b>	<b>5.9%</b>
<b>Operating Expenses by Cost Centers</b>					
Public Safety	\$ 546	\$ 494	\$ 524	\$ 29	5.9%
<b>Total</b>	<b>\$ 546</b>	<b>\$ 494</b>	<b>\$ 524</b>	<b>\$ 29</b>	<b>5.9%</b>

*May not sum to total due to rounding*





FIRE

OVERVIEW

The Fire Department is internationally accredited and provides for delivery of Aircraft Rescue and Fire Fighting, structural fire suppression, emergency medical services, fire prevention and education in order to maintain the safest environment possible for travelers and airport employees.

RESOURCE ALLOCATION

**Salaries & Wages and Employee Benefits** support a staff of 61 full-time employees.

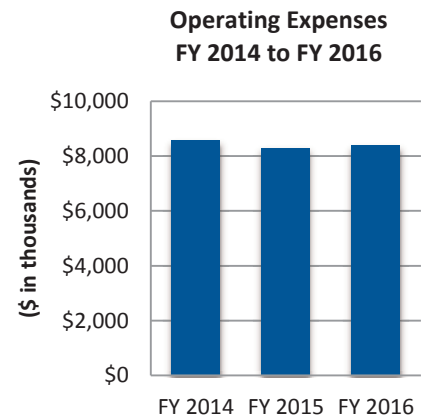
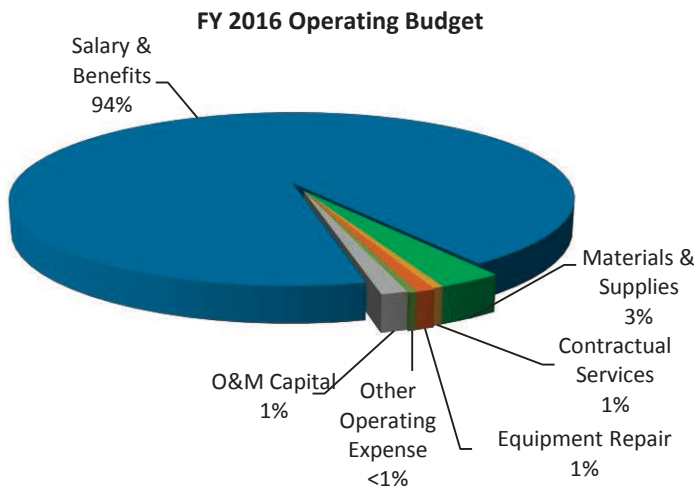
Funds budgeted for **Materials and Supplies** are primarily used to purchase propane for the ARFF simulator, extinguishing agents and uniforms.

**Equipment Repair** budget includes expenses associated with the maintenance of Automated External Defibrillators (AEDs), stretchers, rescue equipment, hydraulic tools and other emergency equipment.

(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Operating Expenses by Category</b>					
Salary & Benefits	\$ 8,049	\$ 7,838	\$ 7,877	\$ 39	0.5%
Materials & Supplies	391	288	257	(31)	-10.7%
Contractual Services	12	27	43	16	58.1%
Equipment Repair	71	80	77	(3)	-3.3%
Other Operating Expense	22	25	31	6	24.1%
O&M Capital <sup>1</sup>	43	32	107	75	>100%
<b>Total</b>	<b>\$ 8,587</b>	<b>\$ 8,290</b>	<b>\$ 8,393</b>	<b>\$ 103</b>	<b>1.2%</b>
<b>Operating Expenses by Cost Centers</b>					
Fire & EMS	\$ 8,587	\$ 8,290	\$ 8,393	\$ 103	1.2%
<b>Total</b>	<b>\$ 8,587</b>	<b>\$ 8,290</b>	<b>\$ 8,393</b>	<b>\$ 103</b>	<b>1.2%</b>

May not sum to total due to rounding

<sup>1</sup> FY 2016 increase due to new foam resupply trailer and hose replacement



**POLICE**

**OVERVIEW**

The Authority’s internationally accredited Police department provides traditional law enforcement and supports the passenger screening function of the TSA.

**RESOURCE ALLOCATION**

**Salaries & Wages and Employee Benefits** support a staff of 98 full-time employees.

Funds budgeted for **Materials and Supplies** includes uniforms for officers, patrol firearms allowance, vests and ammunition.

Funds budgeted for **Contractual Services** include on-site professional development services and veterinary services for police dogs.

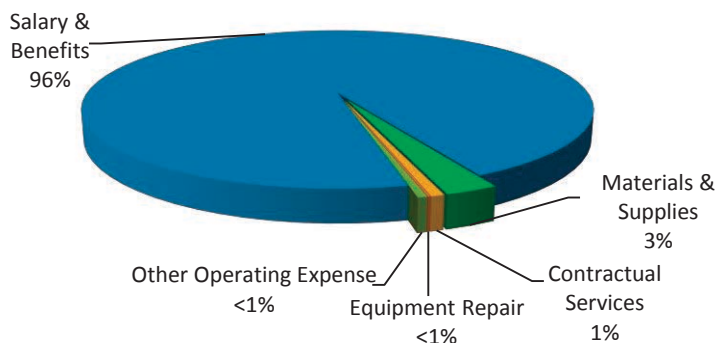
Police Department expenses are offset by federal grants for eligible law enforcement activities. These grants are recorded under non-airline revenues.

(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Operating Expenses by Category</b>					
Salary & Benefits <sup>1</sup>	\$ 13,849	\$ 12,697	\$ 12,353	\$ (343)	-2.7%
Materials & Supplies	382	370	352	(19)	-5.0%
Contractual Services	21	71	88	18	24.9%
Equipment Repair	1	14	15	1	6.9%
Other Operating Expense	71	59	64	5	8.5%
O&M Capital	10	-	-	-	n/a
<b>Total</b>	<b>\$ 14,333</b>	<b>\$ 13,211</b>	<b>\$ 12,873</b>	<b>\$ (338)</b>	<b>-2.6%</b>
<b>Operating Expenses by Cost Centers</b>					
Public Safety	\$ 14,333	\$ 13,211	\$ 12,873	\$ (338)	-2.6%
<b>Total</b>	<b>\$ 14,333</b>	<b>\$ 13,211</b>	<b>\$ 12,873</b>	<b>\$ (338)</b>	<b>-2.6%</b>

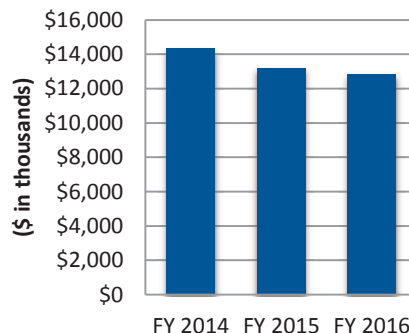
May not sum to total due to rounding

<sup>1</sup> FY 2016 decrease due to organizational realignment

**FY 2016 Operating Budget**



**Operating Expenses FY 2014 to FY 2016**



SECURITY

OVERVIEW

Security is responsible for the systems and procedures to keep the passengers and airport employees safe while maintaining compliance with federal regulations and the Airport Security Program.

RESOURCE ALLOCATION

**Salaries & Wages and Employee Benefits** support a staff of 17 full-time employees.

**Security** includes guard services that are contracted to a third party security firm.

Funds budgeted for **Contractual Services** include maintenance for the access control system and fingerprinting services.

Maintenance for the Security Card Access System for DTW and is budgeted under **Equipment Repair**.

(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Operating Expenses by Category</b>					
Salary & Benefits <sup>1</sup>	\$ 2,602	\$ 2,629	\$ 2,308	\$ (321)	-12.2%
Materials & Supplies	94	91	92	1	0.7%
Security <sup>2</sup>	2,511	2,638	2,793	155	5.9%
Contractual Services <sup>3</sup>	142	198	333	135	68.5%
Equipment Repair <sup>4</sup>	1,368	1,570	1,941	370	23.6%
Other Operating Expense <sup>5</sup>	607	432	12	(420)	-97.2%
O&M Capital	18	-	-	-	n/a
<b>Total</b>	<b>\$ 7,343</b>	<b>\$ 7,558</b>	<b>\$ 7,479</b>	<b>\$ (80)</b>	<b>-1.1%</b>
<b>Operating Expenses by Cost Centers</b>					
Public Safety	7,343	7,558	7,479	(80)	-1.1%
<b>Total</b>	<b>\$ 7,343</b>	<b>\$ 7,558</b>	<b>\$ 7,479</b>	<b>\$ (80)</b>	<b>-1.1%</b>

May not sum to total due to rounding

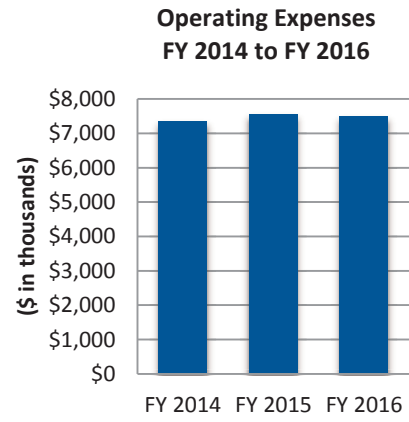
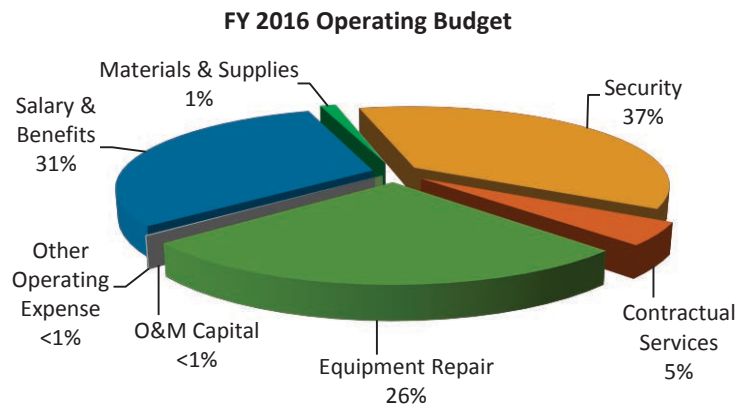
<sup>1</sup> FY 2016 decrease due to organizational realignment

<sup>2</sup> FY 2016 increase due to a new guard position at the South Terminal

<sup>3</sup> FY 2016 increase due to new TSA fingerprinting directive

<sup>4</sup> FY 2016 increase in Security Card Access System maintenance

<sup>5</sup> FY 2016 decrease due to the closure of the North Terminal Credentials Office



SPECIAL SERVICES

OVERVIEW

The Special Services department is responsible for the Emergency Management function at the Airport and accreditation of the departments of the Public Safety Division.

RESOURCE ALLOCATION

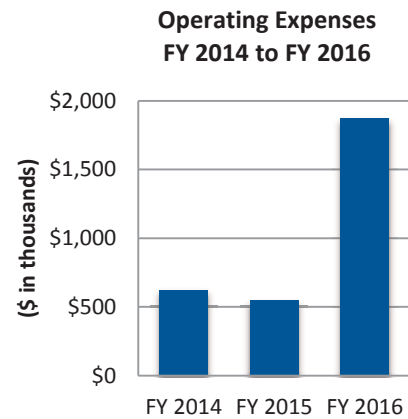
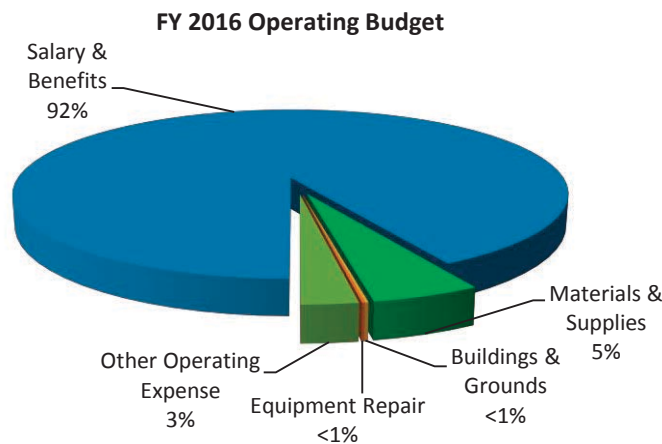
Salaries & Wages and Employee Benefits support a staff of 26 full-time employees.

Funds budgeted in **Materials and Supplies** contains funds for maintaining the airport’s Public Safety accreditations, mutual aid memberships and various subscriptions.

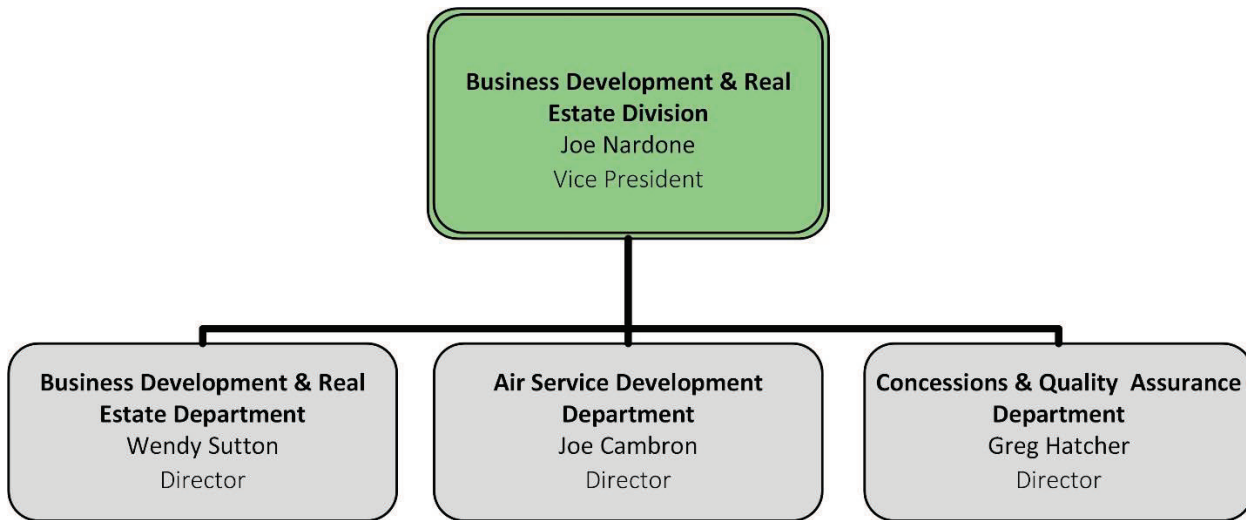
(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Operating Expenses by Category</b>					
Salary & Benefits <sup>1</sup>	\$ 531	\$ 480	\$ 1,725	\$ 1,245	>100%
Materials & Supplies	52	56	95	39	70.3%
Buildings & Grounds	-	-	3	3	n/a
Equipment Repair	29	1	2	2	>100%
Other Operating Expense	10	11	50	39	>100%
<b>Total</b>	<b>\$ 622</b>	<b>\$ 547</b>	<b>\$ 1,875</b>	<b>\$ 1,328</b>	<b>&gt;100%</b>
<b>Operating Expenses by Cost Centers</b>					
Public Safety	\$ 622	\$ 547	\$ 1,875	\$ 1,328	>100%
<b>Total</b>	<b>\$ 622</b>	<b>\$ 547</b>	<b>\$ 1,875</b>	<b>\$ 1,328</b>	<b>&gt;100%</b>

May not sum to total due to rounding

<sup>1</sup> FY 2016 increase due to organizational realignment



**BUSINESS DEVELOPMENT & REAL ESTATE**



Full-Time Employees (FTEs)	FY 2012 Budget	FY 2013 Budget	FY 2014 Budget	FY 2015 Budget	FY 2016 Budget	Five-Year CAGR
<b>Detroit Metropolitan Airport</b>						
<b>Business Development &amp; Real Estate</b>						
Business Development & Real Estate	4	3	3	8	9	17.6%
Air Service Development	1	1	1	1	1	0.0%
Concessions and Quality Services	6	4	4	4	4	-7.8%
<b>Total Business Development &amp; Real Estate</b>	<b>11</b>	<b>8</b>	<b>8</b>	<b>13</b>	<b>14</b>	<b>4.9%</b>

(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Operating Expenses by Category</b>					
Salary & Benefits <sup>1</sup>	\$ 1,901	\$ 1,990	\$ 1,843	\$ (146)	-7.4%
Materials & Supplies	59	115	128	14	12.1%
Contractual Services <sup>2</sup>	1,690	1,666	1,846	180	10.8%
Other Operating Expense	295	203	255	53	25.9%
O&M Capital	255	256	256	-	0.0%
<b>Total</b>	<b>\$ 4,200</b>	<b>\$ 4,229</b>	<b>\$ 4,329</b>	<b>\$ 100</b>	<b>2.4%</b>
<b>Operating Expenses by Cost Centers</b>					
North Terminal	\$ -	\$ 951	\$ 951	\$ -	0.0%
South Terminal	931	580	580	-	0.0%
Airfield	742	-	-	-	n/a
Cargo & Hangar	255	256	256	-	0.0%
Administration	1,811	2,442	2,542	100	4.1%
Public Safety	459	-	-	-	n/a
<b>Total</b>	<b>\$ 4,200</b>	<b>\$ 4,229</b>	<b>\$ 4,329</b>	<b>\$ 100</b>	<b>2.4%</b>

May not sum to total due to rounding

<sup>1</sup> FY 2016 decrease due to organizational realignment

<sup>2</sup> FY 2016 increase due to Real Estate Tool Kit enhancements

Key Performance Measures	FY 2014 Actual	FY 2015 Target	FY 2016 Target
<b>Customer Satisfaction</b>			
Region/Community: # of Scheduled Non-Stop Travel Opportunities	192	183	188
<b>Financial Competitiveness &amp; Sustainability</b>			
Gross Food, Beverage & Retail Revenue per Enplanement	\$10.41	\$10.22	\$10.99
<b>Regional Development</b>			
Overall cargo tonnage handled at DTW	208,839	207,400	191,000

**BUSINESS DEVELOPMENT & REAL ESTATE AND AIR SERVICE DEVELOPMENT**

**OVERVIEW**

**Business Development & Real Estate** is responsible for the lease or sale of the Airport Authority’s property to aviation, aviation-related, commercial and industrial users, as well as any future development of facilities or land on airport property.

**Air Service Development** is responsible for improving air service through the development and implementation of research, marketing and media outreach programs. The department analyzes aviation industry data and trends which result in recommendations for new and/or improved air service as well as identifying positive air service trends that can be used to enhance the Airport’s image in the local community and with connecting passengers.

**RESOURCE ALLOCATION**

**Salaries & Wages and Employee Benefits** for the two Departments support a staff of 10 full-time employees.

Funds budgeted in **Materials & Supplies** are used for industry data subscriptions and software for DiiO and Sabre to support air service development.

Professional appraisal services are budgeted under **Contractual Services**.

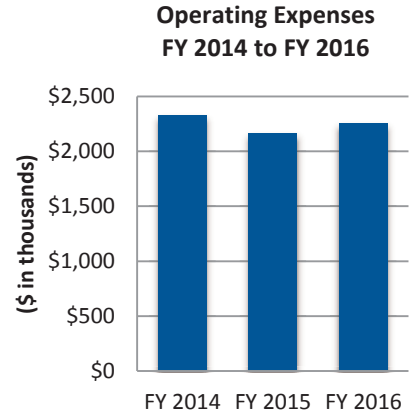
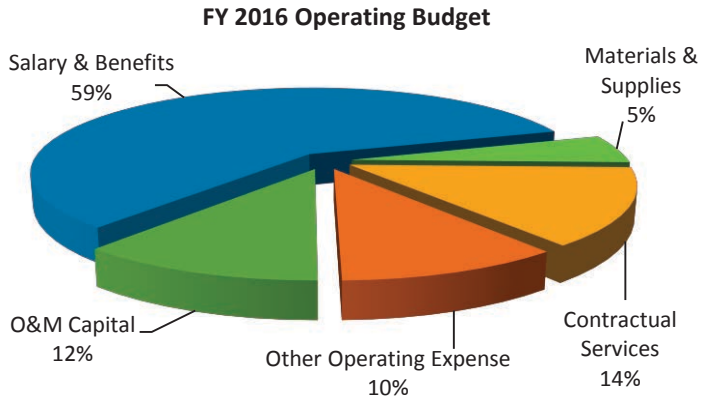
(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Operating Expenses by Category</b>					
Salary & Benefits <sup>1</sup>	\$ 1,437	\$ 1,486	\$ 1,332	\$ (154)	-10.4%
Materials & Supplies	53	106	119	13	12.6%
Contractual Services <sup>2</sup>	109	135	315	180	>100%
Other Operating Expense	471	183	233	51	27.7%
O&M Capital	255	256	256	-	0.0%
<b>Total</b>	<b>\$ 2,326</b>	<b>\$ 2,166</b>	<b>\$ 2,256</b>	<b>\$ 90</b>	<b>4.1%</b>
<b>Operating Expenses by Cost Centers</b>					
Airfield	\$ 259	\$ -	\$ -	\$ -	n/a
Cargo & Hangar	255	256	256	-	0.0%
Administration	1,811	1,910	2,000	90	4.7%
<b>Total</b>	<b>\$ 2,326</b>	<b>\$ 2,166</b>	<b>\$ 2,256</b>	<b>\$ 90</b>	<b>4.1%</b>

May not sum to total due to rounding

<sup>1</sup> FY 2016 decrease due to organizational realignment

<sup>2</sup> FY 2016 increase due to Real Estate Tool Kit enhancements





**CONCESSIONS & QUALITY ASSURANCE**

**OVERVIEW**

The Concessions & Quality Assurance Department is responsible for delivering a variety of services to the traveling public, airlines and visitors including food, beverage, retail, duty-free, car rental, advertising, luggage carts and other customer services. The department oversees the design of new and existing venues, manages all related construction and contractual obligations, conducts plan reviews of renovations, and monitors and evaluates existing concession performance.

**RESOURCE ALLOCATION**

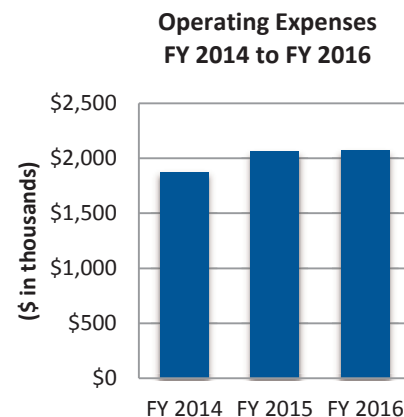
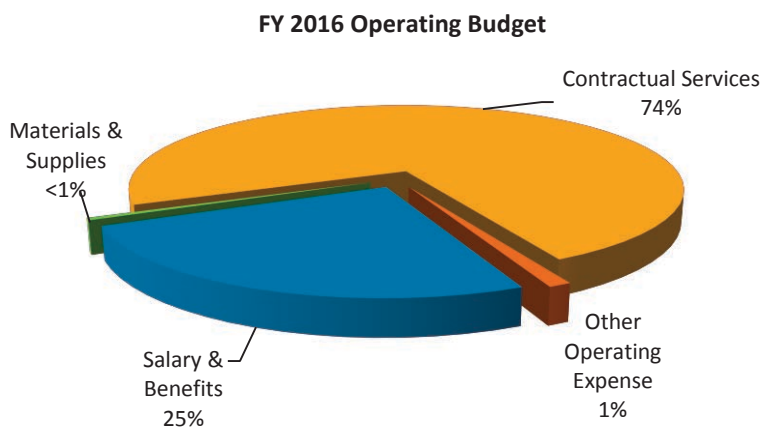
**Salaries & Wages and Employee Benefits** support a staff of four full-time employees.

Funds budgeted in **Contractual Services** are used for:

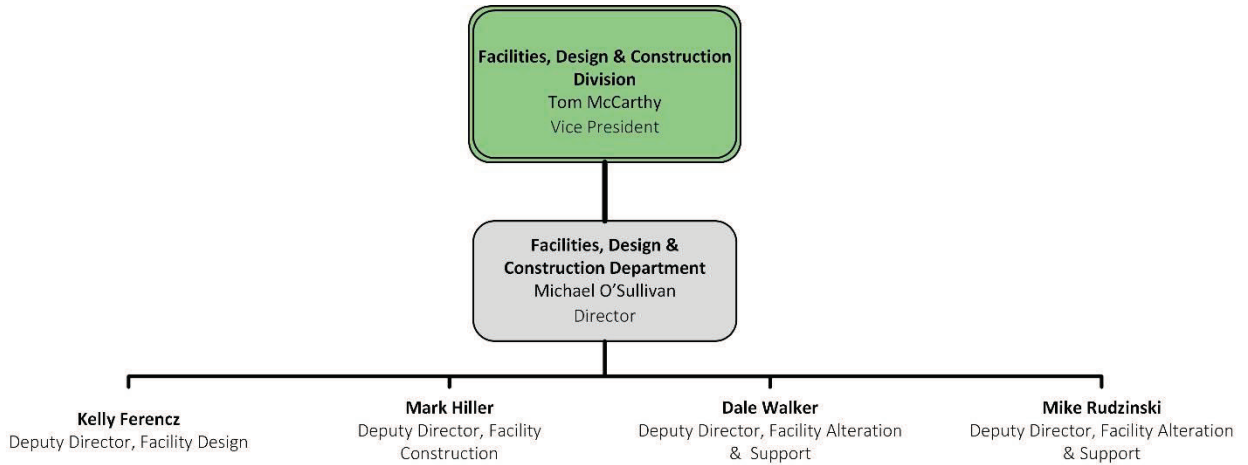
- ➔ Consulting services for all Concessions requests for proposals (RFPs) airport wide
- ➔ Dockmaster services for both terminals
- ➔ Complimentary luggage carts at both terminals for all international passengers

(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Operating Expenses by Category</b>					
Salary & Benefits	\$ 464	\$ 504	\$ 511	\$ 8	1.6%
Materials & Supplies	6	9	9	1	5.9%
Contractual Services	1,580	1,531	1,531	-	0.0%
Other Operating Expense	(176)	20	22	2	10.0%
<b>Total</b>	<b>\$ 1,874</b>	<b>\$ 2,063</b>	<b>\$ 2,073</b>	<b>\$ 10</b>	<b>0.5%</b>
<b>Operating Expenses by Cost Centers</b>					
North Terminal	\$ 931	\$ 951	\$ 951	\$ -	0.0%
South Terminal	483	580	580	-	0.0%
Administration	459	532	542	10	1.9%
<b>Total</b>	<b>\$ 1,874</b>	<b>\$ 2,063</b>	<b>\$ 2,073</b>	<b>\$ 10</b>	<b>0.5%</b>

*May not sum to total due to rounding*



**FACILITIES DESIGN & CONSTRUCTION**



	FY 2012 Budget	FY 2013 Budget	FY 2014 Budget	FY 2015 Budget	FY 2016 Budget	Five-Year CAGR
<b>Full-Time Employees (FTEs)</b>						
<b>Detroit Metropolitan Airport</b>						
<b>Facilities, Design &amp; Construction</b>						
Facilities & Development Administration	3	1	1	1	-	-100.0%
Infrastructure & Engineering	14	12	14	-	-	-100.0%
Facilities, Design & Construction	20	10	13	3	3	-31.6%
Facility Design	-	5	5	7	8	N/A
Facility Construction	-	-	-	9	9	N/A
Facility Alteration & Support	-	-	-	5	6	N/A
<b>Total Facilities &amp; Development Division</b>	<b>37</b>	<b>28</b>	<b>33</b>	<b>25</b>	<b>26</b>	<b>-6.8%</b>

(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Operating Expenses by Category</b>					
Salary & Benefits <sup>1</sup>	\$ 4,232	\$ 2,790	\$ 3,202	\$ 412	14.8%
Materials & Supplies	299	45	69	24	53.4%
Janitorial	511	-	-	-	n/a
Contractual Services <sup>2</sup>	3,364	718	1,269	551	76.7%
Buildings & Grounds <sup>3</sup>	3,977	5,967	4,272	(1,695)	-28.4%
Equipment Repair	1,011	2	2	-	0.0%
Other Operating Expense	60	69	102	32	46.8%
O&M Capital	140	-	-	-	n/a
<b>Total</b>	<b>\$ 13,593</b>	<b>\$ 9,592</b>	<b>\$ 8,916</b>	<b>\$ (676)</b>	<b>-7.0%</b>
<b>Operating Expenses by Cost Centers</b>					
North Terminal	\$ 88	\$ -	\$ -	\$ -	n/a
South Terminal	1	-	-	-	n/a
Airfield	1,017	2,270	1,600	(670)	-29.5%
Facilities & Maintenance	5,011	2,866	2,555	(311)	-10.8%
Ground Transportation	4,481	2,300	2,359	59	2.6%
Administration	2,988	2,156	2,401	246	11.4%
Public Safety	6	-	-	-	n/a
<b>Total</b>	<b>\$ 13,593</b>	<b>\$ 9,592</b>	<b>\$ 8,916</b>	<b>\$ (676)</b>	<b>-7.0%</b>

*May not sum to total due to rounding*

<sup>1</sup> FY 2016 includes two additional employees  
<sup>2</sup> FY 2016 increase due to a new contract for monthly parking deck inspections  
<sup>3</sup> FY 2016 focus on capital projects reduces operating costs for the year

Key Performance Measures	FY 2014 Actual	FY 2015 Target	FY 2016 Target
<b>Operational Excellence</b>			
Passenger Facilitation: Average Customs & Border Patrol (CBP) Wait Time (in minutes)	17.3	15.5	15.8

FACILITIES, DESIGN & CONSTRUCTION

OVERVIEW

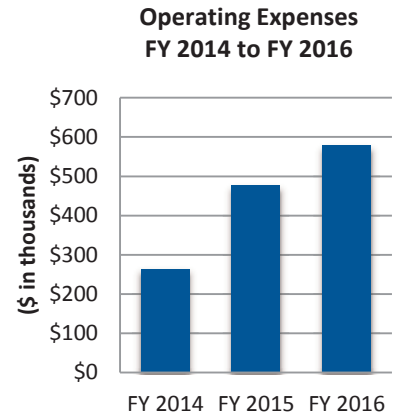
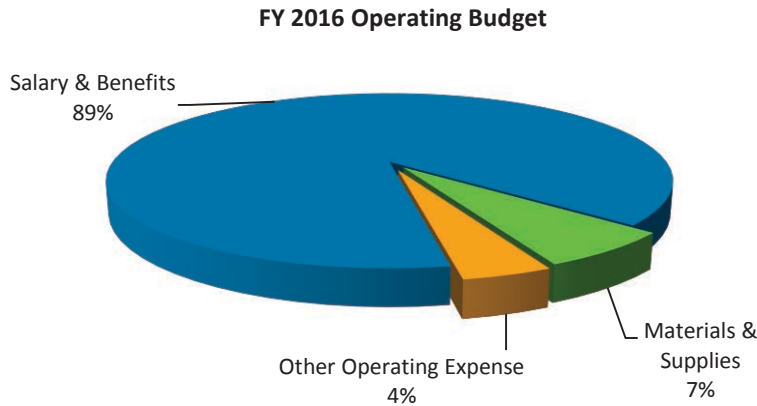
The Facilities, Design & Construction department oversees the Division and provides administration in support of its objective to deliver capital construction at both Detroit Metro and Willow Run Airports.

RESOURCE ALLOCATION

Salaries & Wages and Employee Benefits support a staff of three full-time employees.

(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Operating Expenses by Category</b>					
Salary & Benefits	\$ 39	\$ 477	\$ 516	\$ 39	8.1%
Materials & Supplies	10	-	39	39	n/a
Contractual Services	84	-	-	-	n/a
Other Operating Expense	17	-	24	24	n/a
O&M Capital	115	-	-	-	n/a
<b>Total</b>	<b>\$ 264</b>	<b>\$ 477</b>	<b>\$ 578</b>	<b>\$ 101</b>	<b>21.2%</b>
<b>Operating Expenses by Cost Centers</b>					
Facilities & Maintenance	\$ (4)	\$ -	\$ -	\$ -	n/a
Administration	268	477	578	101	21.2%
<b>Total</b>	<b>\$ 264</b>	<b>\$ 477</b>	<b>\$ 578</b>	<b>\$ 101</b>	<b>21.2%</b>

May not sum to total due to rounding



FACILITY DESIGN

OVERVIEW

Facility Design manages the design of Authority assets including infrastructure, paving projects (both airside and landside) and facilities.

RESOURCE ALLOCATION

**Salaries & Wages and Employee Benefits** support a staff of eight full-time employees.

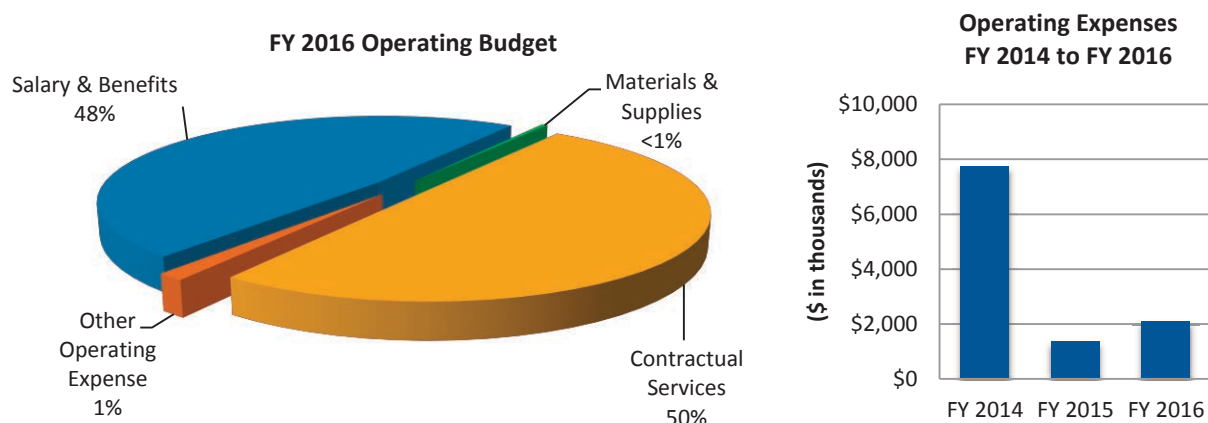
**Contractual Services** includes all preliminary engineering and surveying costs such as ensuring that the airfield pavement complies with FAA guidelines, delivering the Bridge Maintenance Plan, and monthly inspections of the parking decks.

(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Operating Expenses by Category</b>					
Salary & Benefits <sup>1</sup>	\$ 1,032	\$ 880	\$ 1,011	\$ 131	14.9%
Materials & Supplies	9	10	8	(2)	-18.6%
Contractual Services <sup>2</sup>	3,030	458	1,044	586	>100%
Buildings & Grounds	3,654	-	-	-	n/a
Other Operating Expense	9	14	28	13	93.7%
O&M Capital	15	-	-	-	n/a
<b>Total</b>	<b>\$ 7,749</b>	<b>\$ 1,362</b>	<b>\$ 2,091</b>	<b>\$ 729</b>	<b>53.5%</b>
<b>Operating Expenses by Cost Centers</b>					
Airfield	\$ 1,022	\$ 100	\$ 100	\$ -	0.0%
Facilities & Maintenance	3,263	1,262	1,407	145	11.5%
Ground Transportation	3,464	-	584	584	n/a
<b>Total</b>	<b>\$ 7,749</b>	<b>\$ 1,362</b>	<b>\$ 2,091</b>	<b>\$ 729</b>	<b>53.5%</b>

May not sum to total due to rounding

<sup>1</sup> FY 2016 includes one additional employee

<sup>2</sup> FY 2016 increase due to a new contract for monthly parking deck inspections



FACILITY CONSTRUCTION

OVERVIEW

Once the design documents have been drafted, Facility Construction oversees project construction to ensure that the scope of work is completed to specifications that meet industry standards.

RESOURCE ALLOCATION

Salaries & Wages and Employee Benefits support a staff of nine full-time employees.

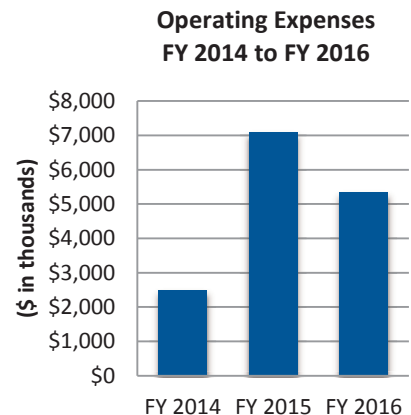
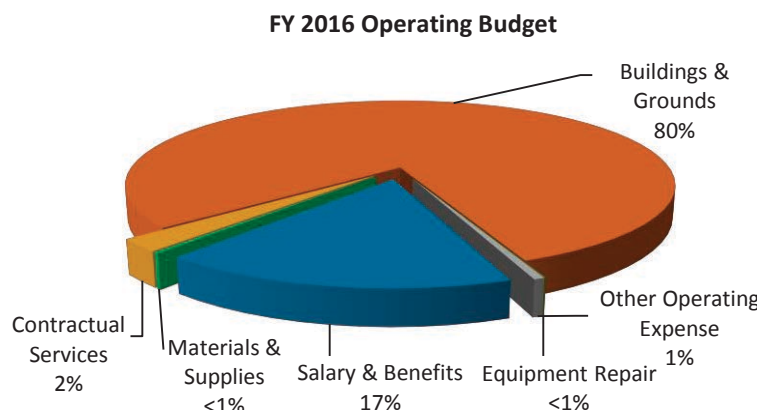
Maintenance and repair for buildings and infrastructure are budgeted under **Buildings & Grounds**. FY 2016 includes significant provisions for emergency airfield pavement repairs and preventative maintenance to parking decks.

(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Operating Expenses by Category</b>					
Salary & Benefits <sup>1</sup>	\$ 2,465	\$ 817	\$ 896	\$ 80	9.8%
Materials & Supplies	12	35	13	(22)	-62.3%
Contractual Services	-	210	125	(85)	-40.5%
Buildings & Grounds <sup>2</sup>	(5)	5,967	4,272	(1,695)	-28.4%
Equipment Repair	2	2	2	-	0.0%
Other Operating Expense	10	55	27	(28)	-50.6%
<b>Total</b>	<b>\$ 2,484</b>	<b>\$ 7,085</b>	<b>\$ 5,335</b>	<b>\$ (1,750)</b>	<b>-24.7%</b>
<b>Operating Expenses by Cost Centers</b>					
Airfield	\$ (5)	\$ 2,170	\$ 1,500	\$ (670)	-30.9%
Facilities & Maintenance	509	1,578	1,098	(480)	-30.4%
Ground Transportation	-	2,275	1,725	(550)	-24.2%
Administration	1,979	1,062	1,012	(50)	-4.7%
<b>Total</b>	<b>\$ 2,484</b>	<b>\$ 7,085</b>	<b>\$ 5,335</b>	<b>\$ (1,750)</b>	<b>-24.7%</b>

May not sum to total due to rounding

<sup>1</sup> FY 2016 includes one additional employee

<sup>2</sup> FY 2016 focus on capital projects reduces operating costs for the year



**FACILITY ALTERATION & SUPPORT**

**OVERVIEW**

Alterations to existing facilities are addressed by the Facility Alteration & Support Department. Their remit covers diverse projects such as the rehabilitation of the Airport North Power Plant Building, the washroom sink replacement in the North Terminal and the installation of heating system retrofits in the McNamara Parking Deck.

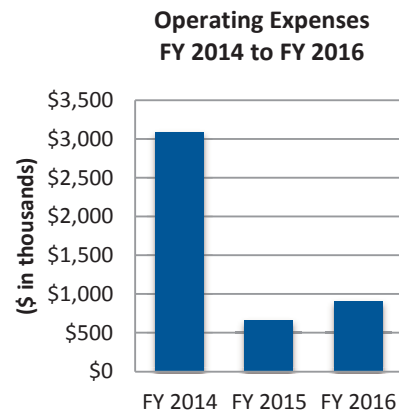
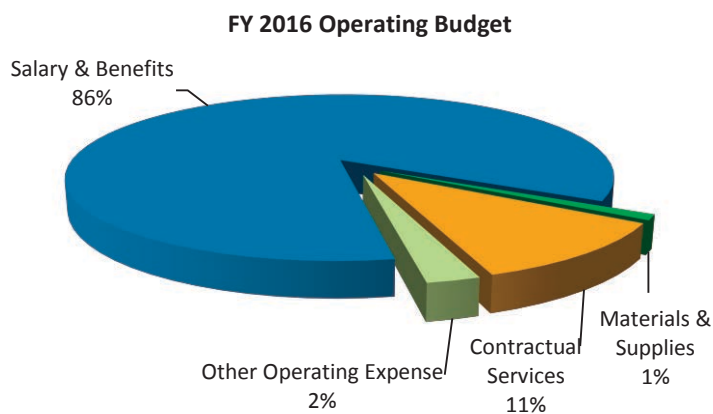
**RESOURCE ALLOCATION**

Salaries & Wages and Employee Benefits support a staff of six full-time employees.

(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change		
	Actual	Budget	Budget	\$	%	
<b>Operating Expenses by Category</b>						
Salary & Benefits <sup>1</sup>	\$ 697	\$ 617	\$ 779	\$ 162	26.3%	
Materials & Supplies	268	1	9	9	>100%	
Janitorial	511	-	-	-	n/a	
Contractual Services	251	50	100	50	100.0%	
Buildings & Grounds	327	-	-	-	n/a	
Equipment Repair	1,009	-	-	-	n/a	
Other Operating Expense	24	-	23	23	n/a	
O&M Capital	9	-	-	-	n/a	
<b>Total</b>	<b>\$ 3,096</b>	<b>\$ 667</b>	<b>\$ 911</b>	<b>\$ 244</b>	<b>36.5%</b>	
<b>Operating Expenses by Cost Centers</b>						
North Terminal	\$ 88	\$ -	\$ -	\$ -	n/a	
South Terminal	1	-	-	-	n/a	
Facilities & Maintenance	1,243	26	50	25	96.1%	
Ground Transportation	1,017	25	50	25	100.0%	
Administration	740	617	811	194	31.5%	
Public Safety	6	-	-	-	n/a	
<b>Total</b>	<b>\$ 3,096</b>	<b>\$ 667</b>	<b>\$ 911</b>	<b>\$ 244</b>	<b>36.5%</b>	

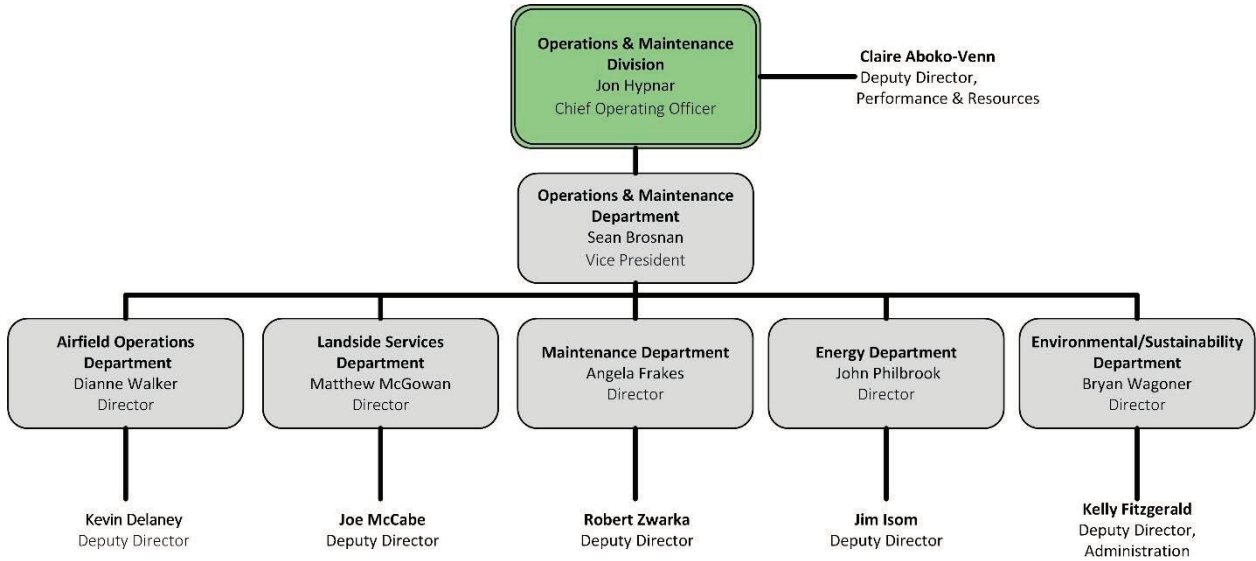
May not sum to total due to rounding

<sup>1</sup> FY 2016 includes one additional employee





**OPERATIONS & MAINTENANCE DIVISION**



	FY 2012 Budget	FY 2013 Budget	FY 2014 Budget	FY 2015 Budget	FY 2016 Budget	Five-Year CAGR
<b>Full-Time Employees (FTEs)</b>						
<b>Detroit Metropolitan Airport</b>						
<b>Operations Division</b>						
Chief Operating Officer	-	2	2	3	3	N/A
Airfield Operations	44	40	39	41	46	0.9%
Landside Services	23	23	23	23	23	0.0%
Maintenance	175	161	161	142	150	-3.0%
Environmental & Sustainability	5	5	5	9	9	12.5%
Energy	12	12	12	41	43	29.1%
<b>Total Operations Division</b>	<b>259</b>	<b>243</b>	<b>242</b>	<b>259</b>	<b>274</b>	<b>1.1%</b>

(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Operating Expenses by Category</b>					
Salary & Benefits <sup>1</sup>	\$ 28,065	\$ 26,885	\$ 28,987	\$ 2,101	7.8%
Materials & Supplies <sup>2</sup>	4,221	3,768	4,779	1,011	26.8%
Parking Management	6,630	7,119	7,193	74	1.0%
Shuttle Bus <sup>3</sup>	6,123	6,498	6,839	341	5.3%
Janitorial	-	662	662	-	0.0%
Contractual Services <sup>4</sup>	7,554	5,802	6,188	386	6.7%
Utilities	28,441	27,083	26,465	(618)	-2.3%
Buildings & Grounds <sup>5</sup>	4,334	7,520	7,726	206	2.7%
Equipment Repair	1,423	2,741	2,821	80	2.9%
Other Operating Expense <sup>6</sup>	2,016	2,036	2,402	367	18.0%
O&M Capital <sup>7</sup>	1,400	1,364	1,478	114	8.3%
<b>Total</b>	<b>\$ 90,208</b>	<b>\$ 91,477</b>	<b>\$ 95,540</b>	<b>\$ 4,063</b>	<b>4.4%</b>
<b>Operating Expenses by Cost Centers</b>					
North Terminal	\$ 5,124	\$ 4,948	\$ 4,721	\$ (227)	-4.6%
South Terminal	16,105	16,312	15,737	(575)	-3.5%
Airfield	27,623	23,182	26,519	3,337	14.4%
Facilities & Maintenance	16,763	15,277	15,617	339	2.2%
Utilities Management	1,906	6,484	6,877	393	6.1%
Cargo & Hangar	1,385	1,428	1,387	(41)	-2.9%
Ground Transportation	20,156	22,809	23,600	791	3.5%
Administration	819	651	691	39	6.0%
Public Safety	188	251	252	1	0.4%
Fire & EMS	139	131	136	5	3.7%
Westin Hotel	(1)	3	3	-	0.0%
<b>Total</b>	<b>\$ 90,208</b>	<b>\$ 91,477</b>	<b>\$ 95,540</b>	<b>\$ 4,063</b>	<b>4.4%</b>

May not sum to total due to rounding

<sup>1</sup> FY 2016 includes 15 additional employees

<sup>2</sup> FY 2016 increase in deicing fluid cost

<sup>3</sup> FY 2016 increase in shuttle bus contract

<sup>4</sup> FY 2016 increase in snow removal contract

<sup>5</sup> FY 2016 increase for pond dredging

<sup>6</sup> FY 2016 increase in credit card transaction fees in-line with growth in parking revenue

<sup>7</sup> FY 2016 increase due to five-year fleet replacement plan

Key Performance Measures	FY 2014 Actual	FY 2015 Target	FY 2016 Target
<b>Operational Excellence</b>			
Airfield Efficiency: Average On-Time Airport Departure	82.1%	74.0%	83.0%
Airfield Safety: Number of Airfield Incidents (DTW)	62	70	60
<b>Financial Competiveness &amp; Sustainability</b>			
Gross Parking Revenue per O&D Passenger	\$10.52	\$10.26	\$12.03

CHIEF OPERATING OFFICER

OVERVIEW

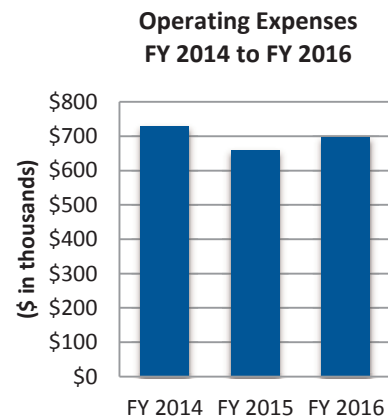
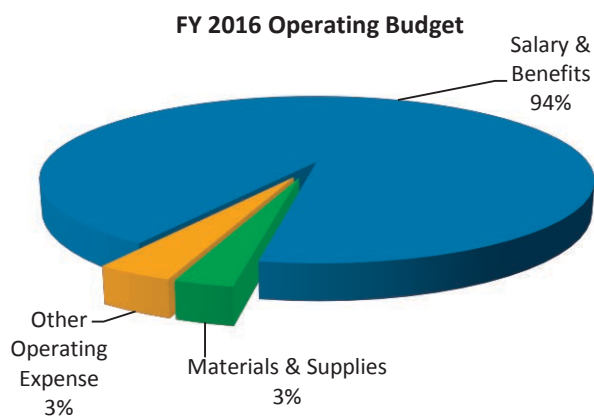
The Chief Operating Officer provides management, administration, oversight and support for the Maintenance, Fleet, Airfield Operations, Environmental / Sustainability and Landside Services departments. The COO also assists with the development of organizational policies and goals that cover operations, personnel, financial and growth of the functions and/or business units mentioned above.

RESOURCE ALLOCATION

Salaries & Wages and Employee Benefits support a staff of three full-time employees.

(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Operating Expenses by Category</b>					
Salary & Benefits	\$ 681	\$ 636	\$ 654	\$ 18	2.9%
Materials & Supplies	6	6	19	13	>100%
Contractual Services	18	-	-	-	n/a
Other Operating Expense	26	18	25	7	38.9%
<b>Total</b>	<b>\$ 731</b>	<b>\$ 660</b>	<b>\$ 698</b>	<b>\$ 38</b>	<b>5.8%</b>
<b>Operating Expenses by Cost Centers</b>					
Facilities & Maintenance	\$ 709	\$ 660	\$ 698	\$ 38	5.8%
Administration	21	-	-	-	n/a
<b>Total</b>	<b>\$ 731</b>	<b>\$ 660</b>	<b>\$ 698</b>	<b>\$ 38</b>	<b>5.8%</b>

May not sum to total due to rounding



AIRFIELD OPERATIONS

OVERVIEW

Airfield Operations is responsible for administering a safe airfield operating environment, working closely with the FAA to maintain the Authority’s Operating Certificate through enforcement of Federal Aviation Administration FAR Part 139. The department manages the administration of the Airport Certification Manual, Wildlife Hazard and Management Plan, Snow and Ice Control Plan, Airfield Training for the airport movement area, Letter of Agreements with federal government agencies, and Emergency Management Plan and Airfield Coordination meetings for construction projects.

RESOURCE ALLOCATION

Salaries & Wages and Employee Benefits support a staff of 46 full-time employees.

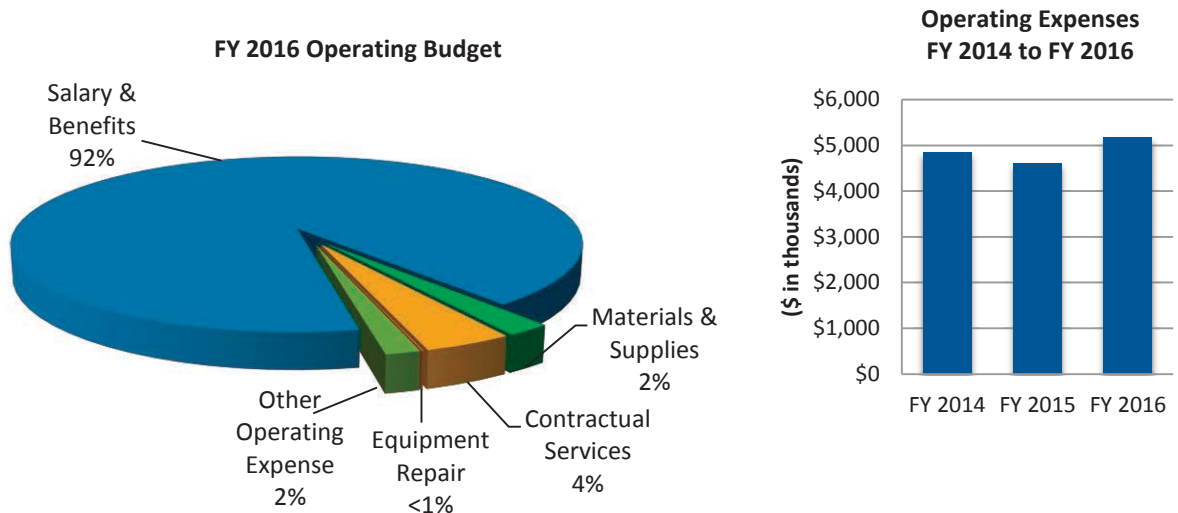
(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Operating Expenses by Category</b>					
Salary & Benefits <sup>1</sup>	\$ 4,728	\$ 4,319	\$ 4,762	\$ 443	10.3%
Materials & Supplies	39	92	109	17	19.0%
Contractual Services <sup>2</sup>	48	148	213	65	44.0%
Equipment Repair	3	4	4	-	0.0%
Other Operating Expense <sup>3</sup>	31	39	84	45	>100%
<b>Total</b>	<b>\$ 4,848</b>	<b>\$ 4,601</b>	<b>\$ 5,172</b>	<b>\$ 570</b>	<b>12.4%</b>
<b>Operating Expenses by Cost Centers</b>					
Airfield	\$ 4,847	\$ 4,601	\$ 5,172	\$ 570	12.4%
Ground Transportation	1	-	-	-	n/a
<b>Total</b>	<b>\$ 4,848</b>	<b>\$ 4,601</b>	<b>\$ 5,172</b>	<b>\$ 570</b>	<b>12.4%</b>

May not sum to total due to rounding

<sup>1</sup> FY 2016 includes five additional employees

<sup>2</sup> FY 2016 increase due to USDA wildlife control compliance

<sup>3</sup> FY 2016 increase for ACI certifications



LANDSIDE SERVICES

OVERVIEW

Landside Services is responsible for delivering on-airport parking, airport employee shuttle services and ground transportation services for airport patrons through overseeing the Airport’s parking contractor, managing the Airport’s parking facilities and overseeing the compliance of ground transportation customer service standards.

RESOURCE ALLOCATION

Salaries & Wages and Employee Benefits support a staff of 23 full-time employees.

The **Parking Management** and **Shuttle Bus** services are contracted to third parties. The parking management contractor operates all parking decks and lots. The shuttle bus service contractor transports passengers between terminals and on-airport parking locations and also shuttles employees from designated parking lots to terminals.

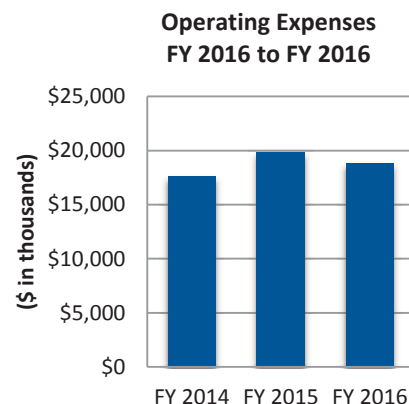
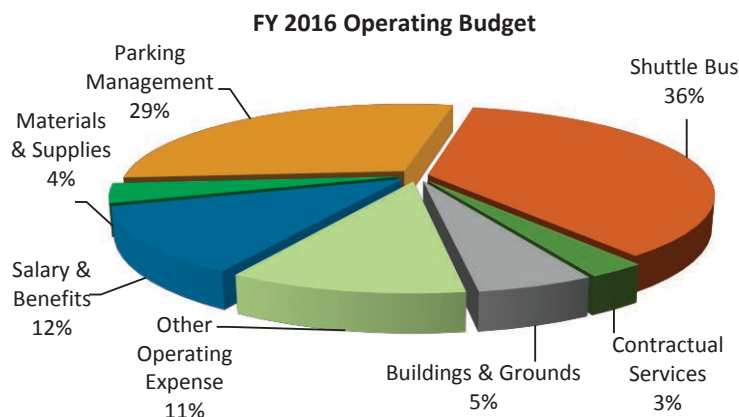
(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Operating Expenses by Category</b>					
Salary & Benefits	\$ 2,287	\$ 2,116	\$ 2,235	\$ 119	5.6%
Materials & Supplies	671	692	668	(24)	-3.4%
Parking Management <sup>1</sup>	6,630	7,119	5,543	(1,576)	-22.1%
Shuttle Bus <sup>2</sup>	6,123	6,498	6,839	341	5.3%
Contractual Services	-	650	500	(150)	-23.1%
Buildings & Grounds	-	1,000	995	(5)	-0.5%
Other Operating Expense <sup>3</sup>	1,899	1,757	2,008	251	14.3%
<b>Total</b>	<b>\$ 17,610</b>	<b>\$ 19,831</b>	<b>\$ 18,788</b>	<b>\$ (1,043)</b>	<b>-5.3%</b>
<b>Operating Expenses by Cost Centers</b>					
Ground Transportation	\$ 17,610	\$ 19,831	\$ 18,788	\$ (1,043)	-5.3%
<b>Total</b>	<b>\$ 17,610</b>	<b>\$ 19,831</b>	<b>\$ 18,788</b>	<b>\$ (1,043)</b>	<b>-5.3%</b>

May not sum to total due to rounding

<sup>1</sup> FY 2016 decrease due to snow removal and power washing no longer being accounted for under Parking Management

<sup>2</sup> FY 2016 increase in shuttle bus contract

<sup>3</sup> FY 2016 increase in credit card transaction fees in-line with growth in parking revenue



## MAINTENANCE

### OVERVIEW

The Maintenance Department is responsible for ensuring that the airfield, Authority buildings and airport campus are clean, safe and compliant with federal, state and local standards. Additional responsibilities include maintaining signage for a safe traverse of the airfield, roadways and facilities, delivering core trades services (e.g., plumbing, carpentry and painting) and maintaining the Authority's vehicles and equipment.

### RESOURCE ALLOCATION

**Salaries & Wages and Employee Benefits** support a staff of 150 full-time employees.

Funds budgeted for **Materials and Supplies** are used for:

- Bulk chemicals such as liquid runway deicer, road salt and runway rubber remover
- Miscellaneous supplies that includes tools and equipment
- Gasoline and diesel fuel for the Authority's vehicle and equipment fleet

Funds budgeted for **Contractual Services** include snow removal services for the airfield ramps, landscaping and facilities maintenance of all property owned by airport.

The **Buildings and Grounds** budget covers funding for the following responsibilities:

- Reflective glass beads, runway latex fast dry marking paint, airfield runway signs and electrical supplies required to maintain the runways and taxiways
- Airfield joint maintenance, removal and replacement
- Maintain asphalt surfaces
- General building supplies for the maintenance and repair of roofing, plumbing, painting, fencing, and carpentry as performed by the Airport's trades personnel

The **Equipment Repair** budget is used for preventative and corrective maintenance of heavy equipment and vehicles.

**O&M Capital** includes light vehicles replacements and lease purchase payments for heavy equipment.

(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Operating Expenses by Category</b>					
Salary & Benefits <sup>1</sup>	\$ 17,841	\$ 13,358	\$ 14,166	\$ 809	6.1%
Materials & Supplies <sup>2</sup>	3,465	2,891	3,851	960	33.2%
Janitorial	-	662	662	-	0.0%
Contractual Services <sup>3</sup>	5,951	3,005	3,430	425	14.1%
Buildings & Grounds <sup>4</sup>	3,241	3,617	3,302	(315)	-8.7%
Equipment Repair	1,022	2,219	2,255	36	1.6%
Other Operating Expense	88	134	148	14	10.4%
O&M Capital <sup>5</sup>	1,400	1,298	1,417	119	9.2%
<b>Total</b>	<b>\$ 33,008</b>	<b>\$ 27,183</b>	<b>\$ 29,231</b>	<b>\$ 2,048</b>	<b>7.5%</b>
<b>Operating Expenses by Cost Centers</b>					
North Terminal	\$ 760	\$ 1,026	\$ 631	\$ (395)	-38.5%
Airfield	16,783	12,094	14,075	1,982	16.4%
Facilities & Maintenance	15,356	12,994	13,509	514	4.0%
Ground Transportation	38	907	857	(50)	-5.5%
Public Safety	60	124	121	(4)	-2.8%
Fire & EMS	11	38	38	-	0.0%
<b>Total</b>	<b>\$ 33,008</b>	<b>\$ 27,183</b>	<b>\$ 29,231</b>	<b>\$ 2,048</b>	<b>7.5%</b>

May not sum to total due to rounding

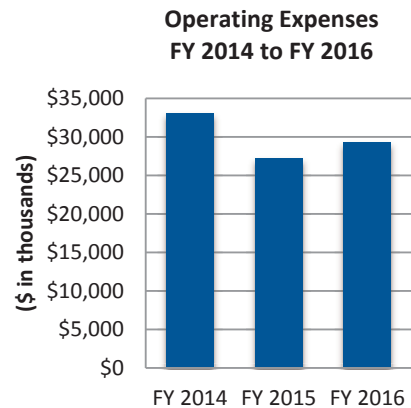
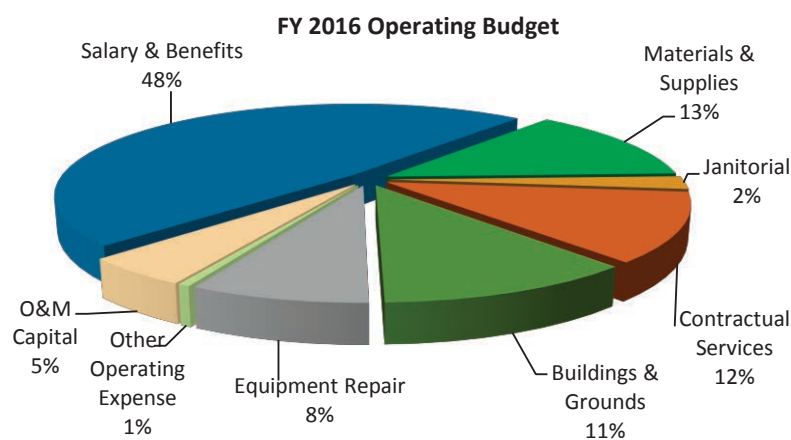
<sup>1</sup> FY 2016 includes eight additional employees

<sup>2</sup> FY 2016 increase in deicing fluid cost

<sup>3</sup> FY 2016 increase in snow removal contract

<sup>4</sup> FY 2016 decrease due North Terminal carpet replacement in FY 2015

<sup>5</sup> FY 2016 increase due to five-year fleet replacement plan





ENERGY

OVERVIEW

The Airport Energy Department manages utilities at Detroit Metropolitan and Willow Run Airports. This includes commodity purchasing for water, electricity and natural gas, operation and maintenance of two central power plants at Metro Airport and one energy plant at Willow Run Airport, all field boilers, chillers, and electrical generators, distribution and end-use systems for electricity, heating and cooling.

RESOURCE ALLOCATION

Salaries & Wages and Employee Benefits support a staff of 43 full-time employees.

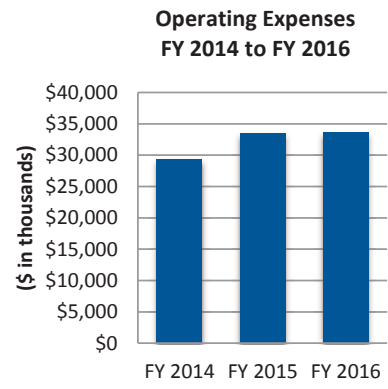
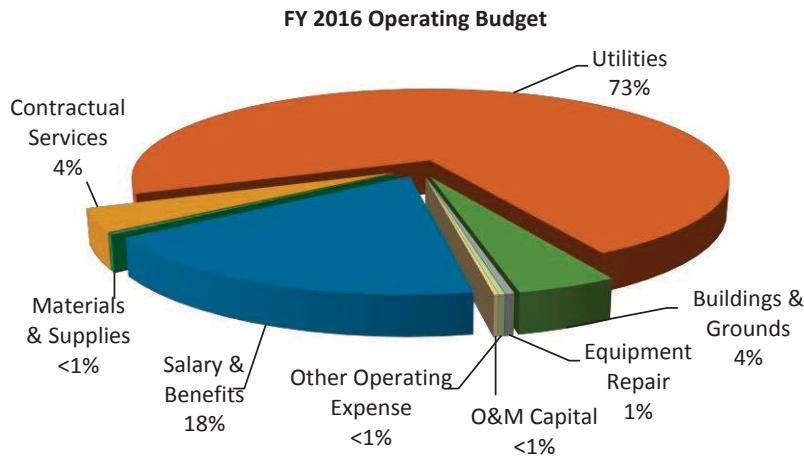
(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Operating Expenses by Category</b>					
Salary & Benefits <sup>1</sup>	\$ 1,836	\$ 5,497	\$ 6,027	\$ 531	9.7%
Materials & Supplies	31	56	62	5	9.0%
Contractual Services <sup>2</sup>	1,022	1,181	1,294	113	9.5%
Utilities	25,692	24,799	24,528	(270)	-1.1%
Buildings & Grounds <sup>3</sup>	783	1,705	1,450	(255)	-14.9%
Equipment Repair	15	86	125	39	45.5%
Other Operating Expense	5	42	86	43	>100%
O&M Capital	-	66	61	(6)	-8.3%
<b>Total</b>	<b>\$ 29,384</b>	<b>\$ 33,432</b>	<b>\$ 33,633</b>	<b>\$ 201</b>	<b>0.6%</b>
<b>Operating Expenses by Cost Centers</b>					
North Terminal	\$ 4,364	\$ 3,902	\$ 4,070	\$ 169	4.3%
South Terminal	16,105	16,291	15,726	(565)	-3.5%
Airfield	1,426	1,706	1,661	(45)	-2.6%
Facilities & Maintenance	631	1,227	1,076	(151)	-12.3%
Utilities Management	1,917	6,011	6,561	550	9.1%
Cargo & Hangar	1,381	1,371	1,330	(41)	-3.0%
Ground Transportation	2,508	2,066	2,299	234	11.3%
Administration	797	651	691	39	6.0%
Public Safety	129	118	122	5	3.9%
Fire & EMS	128	89	95	6	6.6%
Westin Hotel	(1)	-	-	-	n/a
<b>Total</b>	<b>\$ 29,384</b>	<b>\$ 33,432</b>	<b>\$ 33,633</b>	<b>\$ 201</b>	<b>0.6%</b>

May not sum to total due to rounding

<sup>1</sup> FY 2015 increase due to organizational realignment. FY 2016 includes two additional employees

<sup>2</sup> FY 2016 increase due to Siemens Apogee System costs

<sup>3</sup> FY 2016 decrease due to removal of one-time items



## ENVIRONMENTAL &amp; SUSTAINABILITY

## OVERVIEW

The Environmental & Sustainability Department oversees activities including deicing fluid collection, recycling and solid waste disposal, hazardous material testing and abatement, wetland mitigation, air quality permit management, and managing the impact of aircraft generated noise on residents living nearby.

## RESOURCE ALLOCATION

**Salaries & Wages and Employee Benefits** support a staff of nine full-time employees.

(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Operating Expenses by Category</b>					
Salary & Benefits <sup>1</sup>	\$ 692	\$ 961	\$ 1,142	\$ 182	18.9%
Materials & Supplies	11	32	71	39	>100%
Contractual Services	515	817	751	(67)	-8.1%
Utilities <sup>2</sup>	2,749	2,284	1,937	(348)	-15.2%
Buildings & Grounds <sup>3</sup>	310	1,198	1,979	781	65.2%
Equipment Repair	383	432	437	5	1.2%
Other Operating Expense	(33)	46	52	6	13.7%
<b>Total</b>	<b>\$ 4,627</b>	<b>\$ 5,770</b>	<b>\$ 6,369</b>	<b>\$ 598</b>	<b>10.4%</b>
<b>Operating Expenses by Cost Centers</b>					
North Terminal	\$ -	\$ 21	\$ 20	\$ (1)	-2.8%
South Terminal	-	21	11	(10)	-47.6%
Airfield	4,567	4,781	5,610	829	17.3%
Facilities & Maintenance	67	397	334	(63)	-15.8%
Utilities Management	(11)	473	317	(157)	-33.1%
Cargo & Hangar	4	57	57	-	0.0%
Ground Transportation	-	6	6	-	0.0%
Public Safety	-	9	9	-	0.0%
Fire & EMS	-	4	3	(1)	-28.4%
Westin Hotel	-	3	3	-	0.0%
<b>Total</b>	<b>\$ 4,627</b>	<b>\$ 5,770</b>	<b>\$ 6,369</b>	<b>\$ 598</b>	<b>10.4%</b>

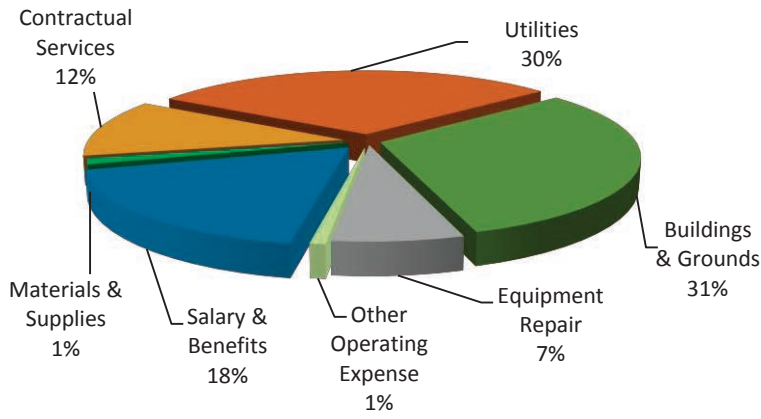
May not sum to total due to rounding

<sup>1</sup> FY 2016 increase due to organizational realignment (including water operator)

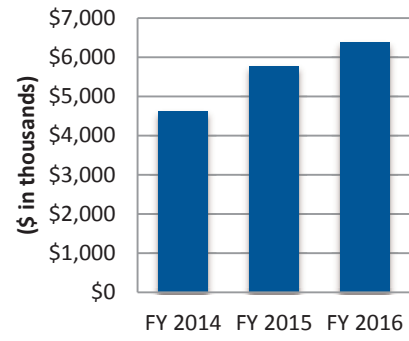
<sup>2</sup> FY 2016 decrease due to a lower quantity of water going to the Detroit Water and Sewerage Department for treatment based on historic averages

<sup>3</sup> FY 2016 increase for pond dredging

**FY 2016 Operating Budget**



**Operating Expenses  
FY 2014 to FY 2016**

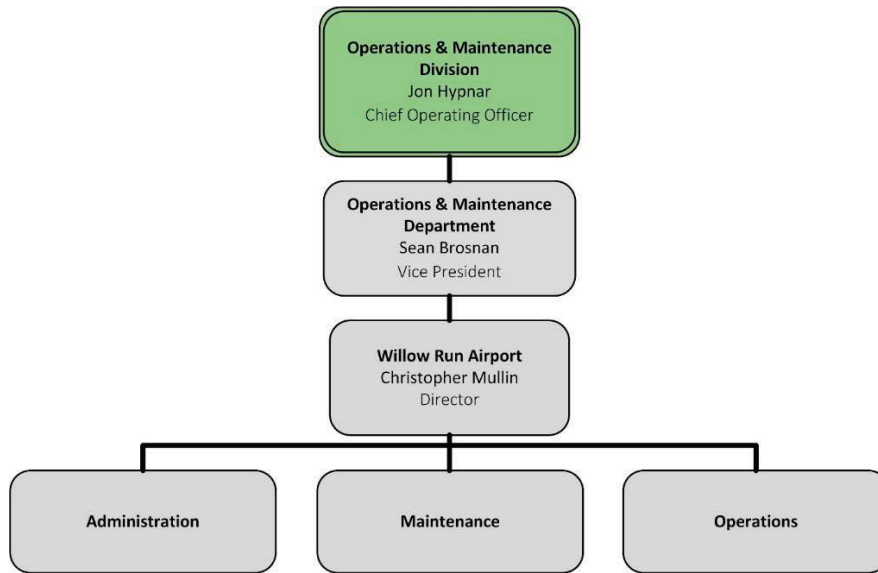


**WILLOW RUN AIRPORT**

Managed by the Wayne County Airport Authority, Willow Run Airport is located seven miles west of Detroit Metro. Occupying 2,600 acres, Willow Run serves cargo, corporate and general aviation clients. The airport offers three runways, 24-hour FAA Tower and U.S. Customs inspections to provide ease of access for its users. Willow Run’s runways include an ILS all-weather and a crosswind runway. The airport accommodates small private planes, as well as international 747 cargo jets. Cargo, corporate and general aviation clients prefer Willow Run, as it provides the advantages of a larger airport with conveniences of a smaller facility.

Willow Run is classified as a national reliever airport in the FAA’s National Plan of Airport Systems (NPIAS). National reliever airports are high-capacity general aviation airports in major metropolitan areas that provide an alternative to more congested commercial service airports. There are nearly 3,400 airports listed in the NPIAS of which only 84 are national relievers – the highest category for a general aviation airport.

Willow Run Airport handles approximately 55,000 operations per year and 3,800 cargo landings, making Willow Run the third largest reliever airport in the State of Michigan.



Full-Time Employees (FTEs)	FY 2012 Budget	FY 2013 Budget	FY 2014 Budget	FY 2015 Budget	FY 2016 Budget	Five-Year CAGR
<b>Willow Run Airport</b>						
Administration	3	3	3	3	4	5.9%
Maintenance	7	7	7	7	7	0.0%
Operations	1	1	1	1	1	0.0%
<b>Total Willow Run Airport</b>	<b>11</b>	<b>11</b>	<b>11</b>	<b>11</b>	<b>12</b>	<b>1.8%</b>

Key Performance Measures	FY 2014 Actual	FY 2015 Target	FY 2016 Target
<b>Regional Development</b>			
Overall cargo tonnage handled at YIP	89,504	90,340	84,000

## WILLOW RUN ADMINISTRATION, OPERATIONS AND MAINTENANCE

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**OVERVIEW**

Willow Run is divided into three operating departments: Operations, Maintenance and Administration.

**The Operations Department** ensures the safety, security and protection of the traveling public and Willow Run community through coordinating the enforcement of all applicable federal and Airport rules and procedures. The Department maintains the FAA's Part 139 Airport Certification and Manual, a requirement for airports serving scheduled air carrier operations in aircraft greater than nine passenger seats but no more than 31. The Operations Department is responsible for responding to incidents and emergencies (e.g. fire, security, snow removal, construction, special occasions and dignitary details). US Customs inspections of inbound and outbound international aircraft are facilitated by the Department.

**The Maintenance Department** is responsible for maximizing the safety, cleanliness and overall quality of the Willow Run Airport grounds, optimizing vendor performance through effective contract management and performing snow removal and landscaping services per the FAA Certificate Manual.

**The Administration Department** manages the airport's business affairs, including finance, data collection, leases, procurement, billings and receivables. It develops and implements Willow Run's Capital Improvement Program, including State of Michigan grant development, plan reviews, master plan updates and environmental assessments. Responsibilities include expanding the marketing reach of airport facilities and services.

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**RESOURCE ALLOCATION**

**Salaries & Wages and Employee Benefits** support a staff of 12 full-time employees.

Gasoline and diesel fuel for Willow Run vehicles and liquid deicer represent the greatest expenses in the **Material and Supplies** budget.

The major expenses budgeted in the **Contractual Services** include:

- Environmental assessments and the collection of deicing fluid
- A chargeback to Detroit Metropolitan Airport for airfield firefighting services
- Snow removal
- Landscaping services

US Customs fees are charges to the **Other Operating Expense** budget.

(\$ in thousands)	FY 2014	FY 2015	FY 2016	FY 2015 to FY 2016 Change	
	Actual	Budget	Budget	\$	%
<b>Operating Expenses by Category</b>					
Salary & Benefits <sup>1</sup>	\$ 1,314	\$ 1,244	\$ 1,405	\$ 162	13.0%
Materials & Supplies <sup>2</sup>	137	114	174	60	53.1%
Janitorial <sup>3</sup>	18	25	45	20	80.0%
Contractual Services <sup>4</sup>	766	716	811	95	13.3%
Insurance	36	42	34	(8)	-19.0%
Utilities	851	673	710	37	5.5%
Buildings & Grounds	414	277	314	38	13.6%
Equipment Repair	113	277	279	2	0.7%
Other Operating Expense	437	438	450	12	2.7%
O&M Capital	212	-	22	22	n/a
<b>Total</b>	<b>\$ 4,298</b>	<b>\$ 3,805</b>	<b>\$ 4,244</b>	<b>\$ 440</b>	<b>11.6%</b>
<b>Operating Expenses by Cost Centers</b>					
Willow Run	\$ 4,298	\$ 3,805	\$ 4,244	\$ 440	11.6%
<b>Total</b>	<b>\$ 4,298</b>	<b>\$ 3,805</b>	<b>\$ 4,244</b>	<b>\$ 440</b>	<b>11.6%</b>

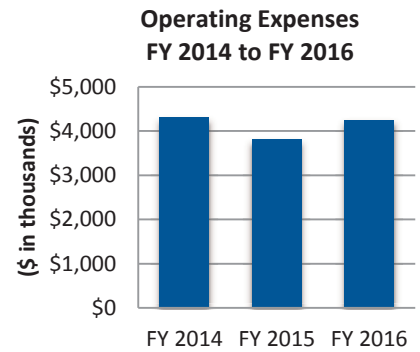
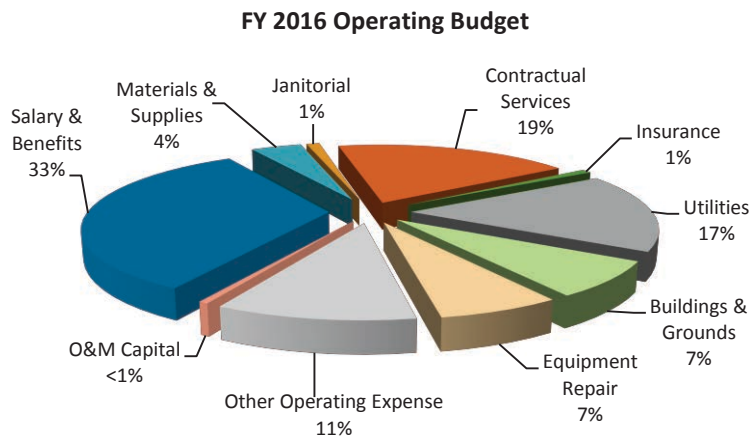
Total may not sum due to rounding

<sup>1</sup> FY 2016 includes one additional employee

<sup>2</sup> FY 2016 increase due to the requirement to use liquid deicing fluid on recently reconstructed RW 5R/23L

<sup>3</sup> FY 2016 increase in janitorial services contract

<sup>4</sup> FY 2016 includes additional tree removal



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# CAPITAL IMPROVEMENT PROGRAM

The Authority manages capital projects under a Capital Improvement Program. Plans for current and future capital projects at each airport are summarized in a Five-Year Capital Improvement Plan (CIP).

The Five-Year Plan is an important tool used for formulating future project financing plans, maximizing federal and state grant opportunities and pro-actively planning for the replacement or reconstruction of essential infrastructure components that are nearing the end of their useful or service life. The CIP provides a forum for scheduling and coordinating execution of multiple projects to minimize operational impact.

## DEFINITION OF CAPITAL PROJECTS

Capital projects are long-term projects requiring large financial investments to acquire, develop, improve and/or maintain a capital asset such as land, runways, buildings, roadways, etc. The minimum thresholds for capitalization are a unit value of \$5,000 and at least a one year of useful life. Additions to and reconstruction of existing assets, including but not limited to improvements, extensions, enlargements, or betterments, should only be capitalized if such expenditures meet the same minimum capital thresholds and significantly extend the useful life and/or functionality of the existing asset (e.g., full-depth concrete keel replacement of sections of a taxiway would represent a significant extension of useful life; runway shoulder widening could represent an expenditure that may not impact runway useful life but could materially enhance the functionality by enabling larger aircraft to utilize the runway).

The capitalized cost of a capital project should include all costs associated with its planning, acquisition, installation, estimating fees, architectural, design, engineering, testing, surveying, construction, start-up (commissioning) and all other costs necessary to complete the project.

The majority of the capital projects in the Five-Year Plan tend to be “routine” projects for a major airport, including reconstruction or rehabilitation of runways, taxiways, parking decks and roadways and environmental or planning studies. In general, routine capital projects do not affect the annual operating budget. As an example, if a runway is taken out of service to be reconstructed, the maintenance efforts that would have been expended on that runway are reassigned to maintain other portions of the airfield that require attention.

## CAPITAL IMPROVEMENT COMMITTEE

The Authority established a Capital Improvement Committee (CIC) to direct, oversee and monitor the CIP and its capital planning process and practices for Detroit Metropolitan (DTW) and Willow Run (YIP) Airports. The CIC reviews all proposed airport capital expenditures to be included in the CIP. All Authority capital projects must be approved by the CIC before they are added to the Five-Year CIP. The Authority Board approves the Five-Year CIP annually along with the O&M Budget.

The Capital Improvement Committee:

- Executes the Authority's annual CIP process
- Affirms the linkage between proposed capital projects, the Authority's Master Plan, strategic goals and objectives
- Ensures compliance with the Airport Use and Lease Agreements, the Authority's Master Bond Ordinance, and other obligations
- Provides a mechanism for financial and resource planning for the Authority
- Reviews the qualitative and quantitative (including financial analysis) evaluation of capital projects to determine the priority of projects

- Assesses the linkage between the capital and operating budgets to ensure appropriate allocation of resources
- Reviews, assesses and approves or denies the placement of proposed capital projects onto the CIP
- Reaffirms the validity of proposed CIP for annual approval by the Authority Board
- Monitors the progress of capital projects
- Periodically updates the CIP for out-of-cycle projects of an emergency nature
- Reviews CIP policies and procedures periodically and implements changes as necessary

## CAPITAL IMPROVEMENT PLAN GUIDELINES

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### ALIGNMENT

The Authority coordinates the development of the Capital Improvement Plan (CIP) with the development of the 20-year Master Plan, Strategic Land Use Plan and O&M Budget. Projects are selected based on their alignment to long-term goals and strategic priorities.

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### CAPITAL BUDGET DEVELOPMENT

The five-year plans for the Capital Improvement Program at the Detroit Metropolitan Airport and Willow Run Airport are analyzed and updated to reflect active and future capital projects that are scheduled to begin within the next five years. They pro-actively plan for the replacement or reconstruction of essential infrastructure components that are nearing the end of their service life and take advantage of scheduling and coordinating the execution of multiple projects to minimize operational impact and maximize fiscal efficiency. The plans are important tools for formulating future funding requirements (bonds, etc.) and maximizing federal and state grant opportunities.

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### CAPITAL REPLACEMENT PROGRAMS

The Authority develops replacement and maintenance plans for, at minimum, a five-year period and reviews and updates these plans as necessary each year. The following replacement and maintenance plans have been established:

- Fleet and Equipment Replacement Plan
  - Power Distribution Plan
  - Roadway Pavement Plan
  - Bridge Repair and Replacement Plan
  - Roof Replacement Plan
  - Airfield Pavement Plan
- 

### WEIGHTED MAJORITY APPROVAL

The Airport Use and Lease Agreement contains the Authority's covenants with regard to capital expenditures. One such covenant allows the Authority to issue bonds to finance the cost of capital projects, only after first receiving a Weighted Majority approval for such capital projects. The Airport Use and Lease Agreements define Weighted Majority as either (1) Signatory Airlines which, in the aggregate, landed 85 percent or more of the landed weight of all Signatory Airlines for the preceding 12-month period for which records are available, or (2) all but one of the Signatory Airlines regardless of landed weight.

The Authority has received Weighted Majority approval for some, but not all, of the projects included in the current CIP.

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ANNUAL CIP DEVELOPMENT CALENDAR – FLOW CHART

The planning calendar illustrated below presents an overview of the annual CIP planning cycle used for preparation of the FY 2016 – FY 2020 CIP.

Activity	Lead Role / Recipients	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Project sponsors prepare and submit new CIP project requests and modifications to existing projects on Project Summary Sheets	Project Sponsors	→											
Project proposal reviews, financial analysis and funding source recommendations	FP&A	→											
Project sponsors' presentations to the CIC	CIC	→											
On-going review of the Five Year Plan and analysis of additional project proposals	FP&A	→											
CIP process calendar and guidelines provided to the Capital Improvement Committee (CIC)	FP&A	→											
Evaluate, score and rank CIP proposals	CIC					→							
On-going review and refinement of proposed CIP and preparation of the Board presentation	FP&A					→							
Preliminary Five-Year CIP presentation to the Board	CFO and FP&A						→						
Project re-evaluations, scoring and ranking to prepare the final Five Year CIP to be presented at the September Board meeting	CIC								→				
Approval of the Five Year CIP in conjunction with the Authority's Annual Budget	WCAA Board									→			

FUNDING SOURCES

The Authority’s funding sources for the CIP include, but are not limited to General Airport Revenue Bond’s (GARB’s), Passenger Facility Charges (PFCs), grants and discretionary funds. Given the multiple funding sources that support this plan, Board approval of the CIP does not imply that the source of funding has been determined. The Financial Planning & Analysis Department is responsible for recommending the source of funding for capital projects with final determination at the discretion of the Chief Financial Officer. The following general guidelines are used to help determine the source of funding.

	Bonds	Passenger Facility Charges	Airport Development Fund	Renewal & Replacement	Operation & Maintenance
<b>Dollar Threshold</b>	>= \$1,000,000	>= \$2,000,000	>= \$1,000,000 Except "Other Buildings"	<= \$500,000	<= \$1,000,000
<b>Asset Type/Class</b>	Airfield, Roadway, Heavy Equipment, Terminal Projects	Airfield, Safety, Security Projects	Airfield, Roadway, Heavy Rolling Stock, Other Buildings >\$500,000	Airfield, Safety, Security	Airfield, Roadway, Terminal or Buildings
<b>Asset Life Expectancy</b>	>=15 Years	> 15 Years	> 10 Years	5-10 Years	>= 1 years
<b>New or Replacement</b>	New or Replacement	New or Replacement	New or Replacement	Replacement	New or Replacement
<b>Temporary Funding</b>	N/A	N/A	Weighted Majority, PFC, or AIP Approval – Bonds Pending	N/A	Weighted Majority, Bonds Pending

#### AIRPORT REVENUE BONDS

The Authority issues GARB's to finance the cost of capital projects, subject to receiving the approval of a weighted majority of Signatory Airlines for such capital projects as outlined in the Airport's Use and Lease Agreements. The yearly operating budget includes the debt service on such bonds until the bonds are repaid in full. Airport revenue bonds have already been issued to fund many of the projects in the Authority's current CIP (pursuant to Public Act 94, prior to the issuance of revenue bonds, a notice of intent to issue bonds shall be published in a newspaper which has general circulation in the territory of the borrower).

**Existing Bonds** - The Authority expects to use proceeds totaling approximately \$387.5 million from previous bond sales to fund certain costs of the CIP. Interest income earned in a particular capital fund will remain in the same fund where the interest was earned.

**Future Bonds** - A total of approximately \$166.4 million in FY 2016 – FY 2020 CIP project costs are currently anticipated to be funded with proceeds of future bonds. The Authority's next new money bond issue is anticipated for FY 2017.

#### PASSENGER FACILITY CHARGES

Under the Aviation Safety and Capacity Expansion Act of 1990 (the "PFC Act"), the FAA may authorize a public agency (such as the Authority) that controls an airport, to impose a PFC of up to \$4.50 for each qualifying enplaned passenger to be used to finance eligible airport-related projects. The Authority must submit an application to and receive approval from the FAA approving the imposition of a PFC and the use of PFC revenues for specific eligible projects described in such application. Projects can be funded on a pay-as-you-go basis or through leveraged debt.

The Authority currently has \$3.2 billion of PFC authorization until 2032. The budgeted PFC collections for FY 2016 are \$64.9 million. Further information regarding Passenger Facility Charges can be found in the Debt Profile chapter of this book.

## OTHER AUTHORITY FUNDS

Per the Master Bond Ordinance and in accordance with provisions in the Airport Use and Lease Agreements, amounts from the Airport Development Fund, Airport Renewal and Replacement Fund, the Airport Discretionary Fund and other funding sources can be used to fund the costs of capital improvement projects.

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### AIRPORT DEVELOPMENT FUND

Per the Master Bond Ordinance, a fixed amount in accordance with the Airport Use and Lease Agreement is transferred from the O&M Fund to the Airport Development Fund and applied toward any capital expense incurred by the Authority for any lawful purpose. The amount of the transfer is adjusted annually relative to the Producer Price Index (PPI). The budgeted contribution for FY 2016 is \$7.7 million. Additionally, there is a contribution to ADF from Automated Vehicle Identification (AVI) revenues of \$2.5 million for FY 2016. The AVI revenue transfer, provided by an automated system for tracking and billing commercial ground transportation vehicles, has a cap of \$2.5 million annually. Any additional revenue above the \$2.5 million stays in the O&M Fund.

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### AIRPORT RENEWAL & REPLACEMENT FUND

Per the Master Bond Ordinance, an amount of \$0.5 is transferred annually into the Airport Renewal & Replacement Fund (R&R) from the O&M Fund. R&R funds may be used for the purpose of paying: (a) the costs of completing capital improvements or replacing capital assets at the Airport and (b) making repairs, replacements or renovations.

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### AIRPORT DISCRETIONARY FUND

Per the Master Bond Ordinance, an amount of \$350,000 is transferred annually into the Airport Discretionary Fund from the Operating & Maintenance Fund. Discretionary funds may be used by the Authority at the discretion of the Chief Executive Officer for any lawful purpose.

## GRANTS

The FAA's Airport Capital Improvement Program (ACIP) provides federal entitlement and discretionary grants for eligible airport projects. The Authority receives Airport Improvement Program (AIP) entitlement grants based on all three of the following criteria being achieved:

- Levels of funding authorized and appropriated by Congress for the program
- The number of passengers and amount of cargo at the Airport
- A 75 percent reduction in entitlement grants resulting from the Authority's \$4.50 PFC level

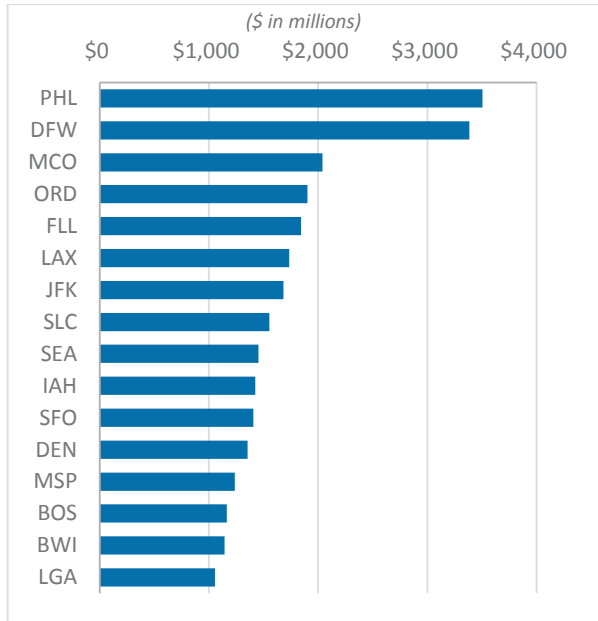
The Authority is also eligible for AIP discretionary grant awards for specific projects pursuant to grant applications for such funding and the FAA's prioritization of competing projects.

From time to time, the Authority also receives grants from other federal, state and local sources.

**DETROIT METROPOLITAN AIRPORT FY 2016 – FY 2020 CAPITAL IMPROVEMENT PLAN**

The DTW’s CIP total project costs are estimated to be \$599 million. The CIP is considered moderate by Moody, Fitch and S&P, given the size of the Airport and the capital needs of other large hub US airports. This is attributed to the fact that DTW, in the last 20 years, has built two new terminals and a fourth parallel runway, reconstructed three runways and numerous taxiways. According to Airports Council International – North America, “US Capital Needs” survey, 16 large hub airports have capital needs greater than \$1 billion as illustrated in Figure H - 1. The top ten projects across the survey, in terms of dollars, are indicated in Figure H - 2.

**Figure H - 1: Top Airports with Over \$1B Capital Needs**



Source: ACI-NA US Airport Capital Needs (2013-2017) Survey

**Figure H - 2: Top 10 Projects at Peer Airports**

Airport Code	Project	2013-2017 Cost (in millions)
DFW	Terminal renewal & improvement program	\$ 1,512
FLL	South runway expansion	791
ORD	ATS and Garage expansion	765
FLL	Terminal 4 expansion	450
JFK	Rehabilitation of Runway 4L/22R	446
ORD	Runway 10R/28L	399
IAH	Terminal D expansion	395
LAX	Bradley West core improvements	370
DEN	South Terminal Redevelopment Program	349
SLC	New terminal	334

Source: ACI-NA US Airport Capital Needs (2013-2017) Survey



**Photo: First departure from 4R/22L after reconstruction**

**FY 2016 – FY 2020 CIP ESTIMATED PROJECT COSTS & TIMING**

Figure H - 3 represents a summary of Airport CIP projects including total estimated project costs by category and anticipated timing. Estimated CIP expenditures for FY 2016 total approximately \$256.1 million, including roughly \$177.0 million in airfield project costs.

Figure H - 3: Detroit Metropolitan Airport CIP FY 2016 - FY 2020

(\$ in thousands)	Estimated Total Project Cost	Projected Expenses to					FY 2020 thru Completion
		9/30/15	FY 2016	FY 2017	FY 2018	FY 2019	
Airfield	\$ 321,164	\$ 63,665	\$ 176,959	\$ 24,054	\$ 25,586	\$ 23,900	\$ 7,000
Noise Mitigation	800	-	-	-	400	400	-
Cargo, Hangar & Commercial Development	9,785	1,085	2,100	925	4,000	838	838
Power Plants & Electrical Distribution System	50,622	5,837	16,750	11,435	5,250	7,550	3,800
Fleet & Equipment	41,421	11,600	6,600	4,000	5,965	8,757	4,500
Parking Decks, Lots & GTCs	36,790	5,720	9,200	3,740	750	14,000	3,380
Bridges & Roadways	28,145	2,410	10,328	7,569	1,724	3,000	3,115
Security & Communications	30,896	100	3,693	4,600	5,729	7,638	9,136
Support Facilities	34,404	599	12,314	14,085	4,875	151	2,380
Site Redevelopment & Demolitions	27,811	1,207	10,940	660	7,650	5,348	2,006
Terminals	4,325	280	3,227	818	-	-	-
Water Mains & Stormwater System	6,600	3,650	1,950	550	150	150	150
Other Projects	6,200	-	2,000	3,200	1,000	-	-
<b>Detroit Metropolitan Airport Total</b>	<b>\$ 598,963</b>	<b>\$ 96,153</b>	<b>\$ 256,061</b>	<b>\$ 75,636</b>	<b>\$ 63,078</b>	<b>\$ 71,731</b>	<b>\$ 36,304</b>

*Total may not sum due to rounding*

ANTICIPATED FUNDING SOURCES

As a result of the forward-looking nature of the program, some of the anticipated funding sources are subject to change.

Figure H - 4 : Detroit Metropolitan Airport CIP FY 2016 – FY 2020 Estimated Sources of Funding

(\$ in thousands)	Estimated Total					
	Cost	Grants	Previous Bonds	Series 2015	Future Bonds	Other
Airfield	\$ 321,164	\$ 19,500	\$ 75,086	\$ 168,100	\$ 56,555	\$ 1,923
Noise Mitigation	800	-	-	-	800	-
Cargo, Hangar & Commercial Development	9,785	-	1,860	-	7,925	-
Power Plants & Electrical Distribution System	50,622	-	32,317	2,050	15,725	530
Fleet & Equipment	41,421	2,048	17,400	8,000	13,173	800
Parking Decks, Lots & GTCs	36,790	-	13,640	3,720	18,130	1,300
Bridges & Roadways	28,145	-	7,050	10,275	8,920	1,900
Security & Communications	30,896	-	1,900	5,000	22,703	1,293
Support Facilities	34,404	-	6,000	13,000	8,246	7,158
Site Redevelopment & Demolitions	27,811	-	8,872	3,000	13,564	2,375
Terminals	4,325	-	3,625	-	700	-
Water Mains & Stormwater System	6,600	-	6,600	-	-	-
Other	6,200	4,622	-	-	-	1,578
<b>Detroit Metropolitan Airport Total</b>	<b>\$ 598,963</b>	<b>\$ 26,170</b>	<b>\$ 174,350</b>	<b>\$ 213,145</b>	<b>\$ 166,441</b>	<b>\$ 18,858</b>

*Total may not sum due to rounding*

## SIGNIFICANT NON-ROUTINE PROJECTS WITH IMPACT TO FUTURE OPERATING BUDGETS

The majority of capital projects in the Five-Year Plan are considered routine, however the following non-routine CIP projects have an impact on the current and future operating budgets.

**Cargo, Hangar & Commercial Development Projects** (Item Nos. 17 & 18) – The CIP includes planning and infrastructure improvements to prepare two “developer-ready” sites for redevelopment: North Cargo Freight Site Redevelopment and the Gateway Airport Business/Commercial Development. Both projects are investments designed to grow cargo and aviation support services, concessions and other non-airline revenues. The CIP provides funding only for site infrastructure improvements and general use aircraft parking.

**Power Plant & Electrical Distribution System Projects** (Item Nos. 23, 25, 26 & 29) – The North Power Plant produces and distributes steam, chilled water and electrical power to the North Terminal, Big Blue Parking Deck, North Ground Transportation Center and the L.C. Smith Terminal. The Power Plant, constructed in 1965, utilizes systems original to the facility that are well beyond their useful life. These four projects will replace equipment critical to the operation of the plant, such as; electrical gear and load centers, chillers, plant HVAC equipment and air handlers. Replacement of the equipment will provide for reliable and efficient operation of the North Power Plant accompanied by reductions in repairs and maintenance costs.

**Compressed Natural Gas Fueling Facility** (Item No. 35) – The cost of compressed natural gas (CNG) has been trending downward over the past several years and is less expensive than gasoline or diesel fuel on a per-gallon basis. Market cost of a gallon equivalent of CNG is approximately \$1. The Authority is studying a conversion to CNG powered vehicles and construction of a CNG fueling facility. The extent to which the Authority can convert its fleet to CNG is under investigation and the estimated savings to the operating budget cannot be quantified until the study is completed. In addition to reducing fuel expenses, a CNG facility has the potential to generate revenue if it is located in an area accessible for commercial use. Since this project is still under review, initial project planning is not anticipated before FY 2018.

**Campus Wide LED Lighting Installation** (Item Nos. 40 & 49) – By replacing existing High Pressure Sodium (HPS) lamps with a Light-Emitting Diode (LED) system in each surface parking lot and along all airport roadways, the Authority anticipates decreased maintenance costs coupled with a significant reduction in electrical consumption, similar to reductions realized following conversion of lighting in the parking decks.

**Airport Administration Headquarters Building** (Item No. 56) – The Authority management and administrative staff are currently housed at the L.C. Smith Terminal, occupying approximately 30 percent of the building. The space not being used requires expenditures for heating, cooling, lighting and nominal maintenance. A new facility has been designed that will provide management and administrative spaces that are both operationally efficient and cost effective. Construction is expected to begin in FY 2016.

**Site Redevelopments & Demolitions** (Item Nos. 8 & 61-64) – In 2012, the Authority developed an Integrated Land Use Strategic Plan to identify opportunities for economic development on Airport property. The plan identifies several vacant or under-utilized sites that would be attractive to developers for aviation and non-aviation related activities including, but not limited to, cargo, aircraft or aviation service equipment maintenance, repair and overhaul, freighter/integrator operations, passenger commercial centers and commercial office space. This grouping of demolition and site redevelopment projects is limited to making specific parcels of property “developer-ready” and is independent of f. Potential operating revenue from future development cannot be quantified at this time. Analysis is on-going as opportunities are presented to the Authority.

**Demolition of the L.C. Smith & Berry Terminals** (Item No. 65) – Both the L.C. Smith and Berry Terminals have been de-commissioned from Airline use since the opening of the North Terminal in 2008. The Berry Terminal serves no routine function, however the Authority is required to maintain the building for life-safety issues. The Berry



Terminal is slated for demolition in CY 2016 with the Smith Terminal to follow after the new Administration Building is completed. Demolition of each facility will result in maintenance and utility cost savings.

**DETROIT METROPOLITAN AIRPORT – PROJECT TIMING BY YEAR**

(\$ in thousands)

Item No.	Project Description	Estimated Total Project Cost	Projected Expenses to 9/30/15	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020 to Completion
<b>Airfield</b>								
1	Taxiway W Balance of Reconstruction	\$ 37,148	\$ 18,574	\$ 16,574	\$ 2,000	\$ -	\$ -	\$ -
2	Runway 3L/21R & Associated Taxiways Reconstruction (Planning and Design only)	6,000	-	-	1,000	3,000	2,000	-
3	Runway 3L/21R Enhancements Planning	700	-	-	350	350	-	-
4	Eastern Taxiways Reconstruction (includes Taxiways S, S-4, S-5, W-5 and portions of Taxiways F, PP-1, PP-2, and V)	28,400	14,200	11,360	2,840	-	-	-
5	Taxiway H Extension/Reconstruction and 22L Deicing Pad Expansion	18,000	-	-	1,000	2,000	15,000	-
6	Taxiway U Extension (East of Taxiway W)	7,336	6,336	1,000	-	-	-	-
7	Runway 4L/22R and Associated Taxiways Rehabilitation	110,000	6,500	98,500	5,000	-	-	-
8	Taxiway Z Reconstruction & Relocation of Southern Portion Including Extension of Taxiway Service Road	15,400	-	1,000	1,000	13,400	-	-
9	Taxiway C Extension (from Runway 9L to Taxiway U)	6,900	900	6,000	-	-	-	-
10	Taxiway M3, M4 and Western Portion of Taxiway P4 Removal	925	-	925	-	-	-	-
11	Runway 21R Deicing Pad Reconstruction (Design only)	500	-	-	364	136	-	-
12	Taxiway F (East of Taxiway S)	20,750	7,900	12,850	-	-	-	-
13	Airfield Pavement Rehabilitation/ Reconstruction Plan	42,655	9,255	6,300	6,500	6,700	6,900	7,000
14	McNamara Apron Rehabilitation/Joint Repairs	11,650	-	11,650	-	-	-	-
15	McNamara Apron Modification and New Hardstand Positions	14,800	-	10,800	4,000	-	-	-
<b>Airfield Total</b>		<b>321,164</b>	<b>63,665</b>	<b>176,959</b>	<b>24,054</b>	<b>25,586</b>	<b>23,900</b>	<b>7,000</b>
<b>Noise Mitigation</b>								
16	Noise Exposure Maps Update	800	-	-	-	400	400	-
<b>Noise Mitigation Total</b>		<b>800</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>400</b>	<b>400</b>	<b>-</b>
<b>Cargo, Hangar &amp; Commercial Development</b>								
17	Gateway Airport Business/Commercial Improvements Sites 1 & 2	1,860	760	1,100	-	-	-	-

CAPITAL IMPROVEMENT PROGRAM | FISCAL YEAR 2016 BUDGET

Item No.	Project Description	Estimated Total Project Cost	Projected Expenses to 9/30/15	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020 to Completion
18	West Service Drive Improvements & Relocation	7,925	325	1,000	925	4,000	838	838
	<b>Cargo, Hangar &amp; Commercial Development Total</b>	<b>9,785</b>	<b>1,085</b>	<b>2,100</b>	<b>925</b>	<b>4,000</b>	<b>838</b>	<b>838</b>
<b>Power Plants &amp; Electrical Distribution System</b>								
19	East Service Drive Utilities Upgrade & Expansion	7,340	3,000	1,340	1,500	1,500	-	-
20	Utility Command Center & Remote Metering	6,000	500	4,000	1,500	-	-	-
21	High Voltage Transmission Lines for Primary Service to the North Campus and Airfield	5,527	927	4,600	-	-	-	-
22	Primary Electrical Cable & Switchgear Replacement	550	-	180	370	-	-	-
23	North Power Plant Electrical Gear & Load Centers Replacement	2,250	150	2,100	-	-	-	-
24	Electrical Substations Planned Replacements	4,000	-	-	2,700	1,300	-	-
25	North Power Plant Chillers & Support Systems	4,150	350	2,000	1,800	-	-	-
26	North Power Plant HVAC / Air Handler and Miscellaneous Improvements	2,500	810	1,000	690	-	-	-
27	South Power Plant Site Generators	10,000	-	-	-	500	5,700	3,800
28	Primary Electrical Loops Nos. 1-3 Upgrade & Expansion	5,125	-	-	1,925	1,600	1,600	-
29	North Power Plant Building Rehabilitation	2,050	100	1,450	500	-	-	-
30	McNamara Terminal HVAC Re-Commissioning Study	600	-	-	-	350	250	-
31	Photo Voltaic Power System Development	80	-	80	-	-	-	-
32	North Power Plant Combined Heating System	450	-	-	450	-	-	-
	<b>Power Plants &amp; Electrical Distribution System Total</b>	<b>50,622</b>	<b>5,837</b>	<b>16,750</b>	<b>11,435</b>	<b>5,250</b>	<b>7,550</b>	<b>3,800</b>
<b>Fleet &amp; Equipment</b>								
33	Fueling Facility Improvements, Tank Replacement and Island Canopies Installation	3,500	900	2,600	-	-	-	-
34	Fleet & Heavy Equipment Acquisitions	35,361	10,700	4,000	4,000	5,581	6,581	4,500
35	Compressed Natural Gas Fueling Facility	2,560	-	-	-	384	2,176	-
	<b>Fleet &amp; Equipment Total</b>	<b>41,421</b>	<b>11,600</b>	<b>6,600</b>	<b>4,000</b>	<b>5,965</b>	<b>8,757</b>	<b>4,500</b>
<b>Parking Decks, Lots &amp; GTCs</b>								
36	Green Lot Rehabilitation	1,750	1,500	250	-	-	-	-
37	Blue Parking Deck Rehabilitation - Phase 3	4,140	2,000	1,500	640	-	-	-
38	McNamara Parking Deck Rehabilitation	7,750	2,000	3,750	2,000	-	-	-
39	Eureka Express Lot	8,130	-	-	-	250	5,000	2,880

Item No.	Project Description	Estimated Total Project Cost	Projected Expenses to 9/30/15	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020 to Completion
40	Surface Lots LED Lighting Installation	1,600	-	1,000	600	-	-	-
41	McNamara Parking Garage Parallel Walkway	800	100	700	-	-	-	-
42	North Terminal GTC Third Elevator and Escalator	500	-	-	500	-	-	-
43	Ground Transportation Center Heating System Reconfiguration	2,120	120	2,000	-	-	-	-
44	Parking System Replacement	10,000	-	-	-	500	9,000	500
	<b>Parking Decks, Lots &amp; GTCs Total</b>	<b>36,790</b>	<b>5,720</b>	<b>9,200</b>	<b>3,740</b>	<b>750</b>	<b>14,000</b>	<b>3,380</b>
<b>Bridges &amp; Roadways</b>								
46	Dingell Drive Retaining Wall Reconstruction	4,300	300	3,000	1,000	-	-	-
47	Bridges & Roadways Rehabilitation Program	14,330	2,000	3,950	1,140	1,125	3,000	3,115
48	Rogell Drive-Dingell Drive Connector	5,040	10	840	3,591	599	-	-
49	Rogell and Burton Drive Intersection Reconfiguration	1,300	100	1,100	100	-	-	-
50	Roadway LED Lighting Installation	1,275	-	638	638	-	-	-
51	Lucas Drive Enhancements	1,900	-	800	1,100	-	-	-
	<b>Bridges &amp; Roadways Total</b>	<b>28,145</b>	<b>2,410</b>	<b>10,328</b>	<b>7,569</b>	<b>1,724</b>	<b>3,000</b>	<b>3,115</b>
<b>Security &amp; Communications</b>								
52	McNamara Terminal CBP CCTV	693	-	693	-	-	-	-
53	Vehicle Checkpoint Enhancements - Sally Port Barriers	600	-	-	600	-	-	-
54	Perimeter Fencing Cable Reinforcement	5,203	-	-	-	1,354	1,713	2,136
55	Checkpoint #1 Vehicle and Truck Screening Building	2,500	-	-	-	375	2,125	-
56	Security System & Network Upgrades - Phases 2 through 5	21,900	100	3,000	4,000	4,000	3,800	7,000
	<b>Security &amp; Communications Total</b>	<b>30,896</b>	<b>100</b>	<b>3,693</b>	<b>4,600</b>	<b>5,729</b>	<b>7,638</b>	<b>9,136</b>
<b>Support Facilities</b>								
57	Airport Authority Headquarters Building	24,900	400	11,450	13,050	-	-	-
58	Roof Replacement Plan	3,149	199	294	65	60	151	2,380
59	Building 348 (Executive Terminal) Partial Restoration	370	-	370	-	-	-	-
60	Fire Training Facility Restoration and Burn Pit Replacement	5,585	-	-	770	4,815	-	-
61	Equipment Maintenance & Storage Facilities Replacement & Consolidation (Planning only)	400	-	200	200	-	-	-
	<b>Support Facilities Total</b>	<b>34,404</b>	<b>599</b>	<b>12,314</b>	<b>14,085</b>	<b>4,875</b>	<b>151</b>	<b>2,380</b>

CAPITAL IMPROVEMENT PROGRAM | FISCAL YEAR 2016 BUDGET

Item No.	Project Description	Estimated Total Project Cost	Projected Expenses to 9/30/15	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020 to Completion
<b>Site Redevelopment &amp; Demolitions</b>								
62	Building 715 (Former NWA/DL Hangar) Demolition	1,562	100	1,462	-	-	-	-
63	Buildings 714, 714A & 714B (Former Metro Flight Buildings) Site Redevelopment & Demolition	1,600	-	-	160	1,440	-	-
64	Building 534 (Former Flight Kitchen) Demolition	1,310	66	1,245	-	-	-	-
65	Building 358 (Police Station) Demolition	3,000	150	2,850	-	-	-	-
66	LC Smith & Berry Terminals Demolition	17,964	891	3,509	-	6,210	5,348	2,006
67	Rental Car Facilities Study	2,375	-	1,875	500	-	-	-
<b>Site Redevelopment &amp; Demolitions Total</b>		<b>27,811</b>	<b>1,207</b>	<b>10,940</b>	<b>660</b>	<b>7,650</b>	<b>5,348</b>	<b>2,006</b>
<b>Terminals</b>								
68	McNamara Terminal Interactive Digital Directories	2,625	200	2,425	-	-	-	-
69	North Terminal Automated Passport Control Equipment	700	80	620	-	-	-	-
70	North Terminal Interior Wall Panel Replacements	1,000	-	182	818	-	-	-
<b>Terminals Total</b>		<b>4,325</b>	<b>280</b>	<b>3,227</b>	<b>818</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Water Mains &amp; Storm Water System</b>								
71	Water Main Replacement	4,000	2,875	1,125	-	-	-	-
72	Primary Pump & Switchgear Replacements	1,100	250	450	400	-	-	-
73	Storm and Sanitary Sewer Systems Replacements	1,500	525	375	150	150	150	150
<b>Water Mains &amp; Storm Water System Total</b>		<b>6,600</b>	<b>3,650</b>	<b>1,950</b>	<b>550</b>	<b>150</b>	<b>150</b>	<b>150</b>
<b>Other Projects</b>								
74	Master Plan Update	6,200	-	2,000	3,200	1,000	-	-
<b>Other Projects Total</b>		<b>6,200</b>	<b>-</b>	<b>2,000</b>	<b>3,200</b>	<b>1,000</b>	<b>-</b>	<b>-</b>
<b>Detroit Metropolitan Airport Total</b>		<b>\$ 598,963</b>	<b>\$ 96,153</b>	<b>\$ 256,061</b>	<b>\$ 75,636</b>	<b>\$ 63,078</b>	<b>\$ 71,731</b>	<b>\$ 36,304</b>

DETROIT METROPOLITAN AIRPORT – PROJECT DESCRIPTIONS

(\$ in thousands)

Item No.	Project	Estimated Total Project Cost	Description
<b>Airfield</b>			
1	Taxiway W Balance of Reconstruction	\$ 37,148	The southern portion of Taxiway Whiskey (W) was reconstructed in 2006 as part of the Runway 3L/21R project. This project consists of design and construction efforts necessary to address the remaining Taxiway W pavement, connector taxiways and associated systems.
2	Runway 3L/21R & Associated Taxiways Reconstruction (Planning and Design only)	\$ 6,000	Planning, design and construction efforts necessary to execute a full depth rehabilitation of Runway 3L/21R will closely follow efforts to rehabilitate Runway 4L/22R. Planning and design efforts for Runway 3L/22R will be accomplished within the current five-year planning horizon with construction efforts starting in FY 2021.
3	Runway 3L/21R Enhancements Planning	\$ 700	Prior to reconstructing Runway 3L/21R a study will be conducted which evaluates if airfield capacity improvements may be achieved by: extending the runway, improving centerline lighting, installing navigational aids of at least CAT I at both ends of the runway, improving drainage, lighting, shoulders, pavement markings, signs and blast pads. The proposed addition of a hold pad northeast of Runway 21R will also be included in the study.
4	Eastern Taxiways Reconstruction	\$ 28,400	This project consists of the design and construction efforts necessary to address Taxiway Sierra (S), S-4, S-5, W-5 pavement and portions of Taxiways Fox (F), Papa Papa (PP), PP-1, PP-2 and Victor (V) pavement and associated systems.
5	Taxiway H Extension/Reconstruction and 22L Deicing Pad Expansion	\$ 18,000	Taxiway Hotel (H) is the primary access taxiway to the Runway 22L deicing pad. Aircraft movement in and out of the pad and the wide-body aircraft gates at the North Terminal is currently restricted by the L.C. Smith Terminal. This project provides for aircraft movement modelling, evaluation of alternatives and design of the extension and possible relocation of Taxiway H following demolition of the Smith Terminal. Also under consideration during this planning and design effort will be potential expansion of the deicing pad and relocation of taxiways to facilitate efficient aircraft movement.
6	Taxiway U Extension (East of Taxiway W)	\$ 7,336	This 2,000 linear foot expansion of the taxiway system serving Runway 9L/27R will enhance safety during crosswind operations and shorten the length of taxi for aircraft departing from the McNamara Terminal to Runway 9L/27R by 1.7 miles.
7	Runway 4L/22R and Associated Taxiways Rehabilitation	\$ 110,000	This project consists of planning, design and construction related efforts necessary for the reconstruction of Runway 4L/22R and its associated taxiways. Planning and design work began in 2014 and continued into 2015. Construction is scheduled to begin in FY 2016 and potentially span two years, ending in CY 2017.
8	Taxiway Z Reconstruction & Relocation of Southern Portion Including Extension of Taxiway Service Road	\$ 15,400	In 2011 the northern portion of Taxiway Zulu (Z) was relocated 157' to the west, widened and re-built to comply with FAA runway design standards and to accommodate Group VI aircraft. This project will provide planning, design and construction related efforts necessary to reconstruct and relocate the remainder of Taxiway Z and to provide a parallel taxiway service road for Authority Maintenance vehicles.
9	Taxiway C Extension (from Runway 9L to Taxiway U)	\$ 6,900	The addition of this taxiway pavement will result in shorter taxi times, reduced fuel consumption/carbon footprint and increased airfield safety for aircraft taxiing from the McNamara Terminal to the departure end of Runway 22L by eliminating two 130 degree turns currently necessary prior to departure.
10	Taxiway M3, M4 and Western Portion of Taxiway P4 Removal	\$ 925	Taxiway Mike (M) 3, M4 and a portion of Taxiway Papa (P) 4 are taxiway connectors located along Runway 3L/21R that have direct access to the runway. The taxiways were part of a prior airfield configuration of the Runway 15L/33R intersection with 3L/21R that has been decommissioned. The project consists of complete pavement and signage removal, installation of FAA mandated lighting and site restoration efforts necessary to decommission these connector taxiways.
11	Runway 21R Deicing Pad Reconstruction (Design only)	\$ 500	Planning and design efforts necessary to execute a full depth rehabilitation of the Runway 21R Deicing Pad will be accomplished within the current five-year planning horizon with construction efforts anticipated for FY 2021, in tandem with the reconstruction of Runway 3L/21R.
12	Taxiway F (East of Taxiway S)	\$ 20,750	This project provides for the full depth reconstruction of Taxiway Fox (F) east of Taxiway S including the installation of approximately 17,500 square yards of concrete pavement. The project will also require construction of a temporary bypass taxiway to maintain daily operations of tenants along this section of Taxiway F during reconstruction.
13	Airfield Pavement Rehabilitation/ Reconstruction Plan	\$ 42,655	This project consists of the planning, design/engineering, and construction to provide pavement rehabilitation, reconstruction, or removal of aged sections of airfield pavement (runway, taxiway, taxiway, shoulder, deicing pad, apron, etc.) which are identified as future work and must be addressed to maintain safe airport operations.

CAPITAL IMPROVEMENT PROGRAM | FISCAL YEAR 2016 BUDGET

(\$ in thousands)

Item No.	Project	Estimated Total Project Cost	Description
			Rehabilitation and/or reconstruction of the pavement will extend the useful life for a term of 5 to 15 years. The method of rehabilitation or reconstruction will be determined based on the type of pavement, the pavement function, severity of deterioration, timing of future reconstruction, operational constraints and further considerations affecting the safe and efficient operation of the airfield.
14	McNamara Apron Rehabilitation/Joint Repairs	\$ 11,650	The condition of the gate positions along the McNamara Terminal, Concourse A necessitates multiple closures for repairs, pavement sweeping and painting. This project will consist of concrete apron replacement for 8 wide body gates to address the repairs and eliminate the exposure to foreign object debris (FOD).
15	McNamara Apron Modifications and New Hardstand Positions	\$ 14,800	The area located between Concourses A and B & C at the McNamara Terminal is important to the movement of aircraft from runways to the terminal gates. Currently, flow is limited by existing grass islands that restrict movement between multiple taxilanes in sequencing inbound and outbound aircraft and push backs from terminal gates. This project will improve flow and reduce taxi time by eliminating bottlenecks between Taxilane U9 and Taxilane Q9 along the McNamara Terminal by filling four existing grass islands. DTW also currently has a shortage of overnight parking and staging areas for widebody aircraft. Infill of the grass area immediately north of McNamara Concourse C will provide for additional overnight aircraft parking.
<b>Noise Mitigation</b>			
16	Noise Exposure Maps Updates	\$ 800	Federal Aviation Regulation (FAR) Part 150 Noise Regulations require timely update of Noise Exposure Maps. This project provides for hiring an airport planning firm to complete updates to the DTW Noise Exposure Maps.
<b>Cargo, Hangar &amp; Commercial Development</b>			
17	Gateway Airport Business/Commercial Improvements Sites 1 & 2	\$ 1,860	The scope of the project includes planning and site improvements needed to prepare two sites near the north entrance to the airport to be "developer ready." This work will include electrical upgrades such as replacing a substation to provide switches to feed all of the proposed development and upgrades to the powerhouse. Sanitary and storm sewer lines will be upgraded to meet anticipated demand and the communications systems housed and feeding Building 515 will be re-located.
18	West Service Drive Improvements & Relocation	\$ 7,925	This project will provide all necessary planning, engineering and construction services necessary to relocate the West Service Drive and associated systems from the I-94 service drive to Gate 53. The roadway's relocation will be west of the fuel storage tanks to accommodate the North Cargo Freight Site Redevelopment.
<b>Power Plants &amp; Electrical Distribution System</b>			
19	East Service Drive Utilities Upgrade & Expansion	\$ 7,340	Design and construction efforts required to upgrade and extend utility and infrastructure systems along the East Service Drive (from Check Point #2 to the South I-94 Service Drive) are included in this project. With these enhancements, steam and chilled water from the North Complex Power Plant will be delivered to Buildings 610 (Public Safety facility) and 614 (cargo facility). Water, electric and fiber infrastructure will be upgraded to accommodate future development along the East Service Drive.
20	Utility Command Center & Remote Metering	\$ 6,000	This project includes all planning, engineering and construction services to develop a Utility Command Center and Remote Metering system in the North Complex Power Plant with the capability of electronically monitoring and remotely metering electrical power, steam, chilled and drinking water consumption.
21	High Voltage Transmission Lines for Primary Service to the North Campus and Airfield	\$ 5,527	This project includes all planning, engineering and construction services required to replace the current primary electricity medium voltage (40,000V) feeders that supply the Airport's North Campus with high voltage (120,000V) transmission lines.
22	Primary Electrical Cable & Switchgear Replacement	\$ 550	This project addresses needed updates to portions of the primary electrical distribution systems cables (approximately 35,000 feet of primary cable campus wide) and the renovation of McNamara Parking Deck switchgear.
23	North Power Plant Electrical Gear & Load Centers Replacement	\$ 2,250	The North Power Plant electrical distribution system will be updated by replacing two low voltage substations, seven motor control centers, eleven lighting and receptacle distribution panels and seven power distribution panels.
24	Electrical Substations Planned Replacements	\$ 4,000	The intent of this project is to obtain a design-build contract for replacement of electrical substations and switchgear that are original to the site. Electrical power is received from DTE Energy via three primary high voltage lines that provide electrical power to medium voltage lineups, which transform the power to low voltage for building use.

(\$ in thousands)

Item No.	Project	Estimated Total Project Cost	Description
25	North Power Plant Chillers & Support Systems	\$ 4,150	This project will provide the planning, design and construction necessary for the replacement of critical components and chiller units that make up the chilled water system at the North Campus Power Plant. The scope, in addition to replacing chiller units, includes the replacement of five condenser water pumps, five primary chilled water pumps, three secondary chilled water pumps and five cooling towers.
26	North Power Plant HVAC / Air Handler and Miscellaneous Improvements	\$ 2,500	This project will provide all design, engineering and construction necessary to replace and maximize the efficiency of the HVAC systems serving the North Power Plant and Utility Tunnel System. Included in the scope of this project is the replacement of air handlers, air conditioners and exhaust fans. Existing air handlers will be replaced with modern direct digital control (DDC) units with variable frequency driven fans tied to the Siemens Apogee system for monitoring and control.
27	South Power Plant Site Generators	\$ 10,000	The South Power Plant was designed to support a total of five back-up generators upon ultimate expansion of the McNamara Terminal. The facility currently has three 5.7MW generators installed. In events requiring the use of the back-up generation system a load shedding system strips “non-essential” loads to prevent overloading the installed generators. This project involves the design, acquisition and installation of the two additional generator(s) that were part of the original design of the facility and will meet the needs of all terminal systems without load shedding.
28	Primary Electrical Loops Nos. 1-3 Upgrade & Expansion	\$ 5,125	The Airport’s North Campus electrical distribution system consists of three basic loops. All three loops were built in the late 1950’s and early 1960’s and all cells are full. This project will involve efforts necessary to examine existing electrical loops, verify duct bank capacity, inspect the Power Plant Gear and provide for the design and construction of necessary upgrades to the Loops.
29	North Power Plant Building Rehabilitation	\$ 2,050	The North Power Plant (Building 611) provides generation and distribution of steam and chilled water to the North Terminal, Blue Deck walkways and ground transportation center and the L.C. Smith Terminal. The facility also provides electrical distribution to the entire North Campus. Built in 1965, the building requires updates to multiple systems, as well as rehabilitation of the building itself. This project provides for replacement of the freight elevator, installation of a public address system, removal of outdated wallboard, replacement of window structural gaskets and safety coating of the floor with epoxy paint.
30	McNamara Terminal HVAC Re-Commissioning Study	\$ 600	The McNamara Terminal has been open for more than a decade. As with any large facility, numerous changes within the building have affected the efficiency of the HVAC systems. This project will evaluate the HVAC systems, controls and operating procedures to reduce waste and ensure passenger comfort. The scope includes the study of the systems and the correction of minor system flaws discovered.
31	Photo Voltaic Power System Development	\$ 80	Airports around the nation are developing photo voltaic solar power fields to provide renewable energy sources and reduce their carbon footprint. WCAA, via this project, will hire a consultant to leverage lessons learned from peer airports and potentially seek a third party development agreement for installation and operation of a photo voltaic solar field.
32	North Power Plant Combined Heating System	\$ 450	A “combined cycle” plant, as proposed at DTW, would utilize “waste heat” from the 14 megawatt site gas turbine to generate electrical power as well as heating steam. This project will provide for a feasibility study to quantify the cost effectiveness of a combined cycle plant at the North Power Plant. If economically viable, this project will further provide the engineering design and specifications to bid the construction phase of this work.
<b>Fleet &amp; Equipment</b>			
33	Fueling Facility Improvements, Tank Replacement and Island Canopies Installation	\$ 3,500	The vehicular and equipment fueling facility near Building 703 includes an existing 10,000 gallon gasoline underground storage tank (UST) and an existing 10,000 gallon diesel UST. The new relocated fueling facility will be moved to the north of Building 703 and will include new fuel tanks. Additionally, a canopy over the new fueling dispensers will permit the use of the fueling facility without concern for weather conditions in all seasons.
34	Fleet & Heavy Equipment Acquisitions	\$ 35,361	The Airport’s five-year fleet and equipment replacement program for heavy equipment and specialty equipment includes, but is not limited to, the purchase of snow removal equipment, ARFF vehicles, ambulances, dump trucks and other large maintenance equipment.
35	Compressed Natural Gas Fueling Facility	\$ 2,560	WCAA desires to design and construct a Compressed Natural Gas Fueling Facility (CNG) at DTW. Airport equipment and small vehicles can be retrofitted to burn CNG rather than gasoline or diesel fuel. The Airport is pursuing a FAA Voluntary Airport Low Emissions Program (VALE) grant which could potentially fund up to 75 percent of the

(\$ in thousands)

Item No.	Project	Estimated Total Project Cost	Description
			project. The exact location of the station is under investigation. Preferably, the CNG station would be located where both Authority and public vehicles can be fueled.
<b>Parking Decks, Lots &amp; GTCs</b>			
36	Green Lot Rehabilitation	\$ 1,750	This project consists of the planning, design and construction efforts necessary to rehabilitate the existing public parking lot pavement and upgrading associated systems in the Green Lot, an economy surface lot located on the East Service Drive. Improvements include replacement of all pavement, as well as lighting and ADA compliance upgrades.
37	Blue Parking Deck Rehabilitation - Phase 3	\$ 4,140	Design efforts have been completed for the rehabilitation work which includes replacement of the metal deck roofs and restoration of eight stair towers. Improvements to emergency lighting system have been completed. The remaining construction work will be phased over a three year period.
38	McNamara Parking Deck Rehabilitation	\$ 7,750	The McNamara Parking Deck rehabilitation project includes; phased replacement of expansion joints throughout the parking structure, installation of roof coating on the portions of parking garage levels 6, 7, 8, 9 and 10 that are exposed to the weather and public stair towers restoration due to the corrosive effects of Michigan winter weather.
39	Eureka Express Lot	\$ 8,130	Occupancy rates at the McNamara Parking Deck indicate that additional parking options at the south end of the airport are warranted. This project will provide planning, engineering and other consulting tasks associated with the design and permitting required for the construction of a new surface lot on Eureka Road. The project scope also includes construction of the lot and associated infrastructure.
40	Surface Lots LED Lighting Installation	\$ 1,600	Light Emitting Diode (LED) fixtures have been installed in both parking structures and in the South Employee Lot at DTW. LED fixtures consume approximately half of the energy utilized by existing fixtures and provide longer lamp service life. This project continues the Authorities effort to provide better and more consistent illumination throughout the campus by re-lamping the remaining surface parking lots. Necessary improvements to the light fixture components (wiring, conduit, etc.) will be completed, as needed, within this project.
41	McNamara Parking Garage Parallel Walkway	\$ 800	The moving walkways between Elevator bank "C" and the 6 <sup>th</sup> floor lobby in the McNamara garage were permanently turned off in 2011. This project removes the mechanical equipment and creates a concrete walkway.
42	North Terminal GTC Third Elevator and Escalator	\$ 500	Efficient passenger conveyance from ground level to the bridge level of the North Terminal Ground Transportation Center is important in making a good first impression for travelers using the North Terminal. This effort provides for the design and installation of one additional elevator and one additional escalator in the North Terminal Ground Transportation Center to provide essential capacity during heavy use and during maintenance of the systems.
43	Ground Transportation Center Heating System Reconfiguration	\$ 2,120	Ground Transportation Centers, due to their function and level of use, create challenges for maintaining sufficient heating during extreme cold events. The Authority, through this project, seeks to upgrade the heating system in the Ground Transportation Center at both terminals.
44	Parking System Replacement	\$ 10,000	The current parking system in use at Detroit Metropolitan Airport has been in place for 7 years. While it provides basic parking services, the technology no longer meets the Authority's needs. The hardware is aging and is no longer adequately supported, making repair services or replacement parts difficult to find. This project anticipates replacement of the entire system.
<b>Bridges &amp; Roadways</b>			
46	Dingell Drive Retaining Wall Reconstruction	\$ 4,300	Dingell Drive represents the main, and only public access to the south side of the airport campus. The roadway was constructed below grade so there are many retaining walls, up to 40' high, separating the public roadway from the airfield above. The retaining walls are in need of rehabilitation due to exposure to the elements, ground pressure and high water tables. This project will study the appropriate post construction upgrades necessary to address any deficiencies while they are still a candidate for repair.
47	Bridges & Roadways Rehabilitation Program	\$ 14,330	The Authority has developed a 10 year Bridge & Roadway Improvement Program which outlines the necessary rehabilitation efforts required on roads and bridges under the control of WCAA. The Program, designed using industry standard practices, provides for rehabilitation of pavement, curb and joint replacement on the roads and bridges in order to extend the useful life of the assets.



(\$ in thousands)

Item No.	Project	Estimated Total Project Cost	Description
48	Rogell Drive-Dingell Drive Connector	\$ 5,040	This project consists of the design and construction of a vehicular access ramp from northbound Rogell to southbound Dingell Drive. This construction will provide improved access for passenger vehicles and shuttle buses.
49	Rogell and Burton Drive Intersection Reconfiguration	\$ 1,300	The intersection of Rogell Drive at Burton Drive provides access to the East and West Service Drives through a signaled intersection allowing direct left turns on eastbound and westbound Burton Drive approaches and southbound Rogell Drive with a protected left turn phase (green left turn arrow). Long delays and queues typically develop at the intersection. This project will provide for testing, design and construction efforts necessary to rework the intersection to a more typical boulevard intersection.
50	Roadway LED Lighting Installation	\$ 1,275	Light Emitting Diode (LED) fixtures have been installed in both parking structures and in the South Employee Lot at DTW. LED fixtures consume approximately half of the energy utilized by existing fixtures and provide longer lamp service life. This project continues the Authority's effort to provide better and more consistent illumination throughout the campus by re-lamping approximately 960 street lights on the roadways at DTW. Necessary improvements to the light fixture components (wiring, conduit, etc.), as well as power lines between the light poles, will be completed, as needed, within this project.
51	Lucas Drive Enhancements	\$ 1,900	The current rental car facilities have been in place since 1985. The remote location along Lucas Drive presently does not represent the high quality standards of exceptional customer service that the Airport demands. As the Authority begins a study for the long term rental car facility solution, interim improvements will be undertaken to improve traffic safety, customer satisfaction, public sightlines and curbside appeal along Lucas Drive.
<b>Security &amp; Communications</b>			
52	McNamara Terminal CBP CCTV	\$ 693	Federal regulations require airports to provide facilities and physical security that enables Customs and Border Protection (CBP) to perform their functions. This project will connect the CBP CCTV to the Authority CCTV system, provide digital video storage capability and additional CCTV cameras in areas not currently covered.
53	Vehicle Checkpoint Enhancements - Sally Port Barriers	\$ 600	The installation of permanent sally port barriers will enhance the vehicle screening process at DTW's guarded access points and prevent unauthorized vehicles from accessing the AOA.
54	Perimeter Fencing Cable Reinforcement	\$ 5,203	For reinforcement of the Airport perimeter fence, DTW is proposing installation of reinforced cable alongside the fence line over a four year period.
55	Checkpoint #1 Vehicle and Truck Screening Building	\$ 2,500	Checkpoint #1 is DTW's guarded, primary access point for vehicles. Transportation Security (TSA) regulations require that the Airport strictly controls access and inspects each vehicle that enters the AOA. This project will provide design and construction efforts necessary to enclose Checkpoint #1 in a secure, climate controlled building that provides a safe and efficient environment for the inspection of one vehicle at a time prior to granting access to the AOA.
56	Security System & Network Upgrades - Phases 2 thru 5	\$ 21,900	This project will provide all necessary field investigation, surveying and installation of redundant fiber optic duct bank and network switches throughout DTW.
<b>Support Facilities</b>			
57	Airport Authority Headquarters Building	\$ 24,900	This project consists of the planning, design and construction of the Authority's Administrative Building adjacent to the North Terminal. Authority management and administrative staff is currently housed at the de-commissioned L.C. Smith Terminal, occupying only approximately 30 percent of the building. The space not being used requires budget expenditures of heating, cooling, lighting and nominal maintenance.
58	Roof Replacement Plan	\$ 3,149	The Airport Authority commissioned a roof assessment of facilities under WCAA control. The plan identified upcoming maintenance requirements as well as capital roof replacements. This project provides for development of specifications necessary for bidding the capital portion of the work as well as the roof construction activity.
59	Building 348 (Executive Terminal) Partial Restoration	\$ 370	Building 348 is one of the first structures built at DTW. The structure requires partial renovation before marketing it for a new tenant. This project will address exterior brick tuck-pointing, window replacement, updates to the fire alarm and fire suppression system as well as upgrades to HVAC and electrical systems.
60	Fire Training Facility Restoration and Burn Pit Replacement	\$ 5,585	Code 14 of Federal Regulations part 139 requires all ARFF personnel to participate in at least one live-fire drill every 12 months. In 1998, the current DTW ARFF training facility was expanded and upgraded to comply with FAA standards. The facility has been in service since that time and the equipment is nearing the end of its useful life,

CAPITAL IMPROVEMENT PROGRAM | FISCAL YEAR 2016 BUDGET

(\$ in thousands)

Item No.	Project	Estimated Total Project Cost	Description
			utilizes outdated technology and is currently situated on a gravel pad with surface drainage that limits training and requires water shut-down of the entire facility during the winter months. The current facility utilizes liquefied petroleum gas (LPG) for fire simulation, but does not have the necessary infrastructure to use hydrocarbon fuels similar to Jet A1 fuel for simulation or to utilize foam for extinguishing the fire. This project will provide for facility upgrades necessary to better simulate real-life training conditions for Airport fire personnel.
61	Equipment Maintenance & Storage Facilities Replacement & Consolidation (Planning only)	\$ 400	This project will provide all necessary planning services to contemplate a new 180,000 square foot Airport Maintenance Equipment Storage Facility. The new facility is envisioned to include renovation and expansion of the existing maintenance offices, stores and trade shops facility (Building 703) to allow for consolidation of maintenance equipment storage and repair functions.
<b>Site Redevelopment &amp; Demolitions</b>			
62	Building 715 (Former NWA/DL Hangar) Demolition	\$ 1,562	This project will provide all necessary planning, engineering, environmental assessments, permitting and demolition of structures, slabs and utilities that currently serve Building 715. The project will result in a clean, development ready site available for cargo development in accordance with the Integrated Land Use Strategic Plan (Land Use Plan).
63	Buildings 714, 714A & 714B (Former Metro Flight Buildings) Site Redevelopment & Demolition	\$ 1,600	Building 714, 714A and 714B are currently used for ground service equipment maintenance and equipment storage by Metro Flight and FedEx. This project will provide all necessary planning, engineering, environmental assessment, permitting and demolition of structures, slabs and utilities that serve Building 714, 714A and 714B. The clean site will then be available for cargo development in accordance with the Land Use Plan.
64	Building 534 (Former Flight Kitchen) Demolition	\$ 1,310	The former flight kitchen site (Building 534) had initially been considered for rehabilitation. However, based on further review of efforts necessary to ready the building for reuse, the decision was made to demolish the structure. This project will be developed as a design build effort to raze the structure and provide a development ready site.
65	Building 358 (Police Station) Demolition	\$ 3,000	This project consists of the design and construction necessary to demolish Building 358 (Police Station), removal of below-grade construction and utilities, disconnecting, sealing/capping in place site utilities that cannot be removed, abatement of hazardous materials prior to demolition, take down all structures and patch affected pavement.
66	LC Smith & Berry Terminals Demolition	\$ 17,964	This project consists of the demolition and environmental remediation efforts to address the removal of the L.C. Smith Terminal, Concourses A & B and the Berry Terminal. Included in the project is the design and construction effort to reroute or disconnect utilities, and incorporates all other demolition activity. The project does not include the removal of building slabs and foundations. The cost estimate does not provide for replacement of the aircraft apron.
67	Rental Car Facilities Study	\$ 2,375	The current rental car facilities have been in place since 1985. There are three rental car companies on six sites representing 11 brands. There are also off-site rental car companies that service DTW. The goal of the planning study is to determine the best rental car solution for DTW. It will look at site alternatives to determine the best location for the rental car facilities along with alternatives for rental car organization and vehicle delivery. The study will identify what support facilities are appropriate for each alternative and the best approach to optimize the operational flow of passengers, buses, cars, fueling and storage.
<b>Terminals</b>			
68	McNamara Terminal Interactive Digital Directories	\$ 2,625	The displays are intended to improve passenger wayfinding by providing improved static and dynamic directories that enable real time updates of changes within the terminal and directions tailored to a specific location. Dynamic directories include boarding pass readers for improved customer service. This project includes the planning, design, software development and installation of Static and Dynamic terminal directories.
69	North Terminal Automated Passport Control Equipment	\$ 700	Automated Passport Control kiosks have proven to be effective in reducing the process time for arriving international passengers. This project includes the design and construction effort necessary to install kiosks at the North Terminal international arrivals area, similar to those installed in the McNamara Terminal in 2014.

(\$ in thousands)

Item No.	Project	Estimated Total Project Cost	Description
70	North Terminal Interior Wall Panel Replacements	\$ 1,000	This effort will serve to evaluate replacement of the decorative wood laminate wall panels installed in the North Terminal, plan for installation and execute the work while not interfering with passenger flow.
<b>Water Mains &amp; Storm Water System</b>			
71	Water Main Replacement	\$ 4,000	This project consists of the design, engineering and construction necessary to replace the primary water mains at DTW. The project does not include water mains serving the McNamara Terminal complex.
72	Primary Pump & Switchgear Replacements	\$ 1,100	This project includes the evaluation, design and construction activity necessary to replace or rehabilitate stormwater pumps, pump stations and associated switchgear at Airport pump stations: 1, 2, 3, 6 and 10. The scope of this project includes the evaluation of these assets and the development of a plan of action. Reconstruction efforts may include pumps, switchgear, wing-walls, lighting and ventilation equipment.
73	Storm and Sanitary Sewer Systems Replacements	\$ 1,500	Sections of the Airport's stormwater piping system requires replacement or reconstruction based on the age of the system. There are more than 40 miles of storm sewer ranging in diameter from 8" to 108". The system has undergone comprehensive physical inspection, cleaning and video inspection since 2011.
<b>Other Projects</b>			
74	Master Plan Update	\$ 6,200	The most recent update to the Master Plan for DTW was completed in 2008. The FAA approved the Airport Layout Plan (ALP) associated with the Master Plan in 2009. Various land, facilities and infrastructure improvements have been accomplished since completion of the 2008 Master Plan update. A comprehensive update to the Master Plan and Airport Layout Plan is now necessary to identify opportunities to enhance airfield capabilities and efficiencies, ready land for future development and preserve eligibility for future federal grants.



Photo: Sunset at DTW

WILLOW RUN AIRPORT FY 2016 – FY 2020 CAPITAL IMPROVEMENT PLAN

FY 2016 – FY 2020 CIP ESTIMATED PROJECT COSTS & TIMING

Willow Run’s \$183.4 million CIP is separate from the DTW program. It is primarily composed of \$117.7 million (64 percent) of airfield projects aimed at reconstructing runways and taxiways while right-sizing the airfield to meet forecasted demand and provide opportunities to lower maintenance costs to sustain a viable future. Due to the Airport Use & Lease agreements at DTW, there are funding limitations for YIP, and the reliever airport relies on federal and state grants to provide 95 percent of the needed funding for their airfield projects identified on the CIP.

Figure H - 5: Willow Run CIP FY 2016 – FY 2020

(\$ in thousands)	Estimated Total Project Cost	Projected Expenses to 9/30/15	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020 thru Completion
Airfield	\$ 117,700	\$ -	\$ 600	\$ 11,200	\$ 23,250	\$ 15,050	\$ 67,600
Noise Mitigation	14,900	-	-	900	1,000	1,000	12,000
Power Plants & Electrical Distribution System	6,850	-	1,120	1,730	1,000	1,000	2,000
Fleet & Equipment	940	-	-	253	92	85	510
Bridges & Roadways	10,125	-	-	-	2,138	5,888	2,100
Security & Communications	2,000	-	-	-	-	-	2,000
Support Facilities	20,390	-	-	1,450	7,940	6,900	4,100
Water Mains & Storm Water System	9,325	-	-	-	1,000	1,000	7,325
Other Projects	1,170	-	761	410	-	-	-
<b>Willow Run Airport Total</b>	<b>\$ 183,400</b>	<b>\$ -</b>	<b>\$ 2,481</b>	<b>\$ 15,942</b>	<b>\$ 36,419</b>	<b>\$ 30,923</b>	<b>\$ 97,635</b>

*Total may not sum due to rounding*

ANTICIPATED FUNDING SOURCES

Figure H - 6 summarizes the anticipated funding sources of the CIP for Willow Run. As a result of the forward-looking nature of the program, some of the anticipated funding sources for the projects are subject to change.

Figure H - 6: Willow Run CIP FY 2016 – FY 2020 Estimated Sources of Funding

(\$ in thousands)	Estimated Total Cost	Federal Grants	State Grants	Authority Funds	Other	TBD
Airfield	\$ 117,700	\$ 105,930	\$ 5,885	\$ 5,885	\$ -	\$ -
Noise Mitigation	14,900	13,120	600	1,180	-	-
Power Plants & Electrical Distribution System	6,850	-	-	6,850	-	-
Fleet & Equipment	940	-	-	940	-	-
Bridges & Roadways	10,125	-	-	10,125	-	-
Security & Communications	2,000	1,800	100	100	-	-
Support Facilities	20,390	2,700	150	17,540	-	-
Water Mains & Storm Water System	9,325	-	-	9,325	-	-
Other Projects	1,170	-	-	1,170	-	-
<b>Willow Run Airport Total</b>	<b>\$ 183,400</b>	<b>\$ 123,550</b>	<b>\$ 6,735</b>	<b>\$ 53,115</b>	<b>\$ -</b>	<b>\$ -</b>

*Total may not sum due to rounding*

**SIGNIFICANT NON-ROUTINE PROJECTS WITH IMPACT TO FUTURE OPERATING BUDGETS**

The majority of capital projects in the Five-Year Plan are considered routine, however the following non-routine CIP projects and descriptions have an impact on the current and future operating budgets.

**Willow Run Hangar 1 Rehabilitation Projects** (Item No. WR27) – The rehabilitation project to Hangar 1 seeks to modernize the facility’s electrical, HVAC and fire suppression systems, to improve efficiency and lower operation costs. Further, this project is critical for retaining existing tenants and improving the marketability of unutilized space for revenue growth.

**WILLOW RUN AIRPORT – PROJECT TIMING BY YEAR**

*(\$ in thousands)*

Item No.	Project Description	Estimated Total Project Cost	Projected Expenses to 9/30/15	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020 to Completion
<b>Airfield</b>								
WR 1	Airfield Pavement Interim Rehabilitation	\$ 600	\$ -	\$ 600	\$ -	\$ -	\$ -	\$ -
WR 2	Airfield Sign Replacement Plan Development	50	-	-	50	-	-	-
WR 3	New Taxiway Parallel East of Runway 5R/23L Construction	18,250	-	-	7,350	6,450	4,450	-
WR 4	NAVAIDS/Approach Aids Installation	2,000	-	-	2,000	-	-	-
WR 5	Runway 5L/23R Rehabilitation & Shorten	6,000	-	-	1,800	4,200	-	-
WR 6	Runway 9/27 Reconstruction	31,800	-	-	-	10,600	10,600	10,600
WR 7	Runway 9 Displaced Threshold & Safety Area Structure Removal	2,000	-	-	-	2,000	-	-
WR 8	Taxiway E-1 Reconstruction	3,000	-	-	-	-	-	3,000
WR 9	Taxiway B Reconstruction	8,000	-	-	-	-	-	8,000
WR 10	Runway 9/27 Extension – Environmental only	3,000	-	-	-	-	-	3,000
WR 11	Taxiway H & E-2 Removal	3,000	-	-	-	-	-	3,000
WR 12	Apron Rightsizing & Rehabilitation	40,000	-	-	-	-	-	40,000
<b>Airfield Total</b>		<b>117,700</b>	<b>-</b>	<b>600</b>	<b>11,200</b>	<b>23,250</b>	<b>15,050</b>	<b>67,600</b>
<b>Noise Mitigation</b>								
WR 13	Residential Sound/Noise Mitigation Program	2,900	-	-	900	1,000	1,000	-
WR 14	Ground Run-Up Enclosure (GRE)	12,000	-	-	-	-	-	12,000
<b>Noise Mitigation Total</b>		<b>14,900</b>	<b>-</b>	<b>-</b>	<b>900</b>	<b>1,000</b>	<b>1,000</b>	<b>12,000</b>
<b>Power Plants &amp; Electrical Distribution System</b>								
WR 15	Electrical Cable Vault Equipment Replacement & Relocation	2,850	-	1,120	1,730	-	-	-
WR 16	Electrical Distribution Loop Rehabilitation	4,000	-	-	-	1,000	1,000	2,000
<b>Power Plants &amp; Electrical Distribution System Total</b>		<b>6,850</b>	<b>-</b>	<b>1,120</b>	<b>1,730</b>	<b>1,000</b>	<b>1,000</b>	<b>2,000</b>

CAPITAL IMPROVEMENT PROGRAM | FISCAL YEAR 2016 BUDGET

(\$ in thousands)

Item No.	Project Description	Estimated Total Project Cost	Projected Expenses to 9/30/15	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020 to Completion
<b>Fleet &amp; Equipment</b>								
WR 17	Sport Utility Vehicle (SUV)	28	-	-	28	-	-	-
WR 18	Roller	45	-	-	45	-	-	-
WR 19	Pothole Patcher	180	-	-	180	-	-	-
WR 20	Telescopic Boom	92	-	-	-	92	-	-
WR 21	Life-Cycle Replacement Plan (Placeholder)	595	-	-	-	-	85	510
<b>Fleet &amp; Equipment Total</b>		<b>940</b>	<b>-</b>	<b>-</b>	<b>253</b>	<b>92</b>	<b>85</b>	<b>510</b>
<b>Bridges &amp; Roadways</b>								
WR 22	South Service Drive Realignment & Reconstruction	7,125	-	-	-	2,138	4,987	-
WR 23	Service Drive Rehabilitation	3,000	-	-	-	-	900	2,100
<b>Bridges &amp; Roadways Total</b>		<b>10,125</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2,138</b>	<b>5,887</b>	<b>2,100</b>
<b>Security &amp; Communications</b>								
WR 24	Wildlife Fence Replacement (South & East Boundaries)	2,000	-	-	-	-	-	2,000
<b>Security &amp; Communications Total</b>		<b>2,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2,000</b>
<b>Support Facilities</b>								
WR 25	Fuel Farm Drain & Pavement Rehabilitation	150	-	-	150	-	-	-
WR 26	Maintenance Facility (Bldg 2620) Renovation	740	-	-	350	390	-	-
WR 27	Hangar 1 Rehabilitation	16,500	-	-	950	7,550	6,000	2,000
WR 28	ARFF Station Replacement	3,000	-	-	-	-	900	2,100
<b>Support Facilities Total</b>		<b>20,390</b>	<b>-</b>	<b>-</b>	<b>1,450</b>	<b>7,940</b>	<b>6,900</b>	<b>4,100</b>
<b>Water Mains &amp; Storm Water System</b>								
WR 29	Water Main Replacement	5,000	-	-	-	1,000	1,000	3,000
WR 30	Primary Pump & Switchgear Replacements	600	-	-	-	-	-	600
WR 31	Storm and Sanitary System Replacements	2,500	-	-	-	-	-	2,500
WR 32	West Side Oil-Water Separator Installations	600	-	-	-	-	-	600
WR 33	East Side Oil-Water Separator Installations	375	-	-	-	-	-	375
WR 34	South Ramp Oil-Water Separator Installations	250	-	-	-	-	-	250
<b>Water Mains &amp; Storm Water System Total</b>		<b>9,325</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,000</b>	<b>1,000</b>	<b>7,325</b>
<b>Other Projects</b>								
WR 35	Airport Master Plan	1,170	-	761	410	-	-	-
<b>Other Projects Total</b>		<b>1,170</b>	<b>-</b>	<b>761</b>	<b>410</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Willow Run Airport Total</b>		<b>\$ 183,400</b>	<b>\$ -</b>	<b>\$ 2,481</b>	<b>\$ 15,942</b>	<b>\$ 36,419</b>	<b>\$ 30,923</b>	<b>\$ 97,635</b>

WILLOW RUN AIRPORT – PROJECT DESCRIPTIONS

(\$ in thousands)

Item No.	Project	Estimated Total Project Cost	Description
<b>Airfield</b>			
WR 1	Airfield Pavement Interim Rehabilitation	\$ 600	This project consists of the planning, design/engineering, and construction to provide pavement rehabilitation, reconstruction, or removal of aged sections of airfield pavement (runway, taxiway, taxilane, shoulder, deicing pad, apron, etc.) which are identified as future work and must be addressed to maintain safe airport operations. Rehabilitation and/or reconstruction of the pavement will extend the useful life for a term of 5 to 15 years. The method of rehabilitation or reconstruction will be determined based on the type of pavement, the pavement function, severity of deterioration, timing of future reconstruction, operational constraints and further considerations affecting the safe and efficient operation of the airfield.
WR 2	Airfield Sign Replacement Plan Development	\$ 50	This project involves the development of an airfield lighting plan as required by 14 CFR Part 139. The plan will evaluate airfield signage and markings and explore a conversion to LED lighting.
WR 3	New Taxiway Parallel East of Runway 5R/23L Construction	\$ 18,250	Runway dwell times on Runway 5R/23L are extended due to the lack of a parallel taxiway. Arriving aircraft must taxi to the runway end to exit the runway. This project will provide planning, design and construction of a parallel taxiway with appropriately positioned taxiway connectors and high speed exits.
WR 4	NAVAIDS/Approach Aids Installation	\$ 2,000	The ability to operate flights in low visibility conditions is essential for the successful operation of aviation entities. An upgrade of the navigation systems at Willow Run would provide increased safety and runway availability for current and potential airport users.
WR 5	Runway 5L/23R Rehabilitation & Shorten	\$ 6,000	Pavement conditions of Runway 5L/23R indicate that full depth reconstruction is warranted. The airfield right sizing plan calls for turning 5L/ 23R into a general aviation runway that is shorter in length and narrower than the current footprint, reducing maintenance costs while continuing to offer a runway dedicated for small aircraft use.
WR 6	Runway 9/27 Reconstruction	\$ 31,800	Analysis conducted in 2011 indicated that Runway 9/27 pavement is near the end of its useful life. The project will involve the complete full depth reconstruction of the runway surface, substructure and drainage system.
WR 7	Runway 9 Displaced Threshold & Safety Area Structure Removal	\$ 2,000	Currently the arrival threshold for Runway 9 is displaced by 250 feet due to structures infringing on the runway safety area. The structures have recently been removed. This project will relocate navigation systems necessary to remove the displaced threshold.
WR 8	Taxiway E-1 Reconstruction	\$ 3,000	Taxiway Echo (E)1 provides access to Runway ends 27 and 23L. A partial mill and overlay in 2015 will provide a temporary (5 – 7 year) solution to the failing pavement. This project will provide for full depth rehabilitation of the taxiway.
WR 9	Taxiway B Reconstruction	\$ 8,000	With airfield operations predominantly in south flow, and without a parallel taxiway system, arrivals from the north are forced to use Taxiway Bravo (B) to exit Runway's 5R/23L and 5L/23R. This taxiway also provides access to Runway 9/27 for tenants on the west side of the airfield. A full depth rehabilitation is required. This project will provide for design and construction efforts to rehabilitate the taxiway.
WR 10	Runway 9/27 Extension – Environmental only	\$ 3,000	Efforts to extend a runway in the National Aviation System start with National Environmental Policy Act (NEPA) approval. Extension of the crosswind runway at Willow Run will require hiring an aviation planning firm to facilitate the NEPA process.
WR 11	Taxiway H & E-2 Removal	\$ 3,000	The pavement surface of Taxiway Hotel (H), formerly Runway 9R/27L, is in need of full depth reconstruction, however with the addition of a parallel taxiway system for Runway 5R/23L, this taxiway will no longer be required. Portions of the pavement will be removed while other areas will be rubbled and left in place.
WR 12	Apron Rightsizing & Rehabilitation	\$ 40,000	This multi-year project will provide for study of the amount of apron paving necessary to meet current and anticipated need, pavement condition, design of replacement pavement footprint and cross-section, as well as eventual construction of new apron.
<b>Noise Mitigation</b>			
WR 13	Residential Sound/Noise Mitigation Program	\$ 2,900	Noise Compatibility Program recommendations for Willow Run include the evaluation of a Residential Sound Insulation Program. Mitigation techniques will be prioritized to meet the objectives of the noise program as well as the development of the airport. The mitigation program will be a phased program based on the availability of Federal Aviation Administration funding.
WR 14	Ground Run-Up Enclosure (GRE)	\$ 12,000	Following certain types of aircraft maintenance, engine run-up tests are conducted to demonstrate that the aircraft's inflight systems are working properly before the aircraft can be put back into service. A run-up is a pre-flight test of the engine systems, where various levels of engine power are applied while the aircraft remains stationary.

CAPITAL IMPROVEMENT PROGRAM | FISCAL YEAR 2016 BUDGET

(\$ in thousands)

Item No.	Project	Estimated Total Project Cost	Description
			A substantial amount of noise can be created when run-up tests occur. A GRE can provide a location for such operations to occur that minimize engine noise intrusion on the surrounding community by deflecting and absorbing noise vibration.
<b>Power Plants &amp; Electrical Distribution System</b>			
WR 15	Electrical Cable Vault Equipment Replacement & Relocation	\$ 2,850	The main electrical vault housing switchgear that feeds power to Hangar #1, the ARFF station and portions of the airfield lighting system is being relocated from a below ground facility. Multiple locations are being assessed to house new equipment.
WR 16	Electrical Distribution Loop Rehabilitation	\$ 4,000	The Electrical Loop at Willow Run was installed in 1940 without significant upgrades since that time. The system is beyond its design useful life and is prone to failure. This effort will replace the entire Loop system providing power to Willow Run facilities.
<b>Fleet &amp; Equipment</b>			
WR 17	Sport Utility Vehicle (SUV)	\$ 28	Replacement vehicle for an existing fleet vehicle (4 x 4).
WR 18	Roller	\$ 45	A roller-compactor engineering vehicle used to compact soil, gravel, concrete, or asphalt in the construction of roads and airfield pavement.
WR 19	Pothole Patcher	\$ 180	A pothole patcher is a trailer mounted road repair machine.
WR 20	Telescopic Boom	\$ 92	High bay areas in hangar facilities and maintenance of lighting fixtures requires the use of a telescopic boom. This is a new piece of equipment for YIP.
WR 21	Life-Cycle Replacement Plan (Placeholder)	\$ 595	Placeholder for vehicle lost to accident or total mechanical failure.
<b>Bridges &amp; Roadways</b>			
WR 22	South Service Drive Realignment & Reconstruction	\$ 7,125	The South Service Drive at Willow Run requires full depth reconstruction and realignment to better support tractor trailer traffic.
WR 23	Service Drive Rehabilitation	\$ 3,000	Service Drives and other surface roads at Willow Run require rehabilitation ranging from milling and resurfacing to complete full depth rehabilitation.
<b>Security &amp; Communications</b>			
WR 24	Wildlife Fence Replacement (South & East Boundaries)	\$ 2,000	Boundary fence on the south and east sides of the airport does not meet recommended height of 10' for wildlife deterrent.
<b>Support Facilities</b>			
WR 25	Fuel Farm Drain & Pavement Rehabilitation	\$ 150	This project consists of the design and construction/development efforts necessary to upgrade the fuel management system and install safety catwalks.
WR 26	Maintenance Facility (Bldg 2620) Renovation	\$ 740	The scope of this multi-year project includes the installation of a fire suppression system, renovations to office and storage space, upgrading the HVAC system, and improving the lavatories and locker room facilities in the recently constructed maintenance facility.
WR 27	Hangar 1 Rehabilitation	\$ 16,500	Hangar 1 was constructed in 1940 and requires upgrades to numerous building systems such as: the fire suppression system in the hangar area, updated electrical/lighting and HVAC systems, Exterior rehabilitation and parking lot overlay. This project provides for the evaluation, design and construction of facility upgrades as required
WR 28	ARFF Station Replacement	\$ 3,000	The ARFF Station at YIP is nearing the end of its useful and may provide better service by being relocated to another part of the airfield. The location will be studied during the Master Plan process.
<b>Water Mains &amp; Storm Water System</b>			
WR 29	Water Main Replacement	\$ 5,000	The water mains at Willow Run need to be replaced and brought up to current standards. This project will provide for installation of a new water system and disconnection from the current mains.
WR 30	Primary Pump & Switchgear Replacements	\$ 600	The sanitary lift station that forces discharge from the east complex of Willow Run through a force main to the YUCA waste water treatment plant is beyond the intended useful life. This project provides for reconstruction of the lift station and replacement of the pipe.



(\$ in thousands)

Item No.	Project	Estimated Total Project Cost	Description
WR 31	Storm and Sanitary System Replacements	\$ 2,500	Storm and sanitary systems, other than those recently replaced during reconstruction of Runway 5R/23L, are original to the facility and require rehabilitation. Capacity for future expansion at Willow Run is also a challenge based on current requirements. This project will provide for investigation of the current system for condition and proper sizing as well as providing for future expansion of the system as required.
WR 32	West Side Oil-Water Separator Installations	\$ 600	This project consists of the rehabilitation and upgrade of the existing oil/water separator located in the parking lot of Hangar #1. This separator reduces the likelihood of spills on the Hangar ramp reaching Tyler Pond. Repair and upgrade of this separator will improve compliance with the Willow Run National Pollution Discharge Elimination System (NPDES) stormwater permit.
WR 33	East Side Oil-Water Separator Installations	\$ 375	This project consists of the design and construction for the installation of an oil/water separator on the southeast ramp stormwater pipe to contain possible spills before reaching the Begole Drain. Installation of this separator will improve compliance with the Willow Run's NPDES stormwater permit.
WR 34	South Ramp Oil-Water Separator Installations	\$ 250	This project consists of the rehabilitation and upgrade of the oil/water separator located near Hangar #2, west of the Willow Run Fuel Farm. This separator reduces the likelihood of spills on the southwest ramp reaching Willow Run Creek. Installation of this separator will improve compliance with Willow Run's NPDES stormwater permit.

**Other Projects**

WR 35	Airport Master Plan	\$ 1,170	A comprehensive update to the Master Plan and Airport Layout Plan is necessary to identify opportunities to enhance airfield capabilities and efficiencies, ready land for future development and preserve eligibility for future federal grants.
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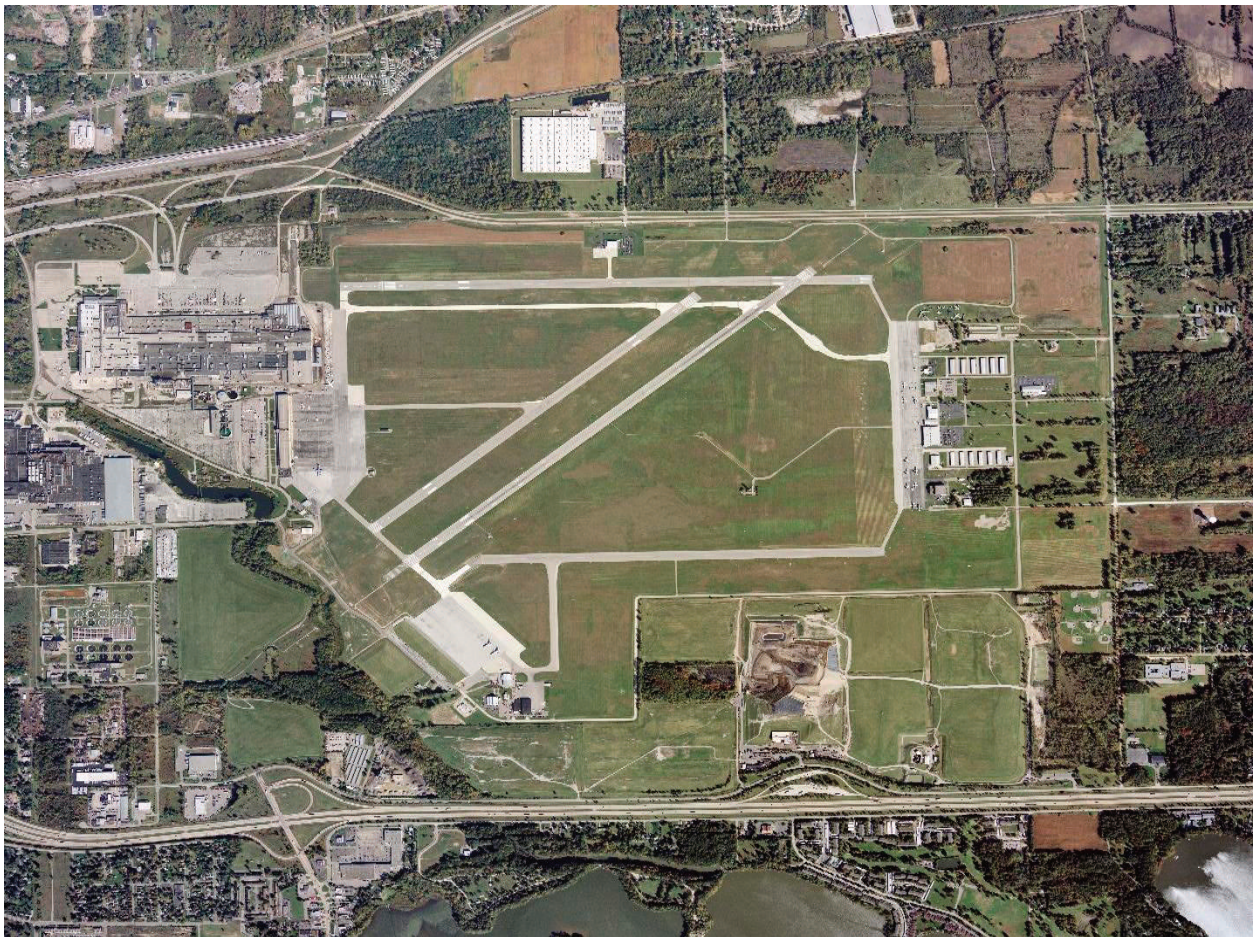


Photo: Willow Run Airport Aerial Photograph

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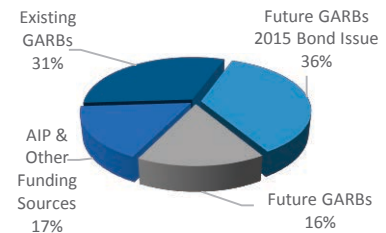
# DEBT PROFILE

The Authority funds major capital improvements primarily through debt issuance. The current level of indebtedness is illustrated in this section and includes schedules and summaries of outstanding principal, gross and net debt service. The section also describes the measures taken by the Authority to manage debt, minimize net debt service and the impact to the O&M budget.

## AIRPORT INDEBTEDNESS

Capital improvements at the Airport are financed by issuing General Airport Revenue Bonds (GARBs), Special Facilities Revenue Bonds, Passenger Facility Charges (PFCs), FAA Airport Improvement Program (AIP) grants and discretionary funds. Figure I - 1 illustrates the percentages of current funding sources for the FY 2016 – FY 2020 CIP.

Figure I - 1: Airport FY 2016 – FY 2020 CIP by Funding Source



The strategy for the Authority’s debt portfolio is to maintain 80 percent fixed-rate and 20 percent variable-rate credit, which allows for a certain amount of hedge protection against market trends. For the Authority’s portfolio, a change in interest rates on variable rate debt would be offset by the change in interest income and provide a natural hedge against increases in interest costs.

Figure I - 2: Outstanding Principal by Series

The majority of the debt is attributed to the development of the following:

- ➔ Two state-of-the-art passenger terminals, the McNamara Terminal which opened in 2002 and the North Terminal which opened in 2008
- ➔ Construction of the McNamara Parking Deck which opened in tandem with the McNamara Terminal
- ➔ Construction of a fourth parallel runway (4L/22R) completed in 2001
- ➔ Reconstruction of two of the three existing parallel runways, including the Airport’s longest runway, 4R/22L

Senior Lien Bonds	Outstanding Principal Amount (\$ in thousands)
Series 2005	\$ 255,590
Series 2007B	109,280
Series 2008A	109,355
Series 2010A	119,580
Series 2010C	117,175
Series 2010D	19,575
Series 2011A	152,465
Series 2011B	14,830
Series 2012A	177,565
Series 2012B	25,090
Series 2012C	1,440
Series 2012D	58,055
Series 2013A	199,730
Series 2013B	74,740
Series 2013C	115,345
Series 2014A	30,000
Series 2014B	66,595
Series 2014C	31,845
Series 2015A	85,000
Series 2015B	75,000
Series 2015C	26,090
<b>Total</b>	<b>\$ 1,864,345</b>
<b>Junior Lien Bonds</b>	
Series 2007A	166,185
<b>Grand Total</b>	<b>\$ 2,030,530</b>

Source: WCAA

At the time of the FY 2016 budget, the total principal amount of outstanding bonds was approximately \$2.0 billion. During 2015, the Authority issued new debt and refunded the Series 2005 and 2001A Hotel Bonds, increasing the outstanding debt to \$2.3 billion, however not in time for the FY 2016 Budget.

## PFC REVENUES

Under the Aviation Safety and Capacity Expansion Act of 1990 (the “PFC Act”), the FAA may authorize a public agency which allows an airport to impose a PFC of up to \$4.50 for each qualifying enplaned passenger at such airport to be used to finance eligible airport-related projects. In order to receive authorization to impose a PFC and use the PFC revenue, the public agency must submit an application requesting that the FAA approve the imposition of a PFC for, and the use of PFC revenues on, specific eligible projects described in such application. PFCs are collected on behalf of airports by air carriers and their agents (the “Collecting Carriers”) and remitted to the public agency. Since the inception of the PFC program, the Authority has submitted seven PFC

applications to the FAA, however application number six was withdrawn by the Authority.

Under current PFC approvals, the Authority can impose and use \$3.1 billion in PFCs. The PFC-eligible projects included in the Authority's CIP for the past 20 years have been funded either directly with PFC funds or with the proceeds of GARBs, with the plan of finance for these projects committing PFC revenue to pay the debt service to the maximum extent possible. The current estimated PFC expiration date is 2034.

The amount of PFC revenue collected for the Airport is based upon many factors, including passenger enplanement levels, compliance with federal law and regulations as well as continuation of the PFC program. Factors that could affect PFC revenue would have a direct impact to the Authority and no assurance can be given that the forecasted level of enplanements will be realized. A shortfall in projected PFC collections could have an adverse impact on the amount of debt service included in the Signatory Airlines' rates and charges, and the timely payment of principal or interest on the senior lien and junior lien bonds eligible to be paid from PFC revenues.

## MANAGING THE COST OF DEBT TO THE AIRLINES

The Authority has been actively managing the cost of net debt service payable by airlines operating at the Airport through a debt restructuring program that spanned a three year period and was completed in 2012. The debt restructuring program accomplished three primary goals: (1) reduced total debt service cost to airlines, (2) minimized impact of debt service costs to the North Terminal cost center and (3) restructured debt portfolio to a more conservative portfolio. To accomplish the debt management goals, the Authority has taken a three-pronged approach: (1) refinanced debt to take advantage of lower interest rates and the Alternative Minimum Tax (AMT) "holiday", (2) on an as needed basis, contribute discretionary or other available funds to reduce the impact of debt to the airline's rates and charges and (3) strengthen the Authority's credit ratings through fiscal austerity.

Figure I – 3 below illustrates the calculation of net debt service paid by airline rates and charges. From gross debt service of \$170.9 million, revenues from Passenger Facility Charges (PFCs) and interest income from bond reserve and payment funds are deducted. The balance of \$92.1 million is charged to the airlines as part of O&M non-operating expenses.

**Figure I - 3: Net Debt Service - Airline Requirement**

<i>(\$ in thousands)</i>	<b>Amount</b>
Principal	\$ 91,811
Interest	79,131
Gross Debt Service	170,942
Less Other Monies Available	
<i>Passenger Facility Charges (PFCs)</i>	(66,358)
<i>Capitalized Interest &amp; Other Available Funds</i>	(12,483)
<i>Subtotal</i>	(78,841)
<b>Net Debt Service/O&amp;M FY 2016 Budget Requirement</b>	<b>\$ 92,101</b>
Enplanements	16,600,000
Gross Debt Service per Enplanement	\$ 10.30
Net Debt Service per Enplanement	\$ 5.55

*Totals may not sum due to rounding*  
*Source: WCAA*

Net debt service is approximately one third of total O&M expenses. Thus, managing total outstanding debt is critical to maintaining the Airport's cost competitiveness among peer airports. As a result, the Authority monitors total debt per enplanement as well as net debt service costs per enplanement.

## REFINANCING DEBT

To date, all GARBs that have been callable have been refunded to take advantage of favorable market rates. In addition to the benefit of cost savings related to the refunding, the impact of debt service costs to the North Terminal cost center was reduced and effectively mitigated potential increases to rental rates by approximately 30 percent. Lastly, the debt restructuring program accomplished a slightly more conservative overall debt profile of 80 percent fixed and 20 percent variable and established a natural hedge to interest rate inflation.

The Alternative Minimum Tax (AMT) is a parallel tax code used to determine the minimum liability a taxpayer would be required to pay after eliminating the deductibility of certain “preference items.” The American Recovery and Reinvestment Act of 2009 (ARRA) was an economic stimulus bill created to help the US economy recover from economic downturn. The ARRA created an AMT holiday allowing airports to issue bonds on a non-AMT basis in 2009 and 2010. In 2010 the Authority took advantage of the non-AMT holiday by refunding callable bonds and issuing \$349.9 million of non-AMT Refunding bonds.

In recognizing the savings available by issuing non-AMT bonds, Authority management sought to issue 2012 debt on a non-AMT basis. Since the AMT holiday provided under ARRA had expired, the Authority reviewed Airport Use and Lease Agreements and identified that if there was an amendment to the agreements, it would allow the Authority to issue part of the new bonds as non-AMT. Authority management succeeded in obtaining signed amendments to the Airport Use and Lease Agreements from all airlines. As a result, the Authority issued \$177.6 million in non-AMT GARBs and was able to issue an additional \$3.9 million of non-AMT refunding bonds to replace callable bonds.

## FY 2015 BOND ISSUANCE

In 2015, the Authority embarked on issuing eight different series (Series 2015 A-H) of GARBs totaling \$780.7 million. The process began in April with the airlines providing Weighted Majority Approval to issue \$221.1 million in new money issuance for CIP projects that are estimated to be completed between FY 2015 and FY 2017. Concurrently, the Authority began the process of refunding the Series 2005 bonds by developing a strategy to take advantage of favorable market conditions that allowed for both direct placements and public offerings. The Authority was successful with directly placing \$185.6 million of the total Series 2005 in fixed rate bonds between PNC Bank, National Association (N.A.), Bank of America, N.A. and Citibank, N.A. to create the new Series 2015A-C.

The Board approved a combination of six bond ordinances and amendments for the public offering of the remainder of the Series 2005 bonds and the new money issuance. In August, the preliminary official statement was issued and presentations were made to rating agencies (Standard & Poor’s, Moody’s and Fitch) with a focus on the history of the Authority’s success. Following the presentations, the agencies reaffirmed their ratings for the Airport.

In September 2015, the Finance team began a strong marketing and targeted investor outreach program that included conducting investor roadshows in Boston and Chicago that were attended by 14 institutional investors, five one-on-one investor conference calls and distribution of a recorded investor presentation to the investment community that was accessed by over 26 institutional investors.

The Series 2015D-E consisted of \$213.3 million non-AMT and \$7.8 million in AMT new money public issuance for projects on the FY 2016 – FY 2020 CIP. Series 2015F completed the Series 2005 refunding with a public offering of \$224.2 million AMT bonds.

The results of the issuance were defined by strong investor demand including \$2.1 billion orders from 73 institutional accounts and \$52 million of total retail orders. The Authority received favorable spreads to Municipal Market Data (MMD) with an all-in true interest cost for the transaction of 4.24 percent.

As part of the 2015 issuance, the Authority gained the support of the Airlines through a separate Weighted Majority request to refund the Series 2001A Hotel bonds. The original Series 2001A Airport Hotel bonds were backed by Wayne County in 2001 to construct the Airport Hotel adjoining the McNamara Terminal. The Authority was able to refinance the hotel bonds through direct placement of \$75.0 million (Series 2015H) along with issuing \$74.8 million in non-AMT GARBs (Series 2015G), leveraging the Airport’s credit ratings to lower the cost of debt for the Hotel.

	Refunding Series	Refunding Bonds Principal Issuance	Approximate Present Value Savings	Estimated Annual Savings
2005 Refunding Bonds	2015A-C Direct Placements	\$185,640,000	\$23,000,000	\$1,500,000
	2015F Public Offering	\$224,155,000	\$22,700,000	\$1,500,000
2001A Hotel Refunding Bonds	2015G Public Offering	\$74,815,000	\$6,900,000	\$500,000
	2015H Direct Placement	\$75,000,000	\$12,000,000	\$600,000
	<i>Refunding Sub-Total</i>	<i>\$559,610,000</i>	<i>\$64,600,000</i>	<i>\$4,100,000</i>
2015 New Issuance	2015D-E Public Offering		\$221,085,000	

### IMPROVING BOND RATINGS

To attain the lowest possible interest rates, and to be sure it has the widest market for its bonds, the Authority obtains credit ratings from all three major rating agency services. Although it is not required, the Authority solicits responses from all three because each credit rating agency has a different way of evaluating the creditworthiness of an obligor with respect to debt security or other financial obligations. Over the years, credit ratings have achieved wide investor acceptance as convenient tools for differentiating credit quality.

As of FY 2015, all rating agencies have re-affirmed the ratings and outlook of the Authority.

Standard & Poor’s	Fitch	Moody’s*	Description from the Rating Agency
<b>The Airport’s Credit Rating (2015)</b>			
A	A-	A2	Bonds which possess many favorable investment attributes and are to be considered as upper-medium-grade obligations. They are somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligations in higher rated categories. However, the obligor’s capacity to meet its financial commitment on the obligations is strong.
<b>All Credit Rating Tiers</b>			
Aaa	AAA	AAA	Bonds which are judged to be of the best quality. They carry the smallest degree of investment risk. The obligor’s capacity to meet its financial commitment on the obligations is extremely strong.
Aa	AA	AA	Bonds which are judged to be of high quality by all standards and only differ in small degree to the highest graded bonds. The obligor’s capacity to meet its financial commitment on the obligations is very strong.
A	A-	A2	The Airport’s credit rating as illustrated above.
Baa	BBB	BBB	Bonds which are considered as medium-grade obligations (i.e., they are neither highly protected nor poorly secured). Interest payments and principal security appear adequate; however, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity of the obligor to meet its financial commitment on the obligation.
Ba and lower	BB and lower	BB and lower	Obligations which are regarded as having significant speculative characteristics. While such obligations will likely have some quality and protective characteristics, they may be outweighed by large uncertainties or major exposures to adverse conditions.
* Moody’s appends numerical modifiers 1, 2 and 3 to each generic rating classification from Aa through Caa. The modifier 1 indicates that the obligation ranks in the higher end of its generic rating category; the modifier 2 indicates a mid-range ranking; and the modifier 3 indicates a ranking in the lower end of that generic rating category			



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# Wayne County Airport Authority, Michigan Detroit Metro Wayne County Airport; Airport

Credit Profile		
US\$233.51 mil arpt rev bnds (Detroit Metro Wayne Cnty Arpt) (Non-amt) ser 2015D due 12/01/2034		
<i>Long Term Rating</i>	A/Stable	New
US\$228.75 mil arpt rev rfdg bnds (Detroit Metro Wayne Cnty Arpt) (Amt) ser 2015F due 12/01/2034		
<i>Long Term Rating</i>	A/Stable	New
US\$102.56 mil arpt rev rfdg bnds (Detroit Metro Wayne Cnty Arpt) (Non-amt) ser 2015G due 12/01/2034		
<i>Long Term Rating</i>	A/Stable	New
US\$25.6mil arpt rev bnds (Detroit Metro Wayne Cnty Arpt) (Non-amt) ser 2015C due 12/01/2034		
<i>Long Term Rating</i>	A/Stable	New
US\$11.665 mil arpt rev bnds (Detroit Metro Wayne Cnty Arpt) (Amt) ser 2015E due 12/01/2034		
<i>Long Term Rating</i>	A/Stable	New

## Rationale

Standard & Poor's Ratings Services assigned its 'A' long-term rating to Wayne County Airport Authority, Mich.'s (WCAA or the authority) \$233.5 million series D senior-lien revenue bonds, \$11.7 million series 2015E senior-lien revenue bonds, \$228.8 million series 2015F senior-lien refunding bonds, and \$102.6 million series 2015G senior-lien refunding bonds, issued for Detroit Metro Wayne County Airport (DTW). In addition, Standard & Poor's assigned its 'A' long-term rating to the authority's \$25.6 million series 2015C direct purchase agreement with Citi refunding a portion of the series 2005 bonds. At the same time, Standard & Poor's affirmed its 'A' long-term rating and underlying rating (SPUR) on the authority's senior-lien bonds and its 'A-' SPUR on the authority's junior-lien bonds. The airport has approximately \$1.9 billion in senior-lien and \$166.2 million in junior-lien bonds outstanding. The outlook is stable.

The ratings reflect our view of the airport's market position and importance to the Delta Air Lines system. More specifically, the ratings reflect our opinion of:

- A large 10-county service area with a population of more than five million that provides a good base for local air travel demand;
- The airport's position as an important domestic hub and international Asian gateway in Delta Air Lines' system; and
- Limited competition from other airports.

In our view, the preceding credit strengths are partly offset by:

- Concentration in Delta Air Lines and its affiliates and a moderately high exposure to connecting traffic, and
- Bond provisions that allow passenger facility charges (PFCs), available cash, other fund deposits, and federal grants to be included in the rate covenant calculation and additional bonds test, which lets the airport maintain a lower cost structure but also may not allow the airport to meet its debt service requirements on a net revenue basis alone.

The airport's net revenues secure both the senior- and junior-lien revenue bonds. The rate covenant is weak, in our



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opinion, in that many nonoperating revenue sources are allowed in the rate covenant calculation. Net revenues and PFCs deposited to the bond fund must equal 100% of senior-lien debt service. The 125% rate covenant on the senior-lien debt comes from the combination of net revenues, PFCs, other available money, and any unencumbered cash (rather than setting rates and charges for sufficient or better debt service coverage, or DSC). The junior-lien rate covenant is similarly calculated, but net revenues together with other available funds must equal 110% of debt service with respect to the senior- and junior-lien bonds outstanding. The additional bonds test is similarly weak, in our view.

In the past decade, enplanements peaked in fiscal 2005 at 18.3 million. On April 14, 2008, Northwest Airlines (NWA) and Delta Air Lines Inc. announced that the two would merge, thereby creating the world's largest airline. Prior to the merger, NWA had been the carrier with the largest market share at the airport, but the airline's enplanements had fluctuated as NWA entered bankruptcy protection in September 2005 (exiting May 31, 2007). While the airline and its affiliate, Mesaba, continued to operate at the airport during this period, service fell to 13.7 million NWA enplanements in fiscal 2006 from 14.4 million in fiscal 2005. This led to a decline in overall enplanements at the airport. For fiscal 2007, overall airport enplaned passengers rose by 1.7% from the previous year due primarily to NWA increasing service at the airport after its emergence from bankruptcy. However, given the global economic slowdown, higher fuel prices, and airline capacity cuts, enplanements declined in the following three fiscal years: by 1.5% in 2008, by 10.6% in 2009, and by 0.4% in 2010. In our opinion, the 2.2% increase in enplanements in fiscal 2011 indicated the beginning of the economic recovery in the air trade area, and enplanements remained essentially flat in fiscal 2012 and fiscal 2013. Showing a positive trend, enplanements in fiscal 2014 (ended Sept. 30) were 16.2 million, up slightly from 16.1 million in fiscal 2013. Enplanements for fiscal 2015 are estimated by management to increase to 16.3 million.

The authority's cost structure has been historically moderate, in our view, with cost per enplanement at approximately \$9.18 in fiscal years 2011 and 2010 (ended Sept. 30). Cost per enplanement increased to \$9.87 in fiscal 2012, fell to \$9.71 in fiscal 2013, and rose to \$10.42 in fiscal 2014. Cost per enplanement is estimated by management at \$10.58 in fiscal 2015 and is projected by the airport's consultant to remain under \$11.00 through fiscal 2022. Debt per enplanement in fiscal 2014 was approximately \$129, which is relatively moderate, in our opinion; however, debt per origination and destination (O&D) enplanement was high, in our view, at \$274. DSC (as calculated per the indenture) for fiscal 2014 was 1.43x on the senior lien and 1.33x on a combined senior and subordinate basis. DSC, as calculated by Standard & Poor's excluding rolling coverage, was 1.04x on the senior lien and 0.97x on a combined senior and subordinate basis, including \$62 million in designated PFC revenue. We consider this adequate for an airport with a residual rate-making model. Unrestricted cash and investments including internal reserve and discretionary funds totaled \$144 million in fiscal 2014, or 273 days; Standard & Poor's considers this figure to be adequate, but it is below the average of 432 for other 'A' rated airports in the U.S.

The current five-year capital improvement project (CIP) is estimated at \$607 million and includes primarily airfield reconstruction projects. Funding comes through a variety of sources, including \$213 million from the series 2015D and 2015E bonds, \$175 million in future bonds, \$174 million from prior bonds, \$26 million in grants, and \$19 million in other funds.

The series 2015G bonds will refund the series 2001 hotel bonds with general airport revenue bonds. The bonds were issued to construct the Westin Hotel in the McNamara terminal. Management forecasts that after paying debt service

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on the refunding bonds and making required deposits, the cash flow from the hotel will initially produce a surplus of approximately \$1.0 million.

## Outlook

The stable outlook reflects our expectation that demand will meet or exceed forecast; that Standard & Poor's-adjusted DSC will stay near 1x; and liquidity will not decline, despite the airport's additional debt plans. We could lower the rating within the two-year outlook period if our adjusted DSC calculations are consistently below 1x or DTW's liquidity position materially erodes. We don't expect to raise the rating within the two-year outlook period, given the airport's additional debt needs. A higher rating could result long term if the airport experiences notable increases in demand that we believe are sustainable and that will boost Standard & Poor's adjusted DSC and liquidity to levels we believe are also sustainable and consistent for a higher rating.

## The Issuer

Wayne County is the fee simple title holder of the primary real property of the Airport, and until Aug. 9, 2002, operated under the county executive's supervision. On March 13, 2002, the state legislature enacted an amendment to the Aeronautics Code (known as the Public Airport Authority Act, or Public Act 90 of the state of Michigan), which affects airports with more than 10 million enplanements. The act requires the transfer of operational jurisdiction of qualified airports to airport authorities created under the act. The Public Airport Authority Act took effect March 26, 2002. As a result, the act created the WCAA as a political subdivision and instrumentality of the county, and as of Aug. 9, 2002, the authority became vested with the power to manage and operate DTW and Willow Run Airport, a reliever airport. Also, with the authority's creation, WCAA assumed the obligations with respect to DTW, including the senior-lien and junior-lien bonds.

A seven-member board governs WCAA. The authority requires that the governor appoint two members, the Wayne County Board of Commissioners one, and the county executive four. Authority board members serve without compensation for six-year terms with a two-term limit. According to management, the move to authority status 12 years ago was to refocus the mission and vision that emphasizes bringing private-sector practices and expertise to airport operations.

In our opinion, the fiscal issues of the Wayne County and the city of Detroit have no financial impact on the authority, as the authority is a separate entity from each.

## Bond Provisions

Securing the bonds is a lien on the net revenues of the airport. Bondholders additionally benefit from a fully funded debt service reserve.

Revenues first fund monthly operations and maintenance (O&M) expenses, then monthly debt service requirements. Remaining revenues first fund any deficiency in the bond reserve account, then junior-lien debt service payments.

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amounts owed to any swap provider pursuant to agreements entered into after Jan. 1, 1998 (the authority has no swaps), and any deficiency in the junior-lien bond reserve account. Remaining money funds various reserves in the following order: O&M reserve fund (six-month reserve), renewal and replacement reserve fund (until \$2.5 million is on deposit), discretionary fund (\$87,500 quarterly), and the airport development fund.

In our opinion, the rate covenant is weak, in that many nonoperating revenue sources are allowed in the rate covenant calculation; in addition to net revenue, these sources may include PFCs, grants, and other available money. Net revenues and PFCs deposited to the bond fund must equal 100% of senior-lien debt service. Instead of setting rates and charges such that net revenues provide sufficient or better DSC, the 125% rate covenant comes from the combination of net revenues, PFCs, other available money, and any unencumbered cash. More specifically, the rate covenant allows for rates and charges to be set such that net revenues, together with PFC proceeds, equal the amount needed to make the deposits required under the master bond ordinance. Also, these funds, together with other available money and any unencumbered cash balances in the revenue fund on the last day of the previous operating year, must provide the amounts needed to make the necessary deposits to the junior-lien bond fund, the O&M reserve fund, the renewal and replacement reserve fund, the discretionary fund, and the airport development fund. They must also provide an amount no less than 25% of the debt service due and payable on the bonds during such operating year. The authority defines other available money as the amount that it will transfer for such operating year to the bond fund or junior-lien bond fund from PFCs or sources other than revenues. The junior-lien rate covenant is similarly calculated, but net revenues and other available funds must equal 110% of debt service with respect to the senior- and junior-lien bonds outstanding.

WCAA may issue additional bonds if an airport consultant projects that revenues, revenue fund balances, and other available money are sufficient to satisfy the rate covenant for the first three full operating years after capital projects that the senior-lien bonds will fund are complete. Alternatively, in lieu of a consultant's report, the CFO must certify that net revenues plus other available money for the most recent fiscal year were not less than 125% of the debt service on all senior-lien bonds outstanding and the proposed issuance. Before issuing junior-lien bonds, the CFO shall certify that the sum of the net revenues for the most recent fiscal year, the amount of other available money deposited in the bond fund, and the average amount of other available money in the junior-lien bond fund and other available money that the consultant certifies to be reasonably available and deposited in the junior-lien bond fund during the period that the bonds will likely be outstanding is not less than 110% of the debt service with respect to the senior- and junior-lien bonds outstanding and of the average annual debt service in terms of the proposed senior- and junior-lien bonds.

The authority may issue refunding bonds for senior or junior debt as long as the bonds to be refunded do not increase debt service by more than 20% in any operating year. It may also issue completion bonds for up to 10% of the face amount of the bonds originally issued to cover the cost of the CIP.

### Contingent Liquidity

We consider the contingent liquidity risk of the authority to be low. Currently, the authority has previously entered into four variable rate direct purchase contracts and is currently entering into three fixed rate direct purchase contracts.

*Wayne County Airport Authority, Michigan Detroit Metro Wayne County Airport; Airport*

According to bond counsel, there are no acceleration provisions in the documents for events of default. In all of the variable rate agreements, should an event of default occur, there will be a mandatory tender. If a mandatory tender occurs and the bonds cannot be remarketed in full, the airport will pay a default rate (base rate plus 4%). The ratings trigger is 'BBB', or its equivalent, with any of the three major rating agencies. We believe that there is sufficient headroom between the current ratings and the threshold, which mitigates the airport's exposure to the potentially higher interest rates.

### **Airport Use And Lease Agreement**

WCAA has residual airport use and lease agreements. The scheduled expiration date of the agreements is Sept. 30, 2032. Delta leases all of the airline space in the McNamara Terminal on a preferential-use basis, and the signatory airlines operating in the North Terminal each lease one or more gate holdrooms and related ticket counters and other airline operational space on a preferential-use basis. The signatory airlines pay rentals for the lease of premises in the terminals and activity fees for the common use of other terminal and airport facilities. Under the terminal rate-making methodology, there are two terminal cost centers. Activity fees are calculated based on an airportwide residual rate-setting methodology. The terminal rental rates are calculated by allocating between the two terminal cost centers all annual terminal-related O&M expenses and all annual debt service on bonds issued after 1997 to finance each terminal, net of debt service to be paid by PFCs. The annual rental rate for each terminal is calculated by dividing the costs allocated to each terminal by the total square footage of space leased to the signatory airlines leasing space in that terminal.

### **Air Trade Area And Service Area Economy**

The airport service region consists of the Ann Arbor, Detroit-Warren-Livonia, Flint, Monroe, and Adrian core statistical areas, which includes a 10-county area near Detroit. While the airport is a large connecting hub for Delta, it is also a large O&D market. The airport service region has a population of over 5.3 million. Overall, the airport's service region has benefited from the manufacturing economic base, a low cost of living, and relatively high personal income levels that support air traffic growth. However, the region's unemployment, at 6.3% as of June 2015 was higher than the state of Michigan's, at 5.8%, and the U.S., at 5.5%; nevertheless, the unemployment rate in the service area economy has declined in each year since its peak in 2009 at 14.6% (the U.S. rate was 9.3%). The service area centers on a manufacturing base that, while diversifying and improving, remains dominated by the auto industry. In our opinion, the area's low cost of living and relatively good personal income levels continue to support further growth in the airport's traffic.

### **Airport Description And Demand**

DTW is 20 miles from the Detroit central business district, on 6,700 acres of land in Wayne County, Mich. It is the primary air carrier airport serving the Detroit area and is classified as a large hub. The airport's service area is southeastern Michigan, portions of Ontario, and northern Ohio. No other airport provides significant competition to

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DTW in the service area. Airports in Flint, Mich. (75 miles away), Toledo, Ohio (65 miles), and Lansing, Mich. (95 miles) are within driving distance of DTW but do not offer comparable service.

DTW provides service from two terminal buildings and related concourses (the McNamara and North terminals) with a total of 147 gates. The McNamara Terminal opened in February 2002. The McNamara Terminal was designed to accommodate the operations of Northwest and its code-share partners and now is utilized by Delta, its regional affiliates, and its SkyTeam partners. The terminal complex consists of an attached Concourse A and satellite concourses B and C, and is adjacent to 9,840 parking spaces. (There are a total of approximately 18,174 public parking spaces at the airport.) In addition, a full-service Westin Hotel opened in December 2002 attached to Concourse A. Delta preferentially leases all 121 gates in the McNamara terminal. The North Terminal opened in September 2008 with 26 gates and is utilized by all other signatory airlines (except FedEx and UPS) and all other airlines serving the airport. DTW has six runways: four parallel runways ranging from 8,500 feet to 12,000 feet long, and two crosswind runways that are 8,500 feet and 8,700 feet long.

According to the latest Airports Council International statistics, in 2014, DTW was the 18th-busiest airport in North America in terms of total passengers. The airport serves a large O&D market and is a major connecting hub for Delta. As of fiscal 2014, about 52% of total domestic enplaned passengers were connecting. Delta and its commuter operators accounted for 78% of the enplaned passengers in fiscal 2014; we consider this to be highly concentrated. The second-largest carrier was Spirit Airlines, with approximately 6% of the market, followed by Southwest, with just over 5% of the market. As of Sept. 1, 2015, 21 U.S. passenger airlines (five legacy/mainline carriers, four low-cost carriers, and 12 regional carriers), five foreign-flag carriers and two cargo airlines use the airport. In fiscal 2014, international passengers accounted for 9% of total enplaned passengers.

In the past decade, enplanements peaked in fiscal 2005 at 18.3 million. On April 14, 2008, NWA and Delta Air Lines Inc. announced that the two would merge, thereby creating the world's largest airline. Prior to the merger, NWA had been the carrier with the largest market share at the airport, but the airline's enplanements had fluctuated as NWA entered bankruptcy protection in September 2005 (exiting May 31, 2007). While the airline and its affiliate, Mesaba, continued to operate at the airport during this period, service fell to 13.7 million NWA enplanements in fiscal 2006 from 14.4 million in fiscal 2005. This led to a decline in overall enplanements at the airport. For fiscal 2007, overall airport enplaned passengers rose by 1.7% from the previous year due primarily to NWA increasing service at the airport after its emergence from bankruptcy. However, given the global economic slowdown, higher fuel prices, and airline capacity cuts, enplanements declined in the following three fiscal years: by 1.5% in 2008, by 10.6% in 2009, and by 0.4% in 2010. In our opinion, the 2.2% increase in enplanements in fiscal 2011 indicated the beginning of the economic recovery in the air trade area, and enplanements remained essentially flat in fiscal 2012 and fiscal 2013. Showing a positive trend, enplanements in fiscal 2014 (ended Sept. 30) were 16.2 million, up slightly from 16.1 million in fiscal 2013. Enplanements for fiscal 2015 are estimated by management to increase to 16.3 million.

The airport consultant's report details forecasts that Standard & Poor's considers to be reasonable. O&D enplanement growth is projected at a 1% compound annual growth rate (CAGR) from fiscal 2015 through fiscal 2022. Connecting traffic is not expected to materially change. International service will continue to grow steadily, according to projections. Nonairline revenue is projected to increase at a CAGR of 2.1% through fiscal 2022, and O&M expense are

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projected to increase at a CAGR of 2.3% for that period. The inclusion of the hotel is projected to increase nonairline revenues by approximately \$30 million and to increase O&M expenses by \$22.5 million in fiscal 2016. Debt service on \$25 million of future bonds is included. Cost per enplanement is anticipated to remain relatively stable, peaking at \$10.98 in fiscal 2018, which we consider to be reasonable. Overall enplanements are forecast to grow to 17.5 million in fiscal 2022 from 16.2 million in fiscal 2014. DSC as calculated per the indenture is projected to be approximately 1.5x over the forecast period, and all-in coverage is projected to be 1.4x; with the residual airline agreements at the airport, we consider this coverage to be adequate.

DTW is a major connecting hub in Delta and its code-share partners' route system. DTW is Delta's primary gateway to Asia. According to a Delta spokesperson, Delta is committed to its position at DTW; expects to continue modest growth in overall service at DTW in the future; and while Delta has been growing its Seattle gateway, the growth at Seattle does not come at the expense of Detroit.

**Related Criteria And Research**

**Related Criteria**

- USPF Criteria: Contingent Liquidity Risks, March 5, 2012
- Criteria: Airport Revenue Bonds In The U.S. And Canada, Nov. 15, 2013
- USPF Criteria: Methodology: Definitions And Related Analytic Practices For Covenant And Payment Provisions In U.S. Public Finance Revenue Obligations, Nov. 29, 2011
- USPF Criteria: Assigning Issue Credit Ratings Of Operating Entities, May 20, 2015
- Criteria: Use of CreditWatch And Outlooks, Sept. 14, 2009

Ratings Detail (As Of September 9, 2015)		
<b>Wayne Charter Cnty, Michigan</b>		
Detroit Metro Wayne Cnty Arpt, Michigan		
Wayne Charter County (Detroit Metro Wayne County Airport) (wrap of Insured) (MBIA, National & Assured Gty) (SEC MKT)		
<i>Unenhanced Rating</i>	A(SPUR)/Stable	Affirmed
Wayne Charter County (Detroit Metro Wayne County Airport) (MBIA) (National)		
<i>Unenhanced Rating</i>	A(SPUR)/Stable	Affirmed
Wayne Charter County (Detroit Metro Wayne County Airport) (MBIA) (National)		
<i>Unenhanced Rating</i>	A(SPUR)/Stable	Affirmed
<b>Wayne Cnty Arprt Auth, Michigan</b>		
Detroit Metro Wayne Cnty Arprt, Michigan		
Wayne Cnty Arprt Auth (Detroit Metro Wayne Cnty Arprt) new money bnds (non-amt)		
<i>Long Term Rating</i>	A/Stable	Affirmed
Wayne Cnty Arprt Auth (Detroit Metro Wayne Cnty Arprt) rfdg bnds (Non-amt)		
<i>Long Term Rating</i>	A/Stable	Affirmed
Wayne Cnty Arprt Auth (Detroit Metro Wayne Cnty Arprt) sr lien arprt (AMT)		
<i>Long Term Rating</i>	A/Stable	Affirmed
Wayne Cnty Arprt Auth (Detroit Metro Wayne Cnty Arprt) (BAM)		
<i>Unenhanced Rating</i>	A(SPUR)/Stable	Affirmed
Wayne Cnty Arprt Auth (Detroit Metro Wayne Cnty Arprt) (BAM)		
<i>Unenhanced Rating</i>	A(SPUR)/Stable	Affirmed

Wayne County Airport Authority, Michigan Detroit Metro Wayne County Airport; Airport

Ratings Detail (As Of September 9, 2015) (cont.)		
Wayne Cnty Arpt Auth (Detroit Metro Wayne County Airport) jr lien arpt (Wrap of Insured) (FGIC & AGM) (SEC MKT)		
<i>Unenhanced Rating</i>	A-(SPUR)/Stable	Affirmed
Wayne Cnty Arpt Auth (Detroit Metro Wayne County Airport) new money bnds		
<i>Long Term Rating</i>	A/Stable	Affirmed
Wayne Cnty Arpt Auth (Detroit Metro Wayne County Airport) new money (AGM)		
<i>Unenhanced Rating</i>	A(SPUR)/Stable	Affirmed
Wayne Cnty Arpt Auth (Detroit Metro Wayne County Airport) sr lien arpt (AGM)		
<i>Unenhanced Rating</i>	A(SPUR)/Stable	Affirmed
Wayne Cnty Arpt Auth (Detroit Metro Wayne County Airport) sr lien arpt (ASSURED GTY)		
<i>Unenhanced Rating</i>	A(SPUR)/Stable	Affirmed
Wayne Cnty Arpt Auth (Detroit Metro Wayne County Airport) sr lien arpt (Wrap of Insured) (FGIC, National & Assured Gty) (SEC MKT)		
<i>Unenhanced Rating</i>	A(SPUR)/Stable	Affirmed
Wayne Cnty Arpt Auth (Detroit Metro Wayne County Airport) sr lien arpt (Wrap of Insured) (MBIA & BHAC) (SEC MKT)		
<i>Unenhanced Rating</i>	A(SPUR)/Stable	Affirmed
Wayne Cnty Arpt Auth (Detroit Metro Wayne County Airport) sr lien arpt (Wrap of Insured) (MBIA, National & ASSURED GTY) (SEC MKT)		
<i>Unenhanced Rating</i>	A(SPUR)/Stable	Affirmed
<b>Wayne Cnty Arpt Auth (Detroit Metro Wayne Cnty Arpt)</b>		
<i>Unenhanced Rating</i>	A-(SPUR)/Stable	Affirmed

Many issues are enhanced by bond insurance.



## **FITCH RATES WAYNE COUNTY AIRPORT AUTHORITY, MI'S REVENUE BONDS 'A-'; OUTLOOK STABLE**

Fitch Ratings-Chicago-02 September 2015: Fitch Ratings has assigned an 'A-' rating to approximately \$602.6 million of Wayne County Airport Authority, MI's (WCAA) senior lien airport revenue and revenue refunding bonds, series 2015C-G.

Additionally, Fitch has affirmed the 'A-' rating on approximately \$1.9 billion outstanding senior lien and \$166.2 million junior lien airport revenue bonds to finance Detroit Metropolitan Airport (DTW). The Rating Outlook on both lien ratings is Stable.

The 'A-' rating reflects DTW's central geographic location and essentiality to Delta's system as seen in their fully residual long-term airline use and lease agreement (AUL) through 2032. The authority's ability to increase non-airline revenues and control operating expense growth while enplanements have remained relatively stagnant in recent years has helped maintain a stable financial position using internal liquidity despite thin underlying financial performance.

### KEY RATING DRIVERS

#### Revenue - Volume: Midrange

**Dependence on Delta Hub:** The airport enjoys limited competition within the metropolitan area, which provides the airport with a catchment population of around 6 million. DTW is heavily reliant on its dominant carrier, Delta ('BB', Outlook Positive), which maintains a significant market share with 76% of airport enplanements. The traffic profile is 52.9% connecting leaving DTW susceptible to realignment of Delta's hubbing service. Enplanements have remained broadly stable at around 16 million since falling 11% in fiscal year (FY) 2009 (ended September 30).

#### Revenue - Price: Stronger

**Strong Cost Recovery Structure:** The AUL is 100% residual with long-term expiration in 2032 and with multiple airlines beyond the dominant carrier, Delta. Cost per enplanement (CPE) was \$10.42 in FY2014 and is expected to increase to near or above \$11 by FY2019 as debt service ramps up. However, signatory airlines are tied into covering all airport costs until at least 2032.

#### Infrastructure & Renewal Risk: Midrange

**Modest Capital Needs:** Having recently completed a multi-billion capital program the airport's investment plans are primarily focused on airfield work. The capital program will be funded from a combination of proceeds from previous issuance, grants, and new money borrowing.

#### Debt Structure: Midrange (Senior Lien), Midrange (Subordinate Lien)

**Variable Rate Debt Exposure:** Compared to other airports of its size DTW has a relatively high debt burden with approximately \$2 billion outstanding. Around 79% of WCAA's debt is fixed rate with 21% paying an unhedged variable rate and subject to some refinancing risk. Upon reaching the maximum annual debt service (MADS) in FY2019, the profile is flat-to-declining. All reserves are cash-funded.

**Moderate Leverage and Liquidity:** WCAA's financial performance has been stable in recent years as it has been able to pass along costs to carriers through residual agreements. Total leverage of 8.82x net debt/cash flow available for debt service (CFADS) is comparable to peers while having sufficient balance sheet liquidity of 251 days cash on hand (DCOH). FY2014 debt service coverage



ratio (DSCR) as calculated by Fitch is 1.15x on the senior lien and 1.06x on the junior lien without the benefit of the sizeable revenue fund balance.

Peer Group: WCAA's peers include Atlanta (rated 'A+/A') and Minneapolis-St. Paul (rated 'AA-/A') airports, given their status as major Delta hubs accounting for over 75% of enplanements and over 45% connecting traffic. Detroit has a materially higher CPE and leverage, and fewer DCOH.

#### RATING SENSITIVITIES

Negative - Exposed Economic Area: The financial challenges of both Detroit and Wayne County could spill over into other surrounding areas causing a significant decline in locally based traffic demand.

Negative - Hub Loss: A material reduction in, or elimination of, connecting traffic will cause CPE to rise and operating margins to weaken.

Positive - Increasing O&D Traffic: Higher than projected passenger growth driven by O&D gains, yielding a lower cost per enplanement and reduced leverage would lead to positive rating action.

#### TRANSACTION SUMMARY

The series 2005 bonds will be refunded into series 2015A,B,C, &F bonds for an estimated savings of \$3 million annually. The \$85 million series 2015A bonds will be directly placed with PNC Bank, \$75 million series 2015B bonds will be directly placed with Bank of America, \$26 million of series 2015C bonds will be directly placed with Citi, and the remaining \$229 million of series 2015F will be a public offering. The \$245 million of series 2015D&E new money bonds will be issued to fund projects in the capital improvement plan (CIP). Additionally, the airport will be refunding approximately \$100 million of the series 2001 hotel bonds issued by the county onto the senior lien as the series 2015G bonds. The hotel's revenues and expenses will be added to the airport's flow of funds, allowing excess revenue after paying debt service to help offset airline costs. After the series 2015A-G transaction, debt service will increase to MADS of \$172.8 million in 2019 before slowly declining through maturity.

Enplanements have been broadly flat since FY2009, having grown at a compound annual growth rate (CAGR) of 0.3%. Traffic rebounded 0.9% in FY2014 after declining 0.6% in FY2013. Though the first nine months of FY2015, traffic has increased an additional 0.4%. Recent growth has been driven by low-cost carriers increasing their collective market share at the airport to 12.9% so far in FY2015, as well as domestic O&D traffic increasing 7.6%. Enplanements on non-Delta carriers are up 8.8% this year.

DSCR, as defined in WCAA's debt ordinance, has remained robust in recent years, around 1.50x for the senior lien and around 1.40x for the junior lien. These have been supported by the relatively stable traffic performance, and improved non-airline revenue performance, which grew 3.5% in FY2014, increasing revenue per enplanement to \$8.27 from \$8.06 in FY2013. Higher non-airline revenues have been primarily driven by increased parking revenue; however, recent investments in both retail and food and beverage concessions in the McNamara Terminal have grown revenues further.

Fitch calculates DSCR excluding the impact of revenue fund balances from the ratio, and these have remained stable at historical levels between 1.10-1.15x for the senior lien and around 1.05x for the junior lien - while these may appear tight, they are backed by the fully residual AULs to 2032 with numerous airlines including not only Delta but also United/Continental, American/US Airways, Southwest, Spirit, Fedex and UPS. WCAA's DSCR including the revenue fund balance for FY2014 was 1.43x on the senior lien and 1.33x on the junior lien. The 'A-' rating on both the senior and junior

debt reflects the little leverage and financial coverage distinctions between the two lien levels based on existing debt secured by airport net revenues.

The airport's proposed FY2016-20 CIP is moderate at \$607.5 million with 53% of funds to be spent on runway improvements and airfield projects. The plan is funded through a mix of grants, funds available from previous bond issuances, the series 2015DE bond issuance and an additional \$175 million in future bonds. Overall size is similar to the previous FY 2014-18 CIP, but reflects removal of projects completed and updated cost estimates and timing for other projects. The plan has not yet been approved and will be presented to WCAA's board later in September.

The WCAA is a political subdivision and instrumentality of the Charter County of Wayne, Michigan (Wayne County, 'B'/Stable Outlook). Wayne County holds legal title to the property related to the Detroit Metropolitan Airport and Willow Run Airport. Pursuant to the Michigan Local Financial Stability and Choice Act (Act 436, or the Authority Act), Wayne County has entered into a consent agreement with the state of Michigan that grants the county government special powers aimed at addressing Wayne County's current financial distress. Act 436 includes provisions that seek to limit the ability of Wayne County to interfere in the functioning of the airport or the exercise of WCAA's powers to deal with airport revenues or property. Pursuant to the Authority Act, WCAA has sole jurisdiction with the exclusive right, responsibility and authority to occupy, operate, control and use both airports. The Authority Act and federal law proscribe any use of airport revenues and property for other than the support of airport related activities. The WCAA operates as a separate legal entity and receives no funding and purchases minimal routine services from Wayne County. Fitch does not view the WCAA credit as being exposed to material risks from the on-going Wayne County fiscal distress or actions it may take under consent agreement.

#### SECURITY

The senior debt has a first lien pledge on net airport revenue while the junior debt has a second lien pledge of net airport revenues.

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**MOODY'S**  
INVESTORS SERVICE

**New Issue: Moody's assigns A2 to Wayne County Airport Authority's, (MI) Series 2015C-G Revenue and Refunding Bonds and affirms outstanding ratings; Outlook stable**

Global Credit Research - 04 Sep 2015

**Authority has \$2.03 billion outstanding debt**

WAYNE COUNTY AIRPORT AUTHORITY, MI  
Airports  
MI

**Moody's Rating**

ISSUE	RATING
Airport Revenue Refunding Bonds Series 2015F (AMT)	A2
<b>Sale Amount</b> \$228,750,000	
<b>Expected Sale Date</b> 09/21/15	
<b>Rating Description</b> Revenue: Government Enterprise	
Airport Revenue Refunding Bonds Series 2015C (AMT)	A2
<b>Sale Amount</b> \$26,090,000	
<b>Expected Sale Date</b> 09/21/15	
<b>Rating Description</b> Revenue: Government Enterprise	
Airport Revenue Bonds Series 2015D (Non-AMT)	A2
<b>Sale Amount</b> \$233,510,000	
<b>Expected Sale Date</b> 09/21/15	
<b>Rating Description</b> Revenue: Government Enterprise	
Airport Revenue Bonds Series 2015E (AMT)	A2
<b>Sale Amount</b> \$11,665,000	
<b>Expected Sale Date</b> 09/21/15	
<b>Rating Description</b> Revenue: Government Enterprise	
Airport Revenue Refunding Bonds Series 2015G (Non-AMT)	A2
<b>Sale Amount</b> \$102,560,000	
<b>Expected Sale Date</b> 09/21/15	
<b>Rating Description</b> Revenue: Government Enterprise	

**Moody's Outlook** STA

NEW YORK, September 04, 2015 --Moody's Investors Service assigns A2 to the \$602.5 million Series 2015C-G Airport Revenue and Refunding Bonds issued by the Wayne County Airport Authority (WCAA or authority). Moody's also has affirmed the A2 underlying rating on outstanding parity senior lien debt and the A3 underlying rating on the authority's outstanding junior lien debt. The rating outlook is stable.

SUMMARY RATING RATIONALE

The A2 senior lien rating reflects the airport's strong competitive position in the Detroit-Wayne County service area and the financial stability provided by its full residual long-term airline use and lease agreement that expires in September 2032. The rating also takes into consideration the concentration risk with Delta Air Lines Inc. (Ba2/positive) accounting for 76% of enplanements, and the modest pace of economic recovery in the service area that is heavily concentrated in the automotive sector.

**OUTLOOK**

The stable outlook reflects our expectation that financial metrics will remain stable based on reasonable assumptions for modest traffic and enplanement growth and limited future debt plans primarily focused on airfield and maintenance projects. We believe that enplanements are anchored by significant 47% origination and destination (O&D) travel and that the authority will continue to proactively manage expenses while increasing non-airline revenue yields.

**WHAT COULD MAKE THE RATING GO UP**

- Significant and sustained enplanement growth by both Delta and low cost carriers (LCCs) that further diversifies carrier traffic
- Lower than forecasted cost per enplanement (CPE)
- Stronger than historic liquidity levels

**WHAT COULD MAKE THE RATING GO DOWN**

- Significant reductions in enplanements due to a reduction in hub activity by Delta or lower than currently forecasted enplanement growth
- Higher than forecasted CPE
- Reduced financial margins and liquidity

**STRENGTHS**

- Long-term, full residual airline use and lease agreement provides the airport with financial stability
- Proactive financial management to reduce expenses and increase non-airline revenue helps mitigate the airport's rising CPE
- Relatively stable O&D air service market with modest recent growth
- Limited future debt needs. The five-year capital plan is largely dedicated towards airfield projects, and the airport's new and efficient terminal facilities provide ample airside capacity and require minimal future capital investment
- The service area economy, while recovering more slowly than the US, maintains strong international ties that support international air travel, a key to maintaining Delta's hub status

**CHALLENGES**

- Concentration risk in Delta Air Lines which accounts for over 76% of enplanements, though somewhat offset by relatively stable O&D traffic base and growth of low cost carrier service
- Airline costs will remain at just above \$10 per enplaned passenger through the forecast period, though slightly moderating in later years
- Service area economy is still concentrated in the automotive sector, though the economy is anticipated to grow modestly. However it is unlikely to fully regain jobs that were lost during the latest economic downturn
- Lower than average liquidity when compared to other residual airports

**RECENT DEVELOPMENTS**

Enplanements grew 0.9% in fiscal 2014 following two years of small declines of 0.3% and 0.6% in 2012 and 2013 after reversing a three-year declining enplanement trend with 2.2% growth in FY 2011. Enplanements are up 0.8%

for the first 10 months of FY 2015 in line with the authority's full year projection. Landed weights are also up slightly by 0.6%. In the latest traffic forecast prepared by the airport consultant enplanements are forecasted to grow at a 1.0% compound average annual growth rate (CAGR) through FY 2022.

#### DETAILED RATING RATIONALE

##### REVENUE GENERATING BASE

Created by state statute in 2002 the authority is a separate legal entity from Wayne County. Delta continues to dominate the authority's enplanements and the airline still remains committed to WCAA, which ranks the second biggest of all Delta hubs, only behind Atlanta. We note that Delta's dominance has moderated from a 81% market share in 2010 to 76% in 2015 primarily on account of increase service by LCCs. The airport offers the airline numerous geographical advantages, and is still critical to Delta's strategy as its primary hub to Asia, despite Delta's growth plans for Seattle-Tacoma International Airport (Port of Seattle, WA Airport Enterprise, Aa2/Stable).

The LCC market share at WCAA has increased to 12.9% in FYTD 2015 from 11.6% in FY 2014 led by Southwest, jetBlue, Frontier and Spirit, which adds a degree of diversity and cost-competitiveness to the airport. Given the airport's position within the Delta system, and strategic shifts at other Delta hub airports, Moody's acknowledges the potential for sizeable seat cutbacks at WCAA is unlikely in the short-term, though remain a risk in the medium to long-term.

##### FINANCIAL OPERATIONS AND POSITION

WCAA's residual rate-making methodology for the airline use and lease agreement provides financial stability by allowing the airport to fully recover its operating and capital costs from the airlines through increased landing fees. Between FYs 2010 - 2013, WCAA's airline CPE generally measured above \$9 per enplanement, and for the FY 2014-2022 projection period, the airport consultant forecasts CPE to be above \$10 but under \$11 per enplanement. To mitigate debt related cost increases for the airlines, the airport has demonstrated proactive financial management to reduce expenses, including implementing a multi-year restructuring program. These initiatives have been supported by the airport's effort to increase non-airline revenue.

Senior lien debt service coverage and total debt service coverage (as calculated on a bond ordinance basis) has remained steady in the last several years. The FY 2014 senior DSCR was 1.43 times and the total 1.33 times. On a Moody's net revenue basis (including PFCs used for debt service but not reserve monies), the airport's FY 2014 senior lien DSCR was 1.09 times and the total DSCR 1.00 times. The airport consultant has forecasted senior lien bond ordinance debt service coverage to measure between 1.47 times and 1.49 times from FY 2017 through FY 2022. We note that the bond ordinance calculation includes rolling coverage from the revenue account, equal to 25% of total debt service costs. We expect that the strength of the airport's residual airline use and lease agreement should ensure adequate debt service coverage going forward.

##### Liquidity

The airport's internal liquidity has generally been weaker than its peers, and Moody's calculated days cash on hand has measured in the low-to-mid 200 days range over the last five fiscal years. The authority expects to maintain comparable levels going forward.

##### DEBT AND OTHER LIABILITIES

The airport has a high, but now moderating debt load and no major debt needs or plans. With the completion of the McNamara Terminal in 2002 and the North Terminal in 2008, the airport's terminal facilities are at the beginning of their useful lives and have sufficient capacity to accommodate future enplanement growth without constraints. The Series 2015 capital projects funded by the current bond issue total \$244.5 million, including \$181.5 million for airfield improvements. An additional debt issue of \$25.4 million is planned no later than 2017 to complete the funding. The 2016-2010 CIP, which includes the Series 2015 projects, forecasts approximately \$607 million in total capital spending with the majority of the capital plan devoted to airfield projects and runway reconstruction at \$321 million or 53% of the total. While a majority in interest of the airlines (MII) have approved the 2015 projects, other 2016-2020 CIP projects require airline approval.

Moody's views the airport's debt funding needs to complete the capital program as modest. The airport's outstanding debt includes several series of privately placed bonds, including the currently offered Series 2015C and unrated Series 2015A and 2015B parity refunding bonds. Moody's has reviewed the terms and conditions and has confirmed that there are no covenants that put the private debt in higher seniority or adversely affect bondholders.

Debt Structure

Debt-Related Derivatives

None. Approximately 20.6% of outstanding debt is variable rate.

Pensions and OPEB

The financial impact of unfunded and OPEB obligations of this issuer are minor and thus not currently a major factor in our assessment of its credit profile.

MANAGEMENT AND GOVERNANCE

Authority is governed by a seven-member board with four members appointed by the county executive; two by the governor and one by the Wayne County Commission. Board member serve six-year terms.

Authority's senior management team has over 10-years of tenure.

KEY STATISTICS

-KEY INDICATORS:

-Type of Airport: Hub

-Rate Making Methodology: 100% Residual

-Enplanement growth, FY 2014: 0.9%

-5-Year Enplanement CAGR: 0.3%

-% O&D passengers, FY 2014: 47.1%

-Largest carrier by Enplanements: Delta (77.8%)

-Airline Cost per Enplaned Passenger, FY 2014: \$10.42

-Debt per O&D Enplaned Passenger, FY 2014: \$257.83

-Bond Ordinance DSCR, FY 2014 (Senior Lien Only / Senior and Junior Lien): 1.43 times / 1.33 times

OTHER CONSIDERATIONS: MAPPING TO THE GRID

The grid-indicated rating outcome is the same as the senior lien rating.

The grid is a reference tool that can be used to approximate credit profiles in the toll road industry in most cases. However, the grid is a summary that does not include every rating consideration. Please see the Rating Methodology for Airport with Unregulated Rating-Setting for more information about the limitations inherent to grids.

METHODOLOGY OUTPUT

FACTOR 1 - MARKET POSITION

Enplanements - Aaa (16.217 million)

Size of Service Area - Aa (4.296 million)

Economic Strength / Diversity of Service Area - Baa

Competition for Travel - Aa

FACTOR 2 - SERVICE OFFERING

Carrier Base (Primary) - Ba (77.8%)

Enplanement 5-Year CAGR - Ba (0.3%)

O&D Passenger Mix - Ba (47.1%)

#### FACTOR 3 - CAPACITY AND CAPITAL PLAN

Limitations to Growth / Operational Restrictions - Aa

Construction Risk of Capital Program - Aa

#### FACTOR 4 - FINANCIAL METRICS

Average Airline Cost Per Enplanement - Aa (\$10.42)

Net Revenue Debt Service Coverage Ratio - Baa (1.00 times) (including PFCs)

Debt Per O&D Enplanement - Baa (\$257.83)

NOTCHING - None

Scorecard Indicated Rating - A2

#### OBLIGOR PROFILE

Created by state statute in 2002 the authority is a separate legal entity from Wayne County though the county holds fee simple title to the primary airport real estate. The airport is located on 6,700 acres 20 miles southwest of downtown Detroit. The airport has four parallel north-south runways and two cross-wind runways. The 2.4 million square foot, 121-gate MacNamara Terminal opened in 2002 and is primarily occupied by Delta and other SkyTeam members. The 850,000 square foot 26-gate North Terminal serves all other carriers.

The airport serves an air trade area that encompasses a population of 5.3 million. The nearest competing commercial airport is Cleveland, 150 miles away.

#### LEGAL SECURITY

Senior bonds are secured by a senior lien on net revenues of the authority and subordinate bonds by a subordinate lien on net revenues. The authority's structure includes rolling coverage and use of Passenger Facility Charge (PFC) revenues for debt service. The rolling coverage requirement provides for a 25% coverage factor on the senior lien debt service. Airport rates and charges can be reduced by the amount of PFC revenues that have already been received by the trustee. The airport benefits from a full residual airline use and lease agreement with the airlines which allows it to fully recover its operating and capital costs from the airlines through increased landing fees.

#### USE OF PROCEEDS

The fixed rate Series 2015D and E bonds will fund certain capital improvement projects as part of the airport's CIP and the Series 2015C and 2015F bonds (along with \$160 million unrated Series 2015A and 2015B bonds) will refund portions of the Series 20015 bonds for estimated net present value savings of \$41.4 million or 9.66% of refunded bonds. The Series 2015G will refund the \$99.6 million outstanding 2001 Hotel Bonds.

#### CONTACT

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#### PRINCIPAL METHODOLOGY

The principal methodology used in this rating was Airports with Unregulated Rate Setting published in July 2011. Please see the Credit Policy page on [www.moodys.com](http://www.moodys.com) for a copy of this methodology.

#### REGULATORY DISCLOSURES

For ratings issued on a program, series or category/class of debt, this announcement provides certain regulatory disclosures in relation to each rating of a subsequently issued bond or note of the same series or category/class of debt or pursuant to a program for which the ratings are derived exclusively from existing ratings in accordance with Moody's rating practices. For ratings issued on a support provider, this announcement provides certain regulatory disclosures in relation to the rating action on the support provider and in relation to each particular rating

action for securities that derive their credit ratings from the support provider's credit rating. For provisional ratings, this announcement provides certain regulatory disclosures in relation to the provisional rating assigned, and in relation to a definitive rating that may be assigned subsequent to the final issuance of the debt, in each case where the transaction structure and terms have not changed prior to the assignment of the definitive rating in a manner that would have affected the rating. For further information please see the ratings tab on the issuer/entity page for the respective issuer on [www.moodys.com](http://www.moodys.com).

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## PROJECTED DEBT SERVICE

The following projected debt service strategies demonstrate the long term gross debt service of the Authority by estimated funding sources. As illustrated, the rates and charges component through FY 2045 is being managed, and keeps overall fluctuations modest from year-to-year.

## AIRPORT'S GROSS AND NET DEBT SERVICE

Figure I – 4 illustrates the annual principal and interest payments through 2045 for the Airport's gross debt service on the \$2.0 billion in outstanding debt is \$170.9 million for the year. Figure I - 5 illustrates the fixed and variable rate senior lien and junior lien net debt service through 2045.

Figure I - 4: Gross Debt Service FY 2016 – FY 2045

Gross Debt Service FY 2016 - FY 2045			
<i>(\$ in thousands)</i>			
Fiscal Year	Principal	Interest	Total
2016	\$ 91,811	\$ 79,131	\$ 170,941
2017	91,331	74,153	165,483
2018	93,658	70,152	163,810
2019	98,944	66,088	165,032
2020	98,851	61,699	160,550
2021	99,287	57,506	156,792
2022	96,002	52,996	148,999
2023	99,537	48,678	148,215
2024	103,038	45,776	148,814
2025	100,895	43,039	143,934
2026	109,935	40,040	149,975
2027	115,358	36,569	151,928
2028	117,947	32,893	150,840
2029	76,950	28,251	105,201
2030	71,092	25,035	96,127
2031	74,083	22,093	96,177
2032	77,156	19,032	96,188
2033	74,578	15,836	90,415
2034	65,618	12,798	78,416
2035	32,400	9,841	42,241
2036	27,178	8,262	35,440
2037	28,545	6,904	35,449
2038	18,108	5,476	23,585
2039	16,629	4,571	21,200
2040	17,473	3,739	21,212
2041	18,344	2,866	21,210
2042	19,257	1,949	21,205
2043	9,935	986	10,921
2044	8,373	489	8,862
2045	1,407	70	1,477
<b>Total</b>	<b>\$ 1,953,721</b>	<b>\$ 876,918</b>	<b>\$ 2,830,639</b>

Source: WCAA

Figure I - 5: Senior & Junior Lien Net Debt Service Requirements FY 2016 – FY 2045

(\$ in thousands)

Fiscal Year	Outstanding Senior Lien			Outstanding Junior Lien Net Debt Service	Aggregate Outstanding Net Debt Service
	Fixed Rate Net Debt Service (1)	Variable Rate Net Debt Service (2)	Total Senior Lien Net Debt Service		
2016	\$ 144,706	\$ 6,039	\$ 150,745	\$ 12,137	\$ 162,882
2017	144,135	7,204	151,339	12,143	163,481
2018	140,974	7,206	148,180	12,141	160,320
2019	138,316	7,210	145,526	12,142	157,668
2020	124,001	7,292	131,293	12,142	143,435
2021	129,312	7,232	136,545	12,141	148,685
2022	121,725	7,212	128,937	12,140	141,077
2023	74,069	51,901	125,970	12,141	138,111
2024	57,252	61,444	118,696	12,144	130,840
2025	65,236	61,731	126,967	12,109	139,076
2026	73,810	62,402	136,212	12,101	148,313
2027	74,871	63,272	138,143	12,099	150,241
2028	94,165	31,546	125,711	12,140	137,851
2029	66,695	18,350	85,045	12,149	97,195
2030	65,707	17,206	82,913	12,148	95,061
2031	65,517	17,443	82,960	12,148	95,108
2032	59,621	17,624	77,245	12,148	89,393
2033	58,284	10,241	68,525	12,148	80,672
2034	28,889	4,214	33,103	12,146	45,249
2035	22,160	3	22,163	12,145	34,308
2036	22,902	-	22,902	12,145	35,046
2037	21,389	-	21,389	2,397	23,786
2038	20,988	-	20,988	75	21,063
2039	20,964	-	20,964	-	20,964
2040	20,976	-	20,976	-	20,976
2041	20,973	-	20,973	-	20,973
2042	11,168	-	11,168	-	11,168
2043	8,838	-	8,838	-	8,838
2044	4,675	-	4,675	-	4,675
2045	54	-	54	-	54
<b>TOTAL</b>	<b>\$ 1,902,371</b>	<b>\$ 466,772</b>	<b>\$ 2,369,143</b>	<b>\$ 257,368</b>	<b>\$ 2,626,510</b>

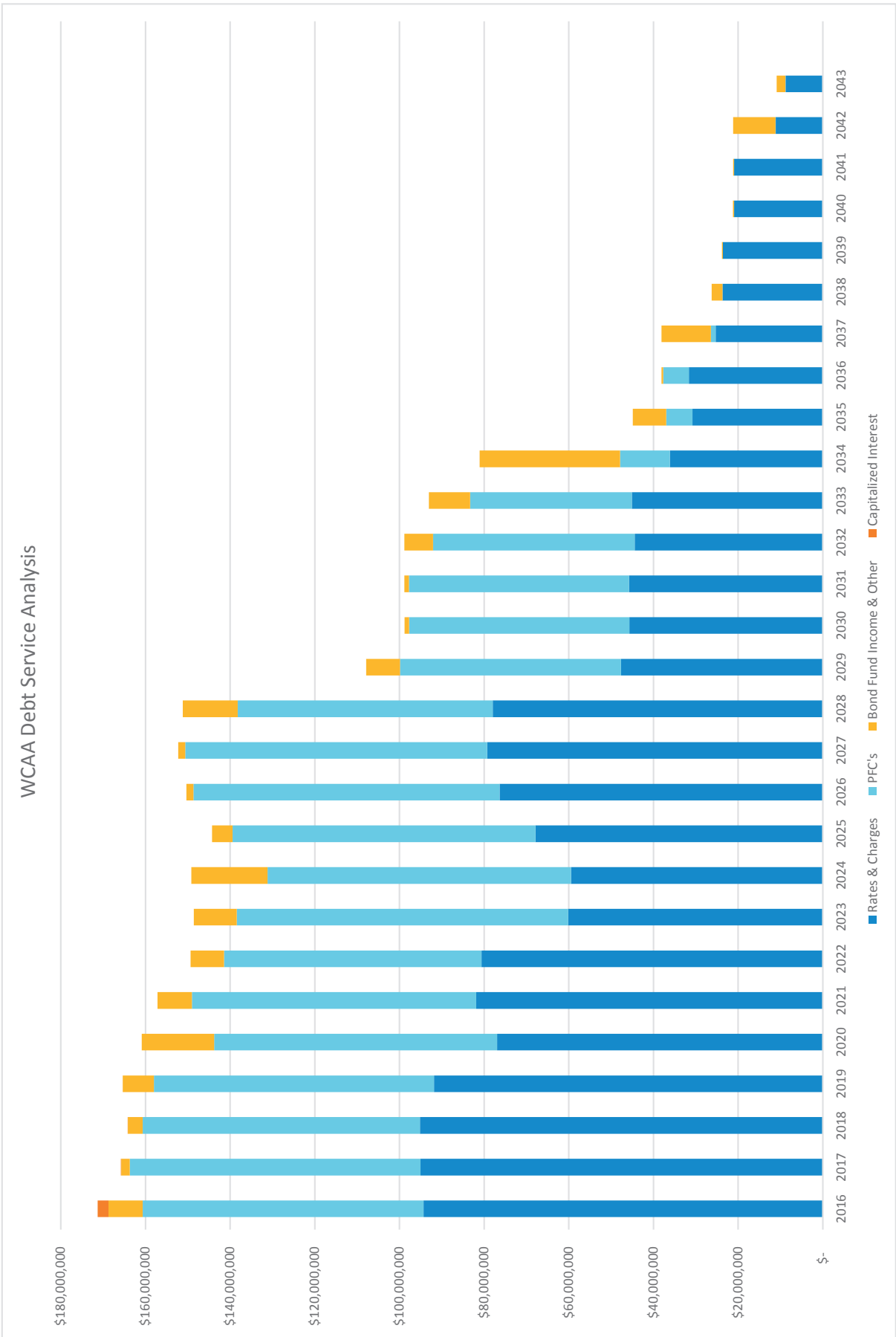
(1) Does not take into account capitalized interest on previously funded GARBs

(2) Variable rate assumption is 1.25% for 2016 and 1.5% from 2017 to 2045

Note: Includes final year principle covered by reserve fund for various debt series as applicable.

Totals may not sum due to rounding

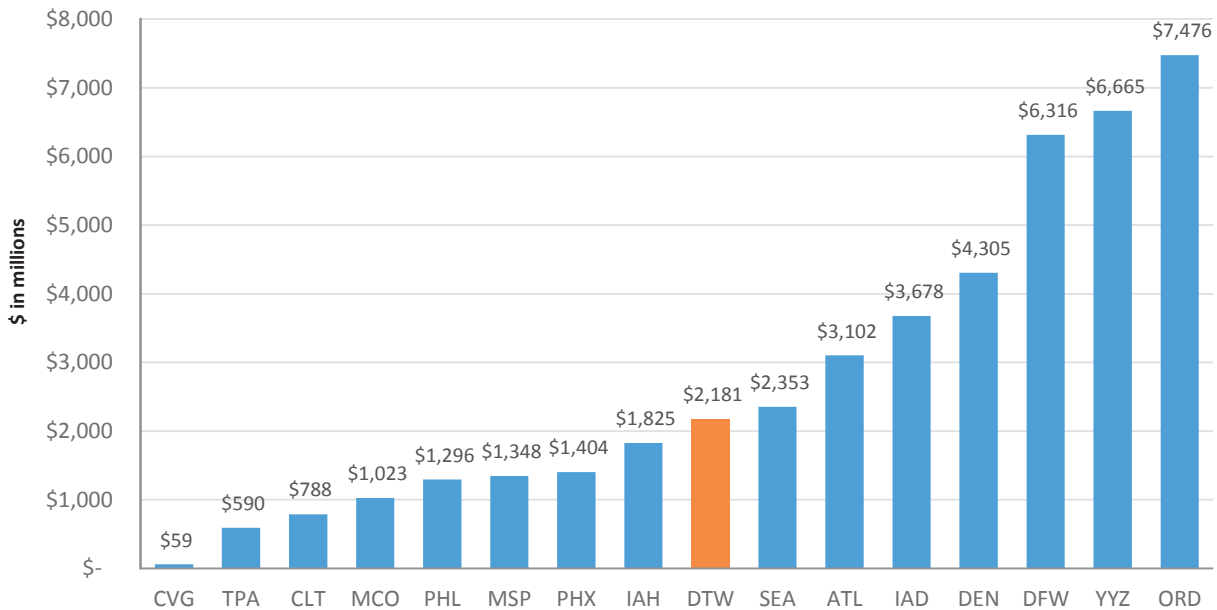
Source: WCAA



PEER AIRPORT DEBT COMPARISON

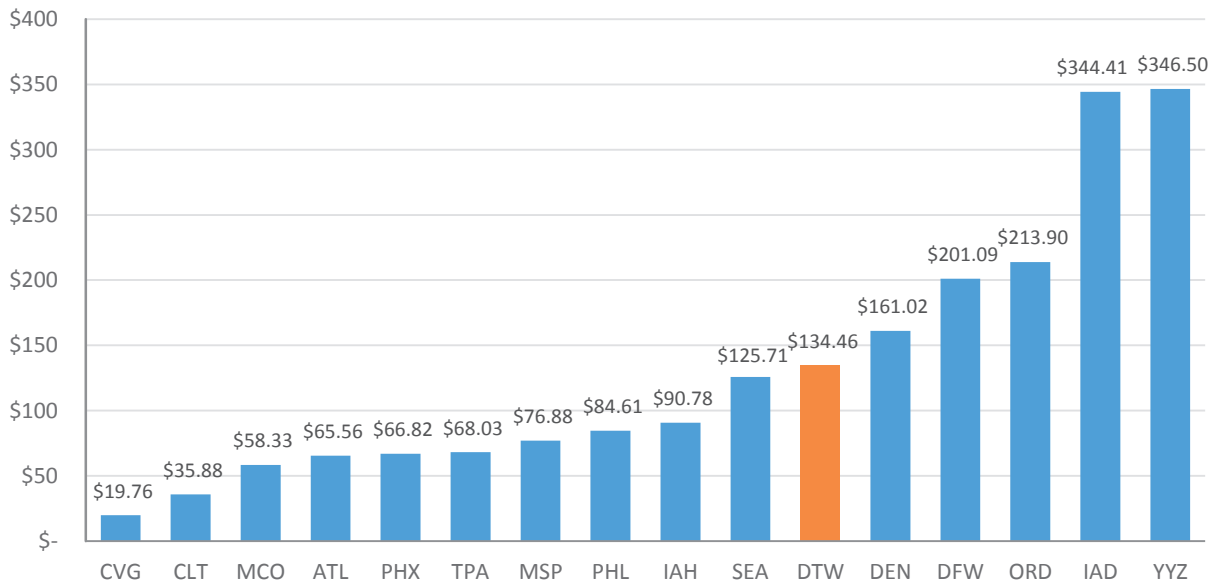
Figure I - 6 and Figure I - 7 below compare the Airport’s indebtedness to other large hub airports in terms of gross and net debt service by enplanement, respectively. As both charts illustrate, the Airport’s debt service per enplanement is competitive among peer airports. Additionally, the Airport has completed significant components of traditional airport capital improvement plans (terminals, runways, etc.). The Airport’s FY 2016 – FY 2020 CIP is considered to be moderate for a large hub airport with limited near-term capital investments.

Figure I - 6: Gross Debt Service among Per Airports FY 2014



Source: 2015 ACI Benchmark Survey (2014 data)

Figure I - 7: Gross Debt Service per Enplanement among Peer Airports FY 2014



Source: 2015 ACI Benchmark Survey (2014 data)

# FIVE-YEAR FINANCIAL OUTLOOK

The purpose of the Five-Year Financial Outlook (the Outlook) is to provide a strategy for the Authority's financial goal of maintaining a cost competitive rate structure among large US hub airports. It provides a starting point for making financial decisions regarding changes to service levels, capital investments and issuing future debt. Using the Outlook, the Authority's Board and Senior Leadership team can see how today's decisions will impact airline rates and charges over a five-year horizon. The Outlook is the culmination of three evaluations; (1) passenger demand for air service, (2) historical expenditures and revenue trends and (3) financing strategic priorities and obligations.

## PASSENGER DEMAND FOR AIR SERVICE

Earlier in the Budget Book is an analysis of the aviation industry and the social-economic profile of the Air Trade Area (see State of the Aviation Industry starting on page C-1). It demonstrates that the aviation industry is doing well with the continuing demand for air travel and the profitability of the airlines. The Air Trade Area's population is stable, diverse and affluent, all positive indicators of strong O&D passenger demand. Further, Delta has demonstrated a commitment to hubbing operations at the Airport with an increasing focus on it being an international gateway to Asia. Historically, airlines have reacted to positive economic news by adding capacity to meet increased demand and it would be reasonable to expect additional enplanement growth at the Airport.

Where, how and when carriers schedule routes is no longer just a primary reaction to economic factors. The previous business model was based on gaining market share and passenger volume through short-term, lower cost per ticket strategies that focused on taking customers away from the competition. Airlines are now changing their business strategies and are making the determination on how to match revenues to cost. The goal is determining what level of capacity will provide the maximum return. Delta and the other legacy airlines are maximizing profitability by retiring smaller, regional jets in favor of larger, more fuel efficient aircraft. This equipment up-gauging maintains a consistent supply of available seats while decreasing total operations. On the strength of consumer spending, the US Gross Domestic Product (GDP) grew at an annualized rate of 3.9 percent in the second quarter of CY 2015, better than the average annual 2.2 percent growth between 2010 and 2013. In turn, the legacy airlines have responded with moderate growth in capacity at or below 3.0 percent, approximately the rate of US economic growth.

Low-cost and small airlines such as Southwest, JetBlue and Spirit are taking an aggressive approach by growing their fleets and adding seat capacity. Their strategy is to grow revenues by adding routes and increasing frequencies to ultimately gain market share surrendered by the legacy carriers during a period of capacity reductions. As an example, since CY 2013, Spirit added 51 new routes (47.7 percent) and 62.7 percent more flights system-wide. Five of the new routes serve the Airport with non-stop service to Atlanta (ATL), Boston (BOS), Kansas City (MCI), New Orleans (MSY) and Minneapolis (MSP). Prior to these additions, only Delta provided non-stop service to MCI, MSY and MSP. The FY 2016 Budget forecasts that these route additions will result in Spirit increasing their market share at the Airport by nearly one percentage point over the FY 2015 Budget.

Positive economic and demographic factors, coupled with the industry's growth-centric strategy, especially on the side of the low-cost carriers, suggests moderate enplanement growth. The Five-Year Outlook starts with the FY 2016 forecast of 16.6 million enplanements, an increase of 3.1 percent from FY 2015 Budget and assumes a compounded annual growth rate (CAGR) of 1.0 percent through FY 2020.

## HISTORY OF REVENUES & EXPENDITURES

The second component of the Outlook's analytical model is an examination of the Airport's historic revenues and expenditures. The model uses eight years of actual financial data from FY 2007 to FY 2014 (the most recently closed

fiscal year) to identify trends, understand the impacts of management decisions and calculate the compounded annual growth rate (CAGR). Key findings are discussed below:

**Non-Airline Revenues** – Despite a non-airline revenue per enplanement CAGR of 1.6 percent, non-airline revenue growth was flat during the period between FY 2007 and FY 2014 (\$134.3 and \$134.2 million, respectively). This was because, during the same time period, enplanements declined by 1.9 million (-1.5 percent CAGR). The Airport’s success in generating additional non-airline revenue per enplanement was achieved through various strategies. Additional advertising and rate adjustments led to parking market share gains. Higher car rental revenue was driven by industry-wide price increases and car rental marketing departments working with event planners to generate additional revenue opportunities. Per passenger concessions revenue improved when the North Terminal opened in 2008 and out-performed concessions generated at the, now decommissioned, L.C. Smith and Berry terminals.

Shuttle bus revenue is the one notable decline in non-airline revenues over the eight-year span. It decreased by \$3.2 million as a result of transferring the responsibility of providing employee shuttle services directly to the airlines. The decline in revenue was offset by a comparable decrease in expenses.

**Operating Expenses** – At a CAGR of 2.3 percent, the operating expenses growth since FY 2007 is moderate. Operating expense trends are discussed below:

- The CAGR for salaries and benefits is 0.8 percent since FY 2007 as annual economic enhancements to bargaining unit contracts have been offset by employee health insurance cost-sharing measures and a series of work force reduction measures since FY 2008.
- Contractual Services, which includes parking management, shuttle bus, janitorial and security services, totaled \$51.5 million in FY 2014 compared to \$33.7 million in FY 2007, a CAGR of 6.3 percent. This increase can be attributed to a change in accounting policy. Prior to FY 2009, janitorial services at the McNamara Terminal were being accounted for under Buildings & Grounds.
- Utilities expenses have grown from \$25.6 million in FY 2007 to \$28.4 million in FY 2014, a CAGR of 1.5 percent. The increase is less than the change in the U.S. Department of Labor’s Producer Price Index (PPI) for utility costs between October 2006 and September 2014, a CAGR of 2.7 percent for the same time span.
- Repair and maintenance for buildings, grounds and equipment have remained virtually unchanged. In FY 2007, repair and maintenance expenses totaled \$33.3 million as compared to \$31.1 million in FY 2014 (-1.0 percent CAGR). As many Airport assets have reached, or are close to surpassing their useful life, historic funding levels are not sustainable and additional resources have been budgeted since.

**Non-operating Expenses** – Since FY 2007, non-operating expenses have grown from \$56.7 million to \$101.0 million in FY 2014, a CAGR of 8.6 percent. This is largely due to net debt service growth. Over the span of the decade since the Authority’s inception, the Airport has financed and constructed two state-of-the-art passenger terminals attributing much of the growth in debt service.

**Airline Revenues** – Historical airline revenue is a factor of the Airport’s operating and non-operating expenses less the generation of non-airline revenue (e.g. parking, concessions, car rentals, etc.). Pursuant to the terms of the Airport’s Use and Lease Agreement, the Authority calculates airlines’ activity fee rates (Landing Fees) under a full residual methodology. As such, the eight year CAGR for airline revenue is 8.9 percent which is primarily attributed to the growth in net debt service of 8.6 percent, as stated above.

In FY 2009, the Authority opened the North Terminal and, with the concurrence of the airlines, changed the Airport’s rate setting approach to a terminal/airport cost center model. This caused the airline rent CAGR to increase by 18.0 percent. Again, the increase is primarily attributed to the debt service associated with terminal construction. Under the new rate setting methodology, debt service related to terminal investment is recaptured through airline rental revenue.

	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	CAGR
	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	FY 2007 to FY 2014
<b>Airline Revenues</b>									
Landing Fees	\$ 58,741	\$ 84,022	\$ 59,723	\$ 69,651	\$ 68,473	\$ 66,719	\$ 64,922	\$ 75,780	3.7%
Rent	26,642	26,934	65,977	70,061	73,652	85,810	84,004	84,915	18.0%
Facility Use Fee	7,525	7,885	6,320	5,950	6,638	7,092	7,262	8,362	1.5%
<b>Total Airline Revenues</b>	<b>92,908</b>	<b>118,842</b>	<b>132,021</b>	<b>145,663</b>	<b>148,764</b>	<b>159,621</b>	<b>156,187</b>	<b>169,057</b>	<b>8.9%</b>
<b>Non-Airline Revenues</b>									
Parking	58,859	58,683	49,911	48,309	54,145	56,091	57,829	61,187	0.6%
Car Rental	20,859	21,493	17,540	17,273	18,984	19,626	20,160	21,909	0.7%
Concessions	29,078	30,043	30,563	30,427	31,261	31,714	31,187	31,874	1.3%
Ground Transportation	7,394	7,056	6,510	4,739	4,944	4,883	5,095	5,453	-4.3%
Shuttle Bus	5,254	5,773	5,655	5,467	5,869	5,211	2,502	2,032	-12.7%
Utility Service Fee	4,078	4,498	4,320	4,332	4,879	4,790	5,152	4,904	2.7%
Rent	3,906	3,783	3,767	3,454	2,761	2,255	2,612	2,975	-3.8%
Other Revenue	2,757	1,414	671	1,024	2,183	1,160	2,832	1,742	-6.3%
Charges For Services	2,121	2,489	2,223	2,032	2,107	1,848	2,095	2,100	-0.1%
<b>Total Non-Airline Revenues</b>	<b>134,307</b>	<b>135,231</b>	<b>121,161</b>	<b>117,057</b>	<b>127,133</b>	<b>127,578</b>	<b>129,463</b>	<b>134,177</b>	<b>0.0%</b>
<b>Non-Operating Revenues</b>	<b>3,015</b>	<b>2,290</b>	<b>1,730</b>	<b>1,465</b>	<b>1,477</b>	<b>1,627</b>	<b>1,562</b>	<b>1,387</b>	<b>-10.5%</b>
<b>Total Revenues</b>	<b>230,229</b>	<b>256,363</b>	<b>254,912</b>	<b>264,185</b>	<b>277,374</b>	<b>288,826</b>	<b>287,212</b>	<b>304,621</b>	<b>4.1%</b>
<b>Operating Expenses</b>									
Salaries & Wages	46,151	47,322	46,274	43,166	44,225	43,159	41,974	46,661	0.2%
Employee Benefits	23,725	27,891	26,422	27,556	25,840	25,268	25,512	27,027	1.9%
Materials and Supplies	4,061	5,392	5,969	5,177	6,457	6,047	7,288	8,769	11.6%
Parking Management	10,325	8,906	7,082	6,505	6,794	6,048	6,280	6,630	-6.1%
Shuttle Bus	8,251	9,221	8,483	8,495	8,750	8,099	6,501	6,123	-4.2%
Janitorial	2,417	2,403	10,576	10,972	11,143	11,480	11,383	11,792	25.4%
Security	3,433	2,758	2,657	2,293	2,401	2,288	2,260	2,511	-4.4%
Contractual Services	9,239	13,519	14,644	14,166	19,354	16,613	18,524	24,490	14.9%
Hotel Expenses	-	5	4	4	4	-	-	-	n/a
Insurance	2,826	2,593	2,710	2,532	2,294	2,370	2,298	2,200	-3.5%
Utilities	25,585	29,558	26,616	25,447	24,524	26,280	26,628	28,441	1.5%
Buildings & Grounds	20,569	22,094	13,021	19,313	18,141	16,519	17,669	15,092	-4.3%
Equipment Repair	12,742	13,435	15,740	17,820	17,193	15,142	15,210	16,051	3.4%
Other Operating Expense	2,258	4,765	3,374	3,394	1,757	4,039	212	4,460	10.2%
O&M Capital	1,942	2,086	1,500	2,774	7,444	3,645	3,647	3,371	8.2%
<b>Total Operating Expenses</b>	<b>173,524</b>	<b>191,948</b>	<b>185,074</b>	<b>189,613</b>	<b>196,321</b>	<b>186,996</b>	<b>185,388</b>	<b>203,619</b>	<b>2.3%</b>
<b>Non-Operating Expense</b>	<b>56,705</b>	<b>64,415</b>	<b>69,838</b>	<b>74,571</b>	<b>81,053</b>	<b>101,831</b>	<b>101,824</b>	<b>101,002</b>	<b>8.6%</b>
<b>Total Expenses</b>	<b>230,229</b>	<b>256,363</b>	<b>254,912</b>	<b>264,185</b>	<b>277,374</b>	<b>288,826</b>	<b>287,212</b>	<b>304,621</b>	<b>4.1%</b>
<b>Net Income (Loss)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>n/a</b>
Enplanements	18,108,090	17,831,231	15,941,132	15,876,381	16,226,201	16,169,584	16,077,652	16,216,673	-0.8%

## EXPENDITURE PRIORITIES & OBLIGATIONS

The third component of the Outlook is identifying future financial obligations, unavoidable costs and estimating the expense to implement the Authority's strategic initiatives.

### COST TO IMPLEMENT THE AUTHORITY'S STRATEGIC PRIORITIES

The Authority's strategic plan identifies several priorities that will require financial investments and/or the reallocation of resources. The initiatives with the greatest financial impact are discussed below.

**Project Oasis** – Project Oasis is one of the Authority's customer service initiatives which aims to establish a welcoming and cohesive airport campus. Initial Implementation include:

- Improve the landscaping at the five main road entry points onto the Airport campus
- Establish consistent landscaping along key corridors
- Convert street lighting to a consistent LED light and pole standard
- Standardize decorative fencing
- Provide building monument identification signs for major facilities on the airport campus
- Provide street addresses for airport campus facilities

The Outlook includes funding for the initial three-year implementation and consideration for additional maintenance and replacement expenses beyond the initial implementation.

**Preventative Corrective and Maintenance** – As discussed previously, the Airport's repair and maintenance spending has remained flat since FY 2007 as a number of maintenance projects were deferred to manage expenses while Northwest Airlines (now Delta) underwent bankruptcy reorganization and economic recession resulted in financial hardship for all airlines. The Authority's Operations and Maintenance division along with Facilities Design and Construction division, have identified projects that must be performed in the upcoming five years in order to maintain operational excellence and protect capital assets. These plans identify a corrective course of action to address deferred maintenance, plan for non-routine maintenance projects and recommend preventative maintenance measures beyond what has historically been performed. While some projects are undertaken in scheduled intervals (e.g. pond dredging once every 30 years), others are currently being defined and plans are under development to address the next 20 years.

The Authority's operational departments have developed five- and ten-year maintenance and renewal plans for the following asset categories:

- Airfield pavement
- Bridges and roadways
- Fleet and equipment
- Power Plant and electrical distribution systems
- Storm water systems and pond dredging

The estimated cost to implement these plans is included in the Outlook.

**Environmental Sustainability** – The Authority aims to continue developing environmentally conscious policies and procedures that benefit airport users. An important area of emphasis is the supply of electrical power, heated water and Heating, Ventilation and Air Conditioning (HVAC) Systems.

The North Power Plant was recently fitted with four high efficiency boilers, funded by the FAA Voluntary Airport Low Emission (VALE) Grant program. A water recycling unit was also installed allowing water to be cleaned and reused



through the boilers. The new boiler system is not only more reliable than the equipment it replaced, but it consumes a fraction of the fuel and water previously required, resulting in benefits to the environment and a substantial cost savings. Through the sustainability program, the Authority will continue to seek out opportunities to benefit the environment while improving the operational efficiency of the Airport.

Rehabilitation of the North Power Plant, including improvements to the chilled water system and study of a combined cycle waste heat boiler to take advantage of waste heat produced by an emergency generator, will begin in FY 2016.

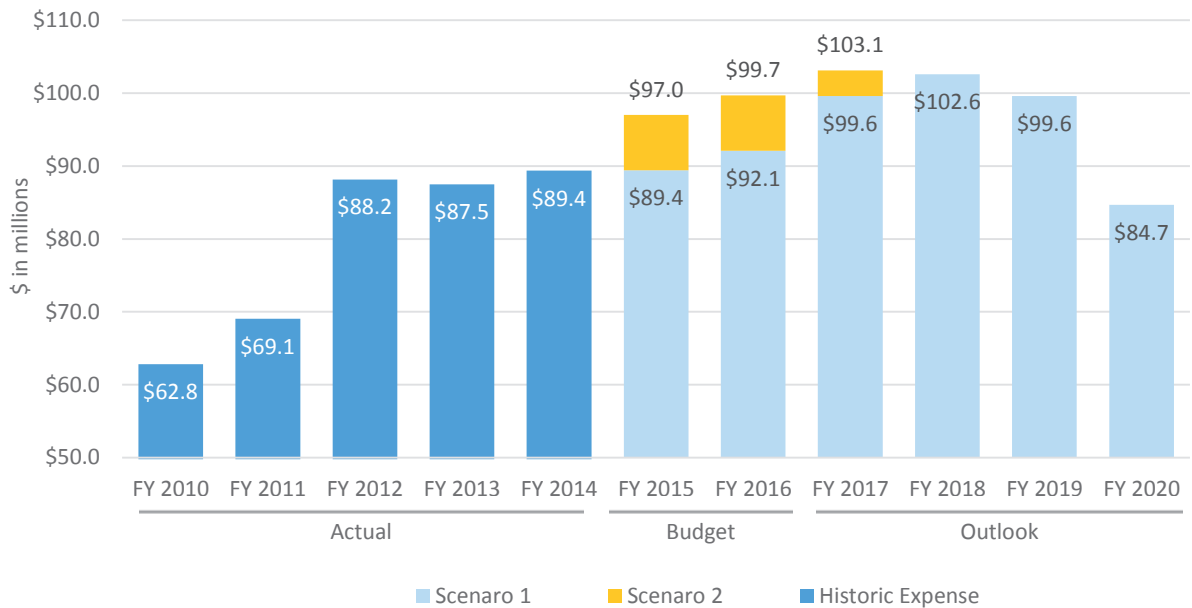
The Authority has contracted with a national consulting firm to review the sustainable policies in place at the Authority in an effort to gain additional ideas and best practices from peer airports and to discuss potential new projects. The primary efforts currently being investigated include the potential shift of some of the maintenance fleet to Compressed Natural Gas (CNG) power, installation of a CNG Filling Station and third party development of photo-voltaic fields at both airports.

**FINANCIAL OBLIGATIONS AND UNAVOIDABLE COSTS**

The Airport has unavoidable or mandated financial obligations that must be factored into a five-year financial outlook. Those with the greatest impact to the Outlook are listed below.

**Debt Service** – The Airport’s FY 2016 net debt service obligation, the portion paid from airline rates and charges, is \$92.1 million or approximately 29.0 percent of budgeted expenses, the O&M budget’s largest expense category. The Outlook explored two scenarios to manage the impact of net debt service to the Operating fund. The first scenario holds net debt service flat over the five year horizon by using excess reserves and discretionary funds to cover the debt service spike and not pass that increase to the airlines. The second scenario represents the net debt service expense “as-is”. The two scenarios are charted below.

Figure J - 1: Net Debt Service Outlook - Scenarios 1 & 2



Source: WCAA

**Collective Bargaining Agreements** – The Authority’s employees are represented by ten bargaining units. The economic enhancement provisions of the collective bargaining agreements include a 1.5 percent annual increase to base pay and performance bonuses ranging from 0.5 to 2.0 percent.

**Health Care Benefits** – Historically, health care cost inflation has outpaced year-over-year increases in the consumer price index (CPI). While health care inflation has slowed since 2009, it still out paces the CPI and other inflationary indices. Like many employers, the Authority has undertaken a number of cost-saving and cost-sharing initiatives to help contain health care benefit costs.

**Sustain Current Service Levels** – Since FY 2009, the Authority has implemented a series of service level modifications to hold costs flat as warranted by economic recession and a decline in enplanements and aviation activity at the Airport. Moving forward, the Authority does not foresee additional service level reductions in the five-year horizon of the Outlook. Commodities or services historically subject to price volatility greater than the CPI are factored into the model.

## FIVE-YEAR FINANCIAL OUTLOOK

The following section outlines the Outlook of O&M revenues and expenditures for FY 2016 through FY 2020. The Outlook demonstrates the Authority’s ability to achieve its financial goals while also meeting financial obligations. It is based upon a series of conservative assumptions at the revenue/expense category or subcategory level. The Outlook does not make across-the-board assumptions for unidentified strategies to improve revenue or lower expenses.

There are three valuable conclusions that can be drawn from the Outlook. The first is that the demographic and economic base of the Air Trade Area is stable, providing consistent demand for O&D air travel. Further, the Airport’s role as a hub and international gateway to Asia in Delta Air Line’s network, provides a stable level of connecting passengers. Combining these two factors, the Outlook foresees slight growth in passenger enplanements at 1.0 percent per year.

Secondly, historic trends in operating expenses have stayed essentially flat since the Authority’s creation in 2003. As illustrated on page J - 3, the Airport’s operating expenditures between FY 2007 and FY 2014 grew by a 2.3 percent CAGR, comparable to the CPI’s 2.2 percent CAGR. However, the Airport’s debt service has been the main driver of the CAGR increase, with 8.6 percent growth. The increase is largely associated with the construction of two new terminals. The current Capital Improvement Plan contains no projects of that magnitude that would drive double-digit annual increases in debt service over the next five years.

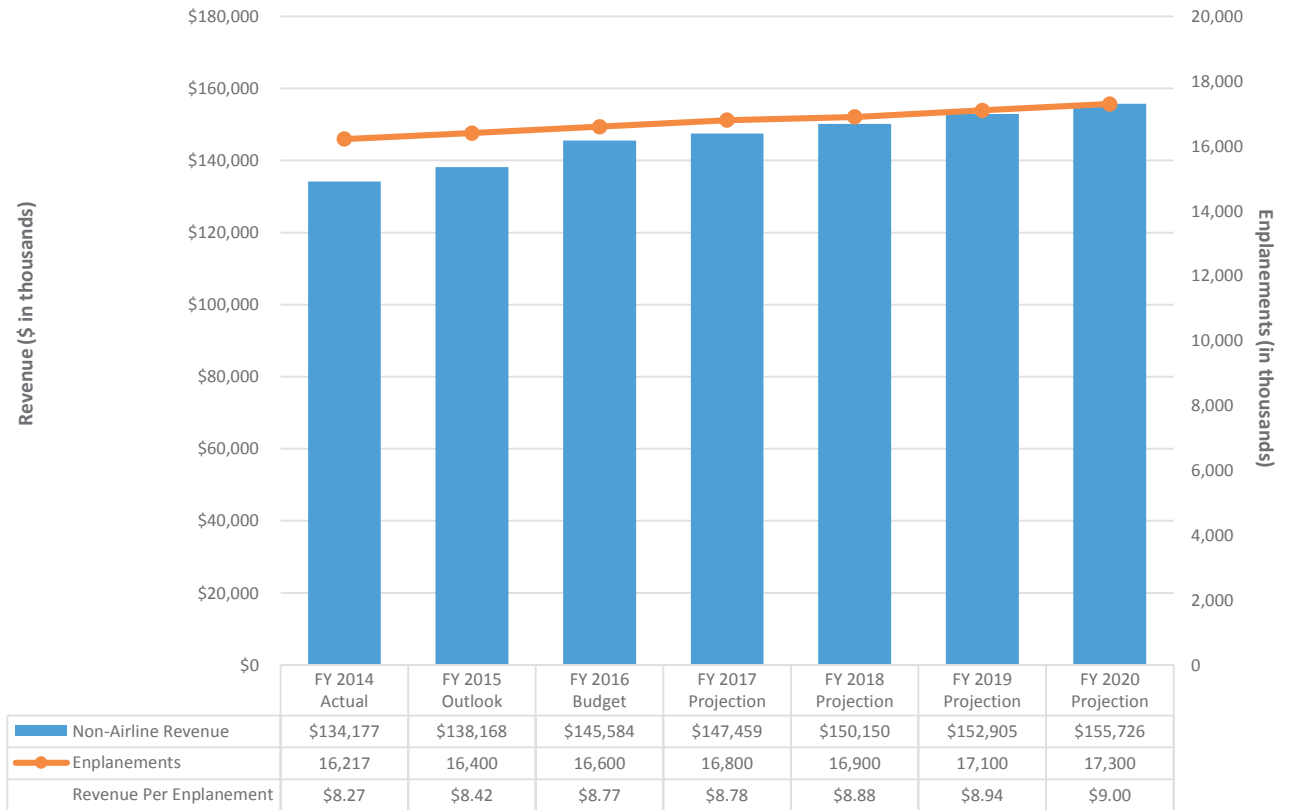
Lastly, the Outlook analysis concludes that the Authority has the opportunity to fund its strategic priorities while meeting all financial obligations at a CAGR less than PPI inflation. In summary, the Airport’s goal to maintain a cost competitive rate structure among large US hub airports is achievable.

## NON-AIRLINE REVENUE OUTLOOK

Non-airline revenues are projected to increase to \$145.6 million in the FY 2016 budget, primarily attributable to parking and concession revenue. In FY 2016, the Airport will see the full year revenue impact of the \$1.00 per day parking rate increase established February 2015. During FY 2015, new food and beverage concession concepts were established in the McNamara Terminal. Thus far, the new concepts have increased concession revenue and the full year impact will drive the FY 2016 budget. While there are many positive developments and trends, the Outlook for non-airline revenue in 2020 is a conservative \$155.7 million. This represents a CAGR of 1.7 percent, slightly less than the ten-year CAGR of 2.2 percent.

Sustaining non-airline revenue growth without a substantial corresponding increase in passenger enplanements is not realistic. Other opportunities for growth exist in non-passenger dependent revenue. The Authority’s economic development efforts are focused on restoring losses in non-airline rentals by attracting cargo, freight and logistics services to develop and/or lease airport properties. The successful attraction of non-airline tenants would be reason to increase the five-year forecast beyond the projected 1.7 percent.

Figure J - 2: Non-Airline Revenue Five Year Outlook



EXPENSE OUTLOOK

The Outlook expects operating expenses to grow from \$211.1 million in FY 2016 to \$230.5 million in FY 2020, a 2.2 percent five-year CAGR.

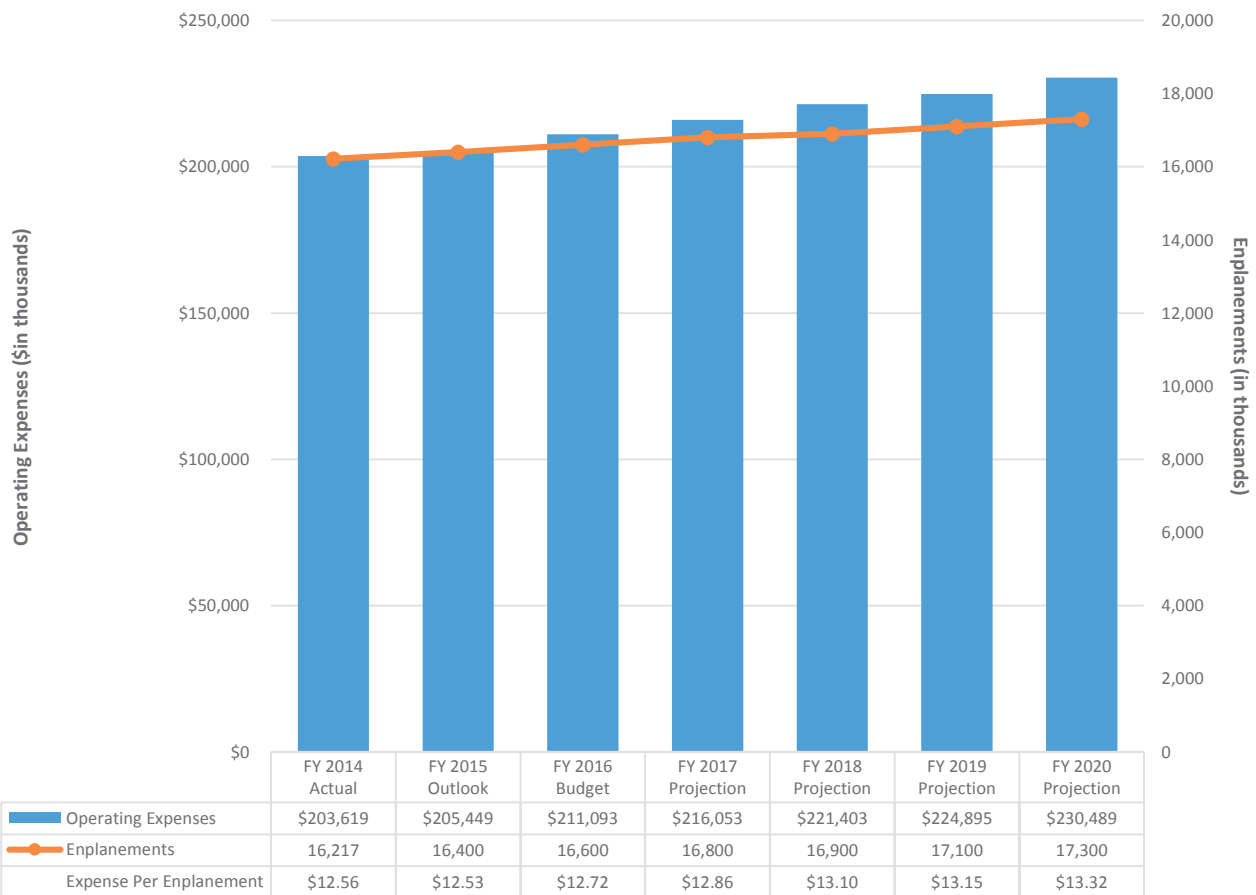
**Salaries & Benefits** – The Outlook expects nominal staffing levels growth over the five-year period. Economic enhancement provisions in the Authority’s collective bargaining agreements will drive salaries to grow by 2.0 percent per year. Fringe benefits are expected to grow at an annual rate of 3.0 percent.

**Professional & Contractual Services** – Current services are projected to grow by 2.0 to 3.0 percent, a conservative inflationary adjustment. Technology services are projected to grow by 4.0 percent annually for the maintenance and development of new or enhanced systems.

**Utilities** – The Outlook assumes a 4.0 percent annual increase in all utility rates with a 1.0 percent system-wide reduction in electricity consumption resulting from LED lighting projects in parking facilities and roadways.

**Repair & Maintenance** – The Outlook includes funding for the preliminary five and ten-year maintenance and renewal plans for bridge, airfield and roadway repairs, and replacement of fleet equipment.

Figure J - 3: Operating Expenses Five-Year Outlook



DEBT SERVICE COVERAGE

Figure J - 4 presents the Debt Service coverage ratio outlook for FY 2017 through FY 2020. As shown, net revenues generated in each year of the updated Projection Period are forecast to be sufficient to comply with the 1.25x coverage required by the rate covenant established in the Authority’s bond enabling legislation. The updated Debt Service coverage is projected to be between approximately 1.46x and 1.47x each year during the projection period.

Figure J - 4: Debt Service Coverage

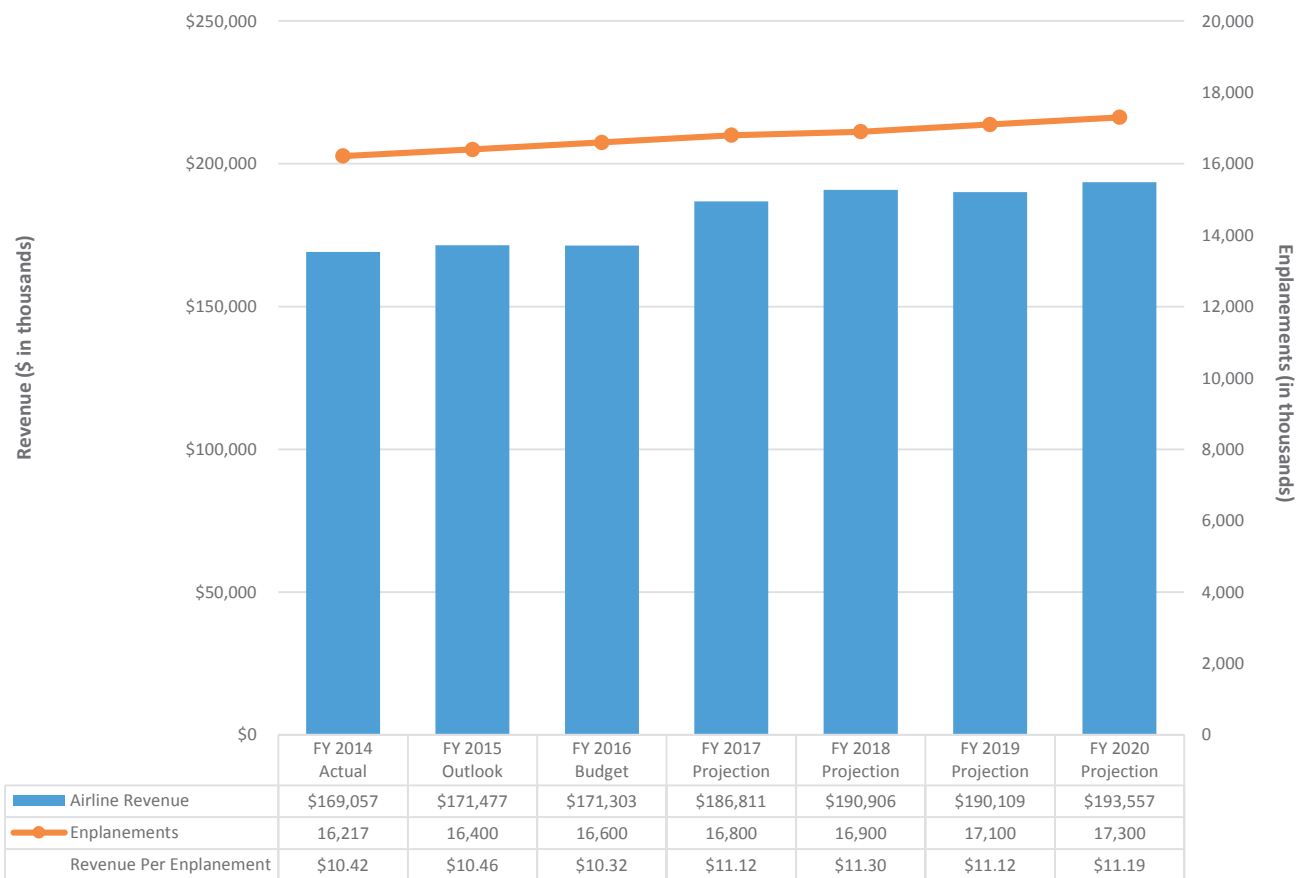


## AIRLINE REVENUE OUTLOOK

Calculated on an Airport-wide residual methodology, airline revenues are projected to increase to \$193.6 million in FY 2020, a \$22.3 million increase over the FY 2016 budget which represents a CAGR of 3.1 percent.

A general test of reasonableness for Airport user fees is airline cost per enplaned passenger. The airline CPE is calculated by dividing the Total Airline Requirement by the number of enplaned passengers at the Airport for any given year. Figure J - 5 presents the airline CPE for FY 2014 through FY 2020. The updated airline CPE at the Airport was approximately \$10.42 in FY 2014. The Airport’s estimated average Airline CPE is projected to increase from \$10.32 in FY 2016 to a five-year high of \$11.30 in FY 2018 and then decrease to \$11.19 in 2020. In summary, the airline CPE throughout the updated Projection Period continues to be considered reasonable compared to the historical CPE at the Airport, costs at other large-hub airports, and considering the ongoing role of the Airport as a hub in Delta’s network.

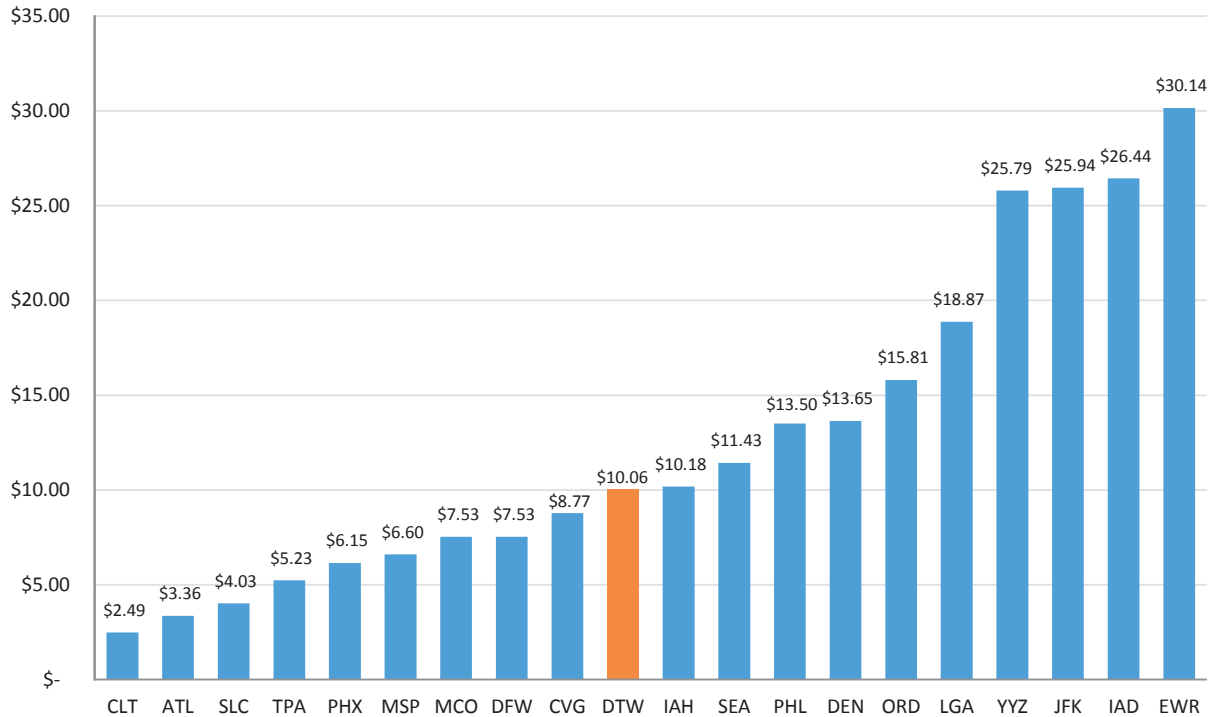
Figure J - 5: Airline Revenue Five-Year Outlook



**COST PER ENPLANED PASSENGER**

Figure J - 6 represents the Airport’s CPE relative to other airports in the US participating in ACI’s Preliminary FY 2014 Benchmarking Survey. As the chart illustrates, the Airport’s CPE is reasonable as compared to other large-hub US airports, especially when noting that the Authority has built two new terminals, a significant capital program. The comparatively low CPE, combined with the modern facilities, strategically positions the Airport well into the foreseeable future.

Figure J - 6: FY 2015 Airline Cost per Enplanement - Peer Airports



Source: ACI-NA 2015 (FY 2014) Benchmarking Survey

**FINANCIALLY SUSTAINABLE & COST COMPETITIVE**

Based on the analysis conducted to perform the Five-Year Financial Outlook, the Airport’s plan of finance will be able to meet all contractual and debt obligations, as well as fund strategic initiatives while remaining cost-competitive among peer airports. Demand for air service is resilient and the Authority foresees modest enplanement growth of approximately 1.0 percent per year. In turn, enplanement growth drives certain non-airline revenue streams which partially offsets inflationary driven cost increases foreseen in the five-year horizon. Over the past ten years, debt service is the largest component of the cost increases (8.3 percent CAGR), however in the upcoming five years, the debt program has been structured so that annual debt service is flat. The model used to develop the Outlook takes into consideration the expense to undertake various strategic initiatives and finds that those initiatives can be accomplished with a CAGR of 1.0 percent through FY 2020. At that rate of growth, the airline revenue per enplanement will increase from \$10.42 to \$11.19 between FY 2014 to FY 2020. As compared to other large hub airports, the Airport’s rates and charges will remain reasonable and competitive on a CPE basis in FY 2020.

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# APPENDIX

## APPENDIX A: AIRPORT RATES & CHARGES

	FY 2015		FY 2016
	Approved Budget	Mid-Year Projection	Approved Budget
<b>Airfield Activity and Rates</b>			
Enplanements	16,100,000	16,100,000	16,600,000
Airline Cost per Enplanement	\$ 10.50	\$ 10.68	\$ 10.32
Landed Weights (thousands of pounds)	20,700,000	20,700,000	20,900,000
Signatory Airline Landing Fee	\$ 3.44	\$ 3.58	\$ 3.66
Non-Signatory Airline Landing Fee	\$ 4.30	\$ 4.48	\$ 4.58
<b>South Terminal Activity and Fees</b>			
<b>Terminal Rental Rates</b>			
Signatory Airline	\$ 61.00	\$ 61.00	\$ 61.00
Non-Signatory Airline	\$ 71.00	\$ 71.00	\$ 71.00
International Facility Use Fee	\$ 5.50	\$ 5.50	\$ 5.50
<b>North Terminal Activity and Fees</b>			
<b>Terminal Rental Rates</b>			
Signatory Airline	\$ 128.00	\$ 128.00	\$ 115.00
Non-Signatory Airline	\$ 148.00	\$ 148.00	\$ 132.00
International Facility Use Fee	\$ 5.50	\$ 5.50	\$ 5.50
Shared Use Per Enplaned Passenger (Signatory)	\$ 4.43	\$ 4.43	\$ 3.80
Shared Use Per Enplaned Passenger (Non-Signatory)	\$ 5.10	\$ 5.10	\$ 4.37
<b>Common Use Gate Fees*</b>			
Signatory Airline	\$ 349.00	\$ 349.00	\$ 296.00
Non-Signatory Airline	\$ 402.00	\$ 402.00	\$ 341.00
<b>Overnight Aircraft Parking</b>			
<b>Common Use Gates**</b>			
Signatory Airline - Overnight	\$ 200.00	\$ 200.00	\$ 200.00
Non-Signatory Airline - Overnight	\$ 230.00	\$ 230.00	\$ 230.00
Signatory Airline - Hourly Rate	\$ 40.00	\$ 40.00	\$ 40.00
Non-Signatory Airline - Hourly Rate	\$ 50.00	\$ 50.00	\$ 50.00
<b>Remote Hardstand Aircraft Parking</b>			
Signatory Airline - Overnight	\$ 100.00	\$ 100.00	\$ 100.00
Non-Signatory Airline - Overnight	\$ 125.00	\$ 125.00	\$ 125.00
Signatory Airline - Hourly Rate	\$ 20.00	\$ 20.00	\$ 20.00
Non-Signatory Airline - Hourly Rate	\$ 25.00	\$ 25.00	\$ 25.00

**Notes:**

\* Common Use Gate Fee is for Narrow Body Equivalent aircraft. Fee is adjusted based on actual aircraft size; refer to "Definitions Section" of Airport Use & Lease Agreement.

\*\* Please refer to WCAA Gate Access Procedures for North Terminal Common Use Gates.

APPENDIX B: SUPPLEMENTAL AVIATION STATISTICS

DETROIT METROPOLITAN AIRPORT & PEER AIRPORTS

Figure APDX - 1: Average Daily Seats-Out Twelve-Months Ending September 30, 2015

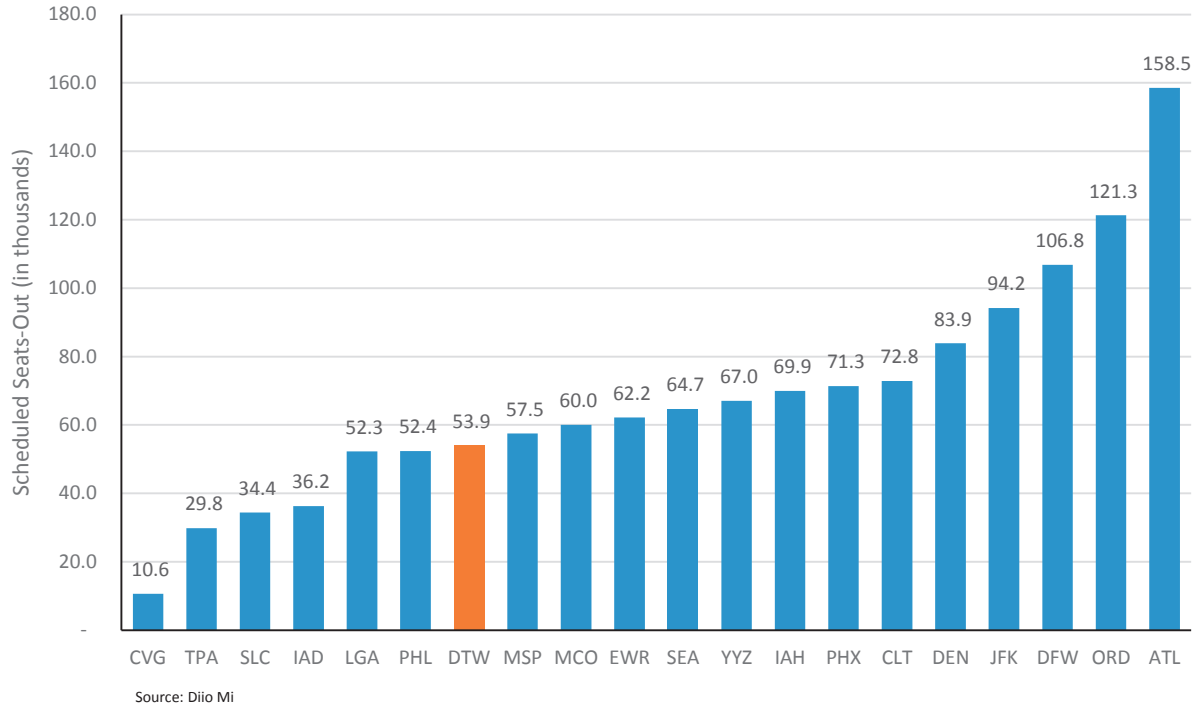


Figure APDX - 2: Average Daily Seats-Out Year over Year Change 2015 to 2014 Twelve-months Ending September 30

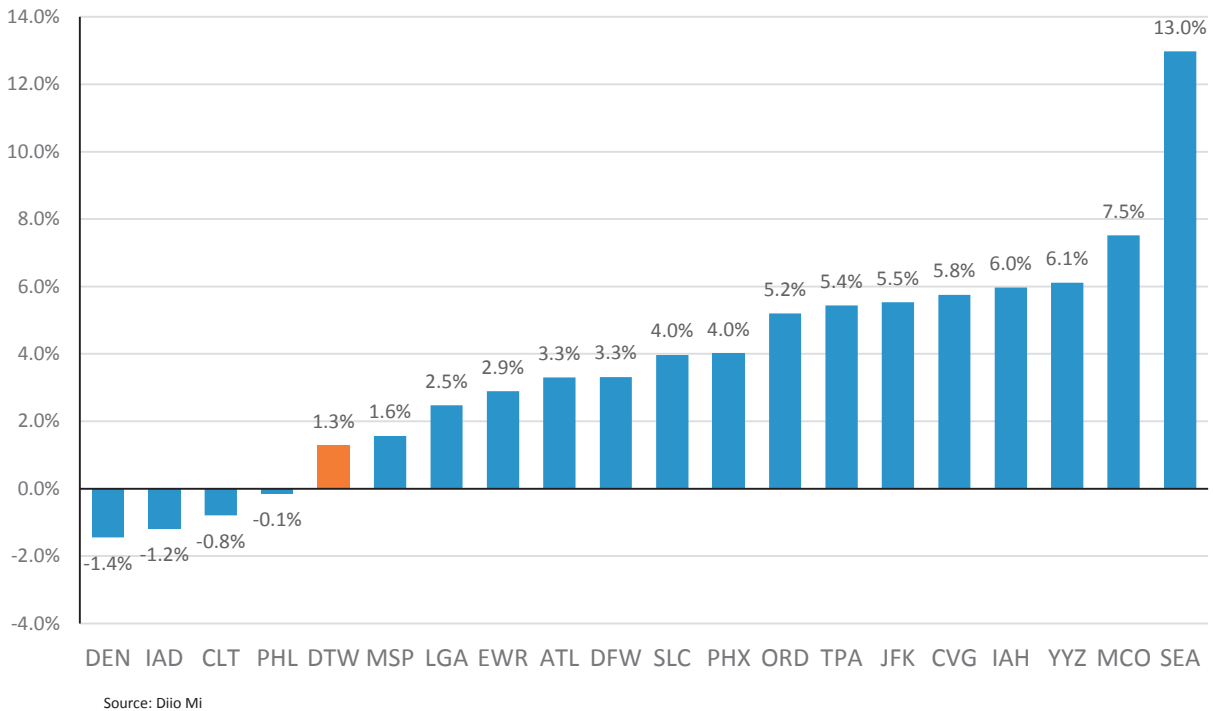
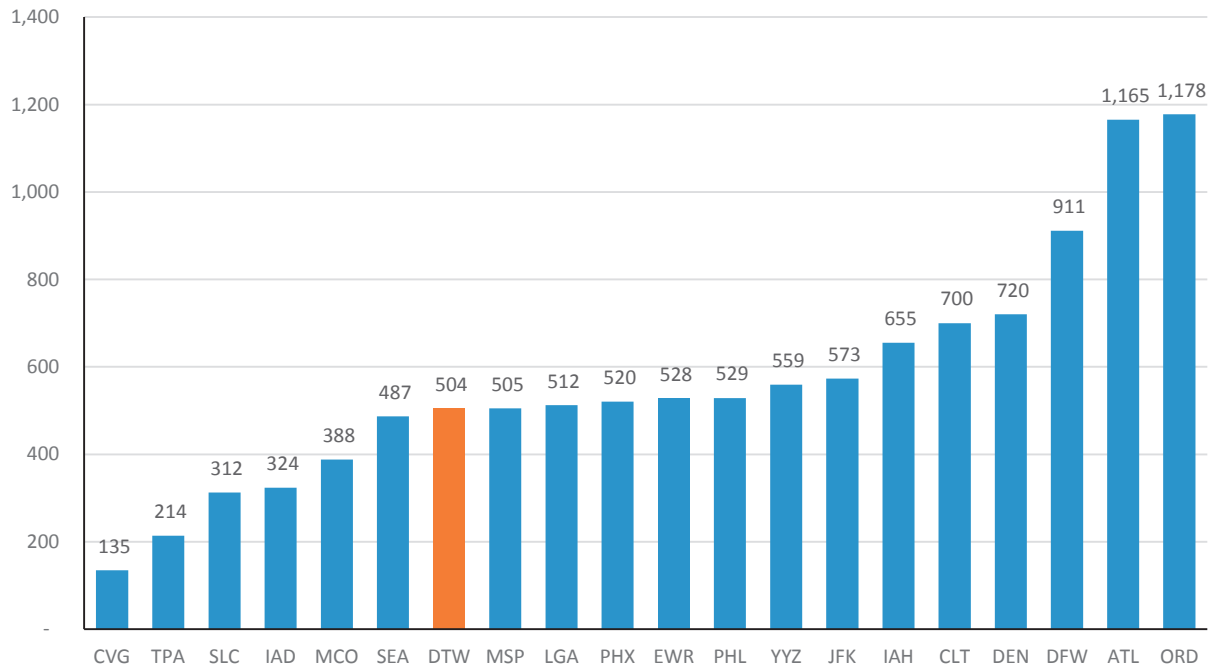
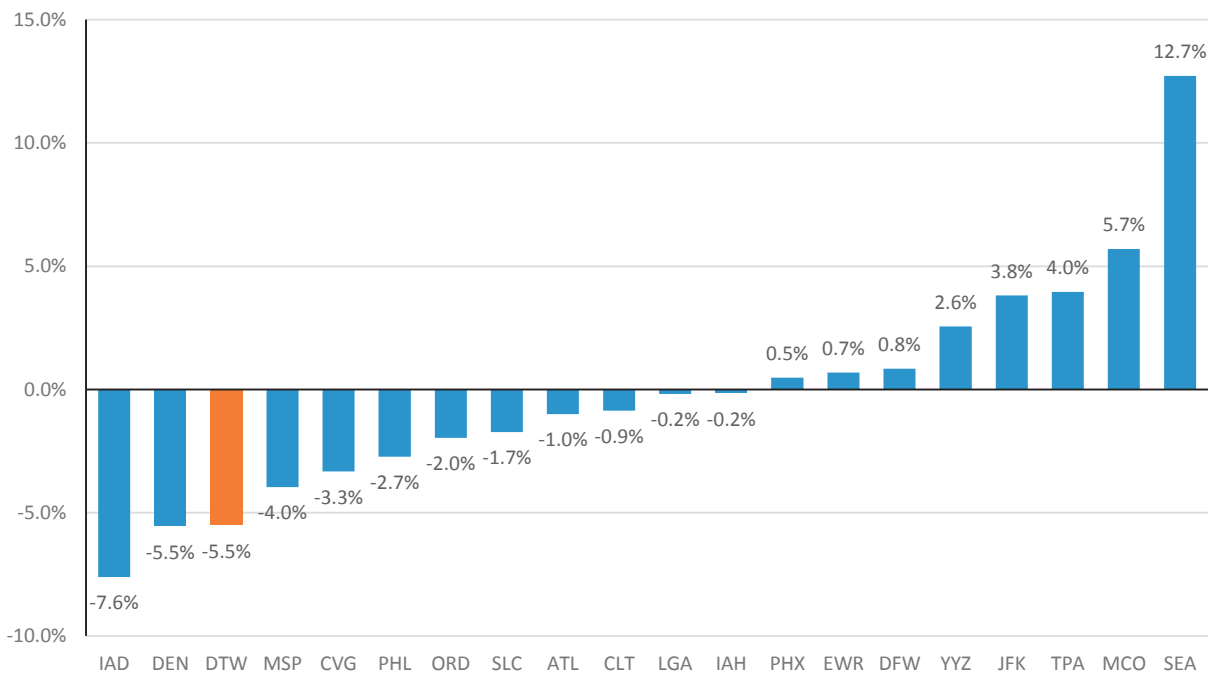


Figure APDX - 3: Average Daily Departures Twelve-Months Ending September 30, 2015



Source: Diio Mi

Figure APDX - 4: Average Daily Departures Year over Year Change 2015 to 2014 Twelve-Months Ending September 30



Source: Diio Mi

Figure APDX - 5: CY 2014 Movements Top 20 North American Airports

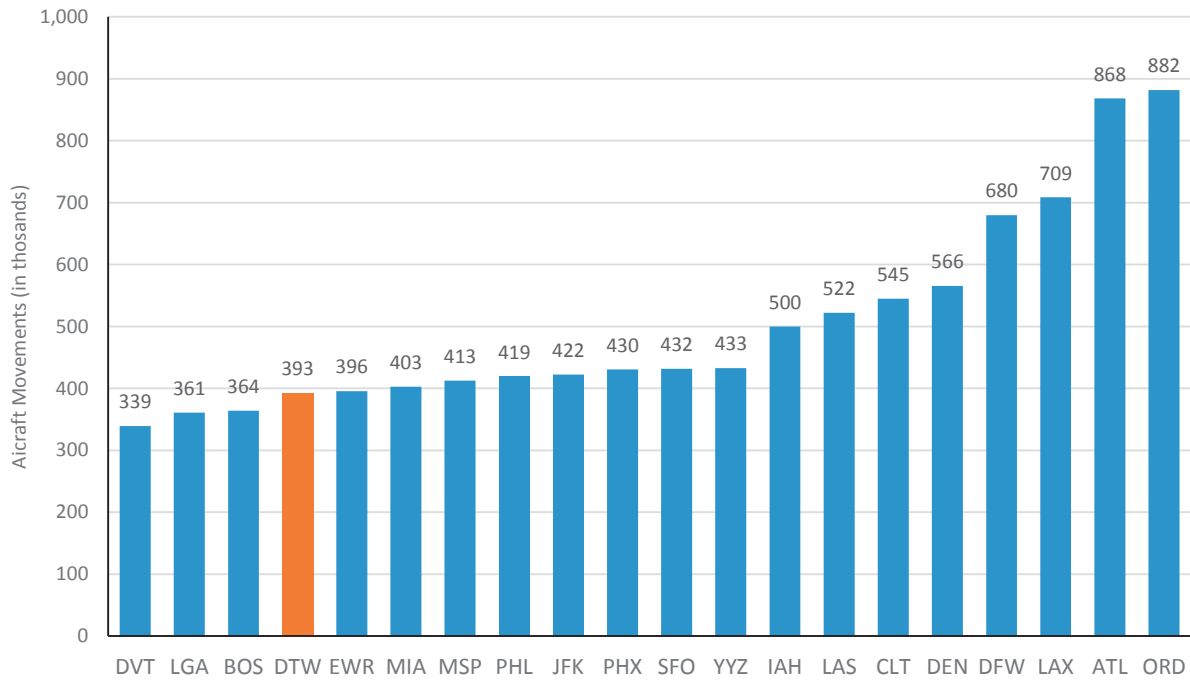


Figure APDX - 6: CY 2014 Commercial Passengers Top 20 North American Airports

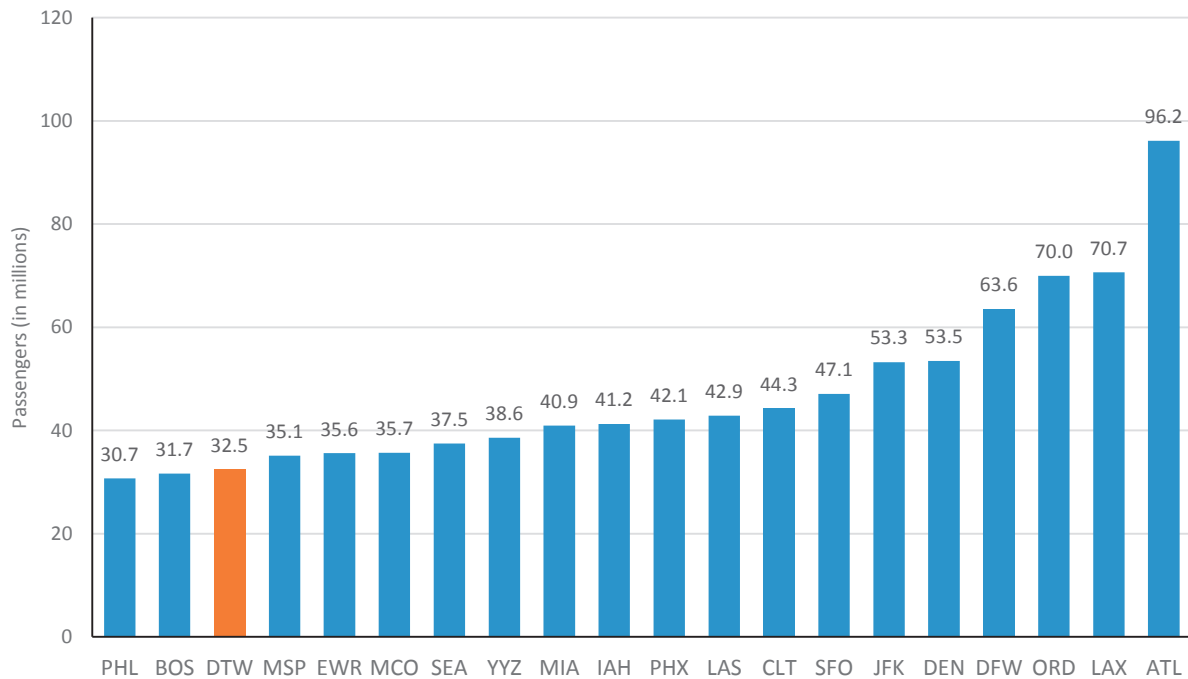


Figure APDX - 7: CY 2014 Cargo Tonnage Top 30 U.S. Airports

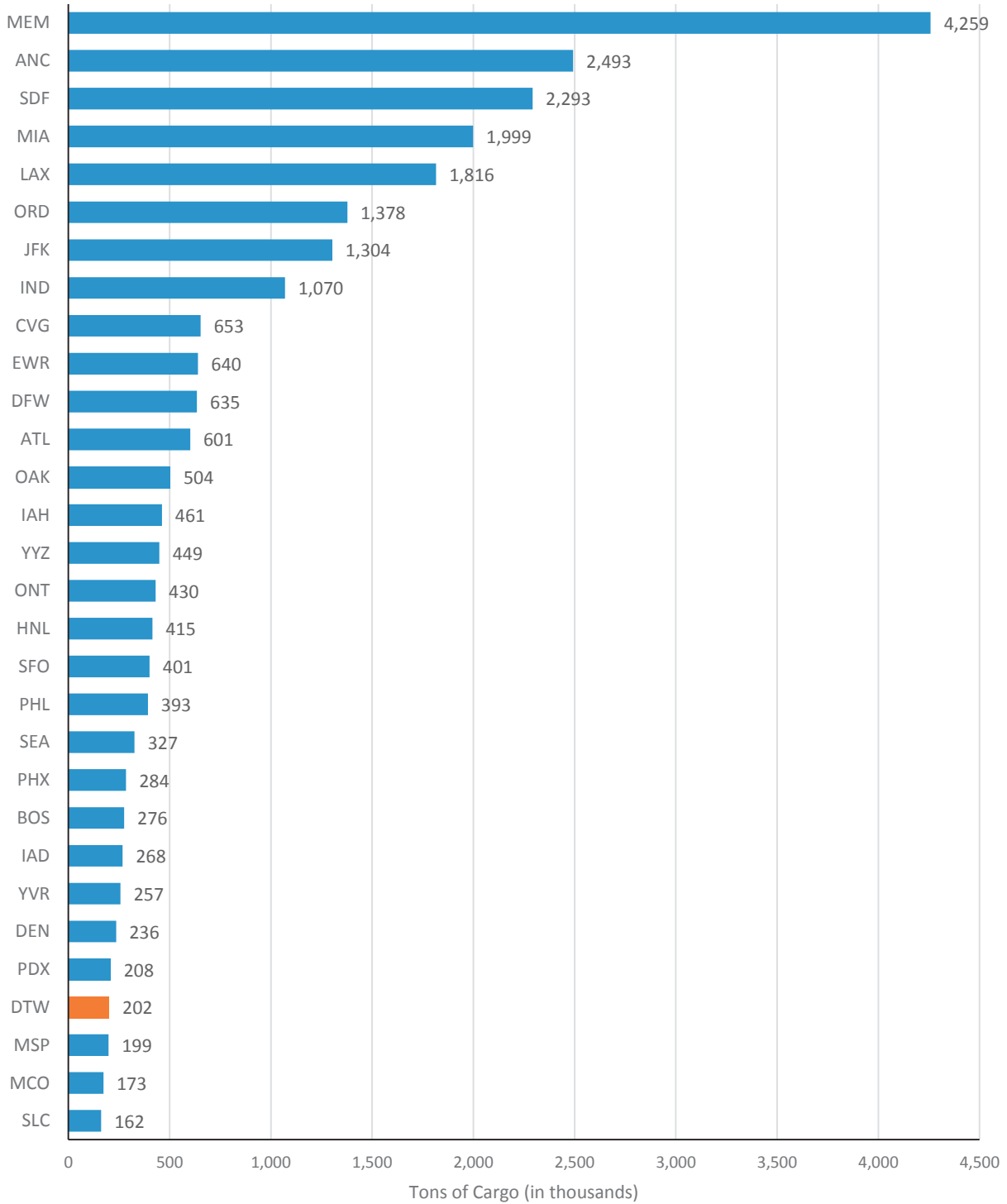
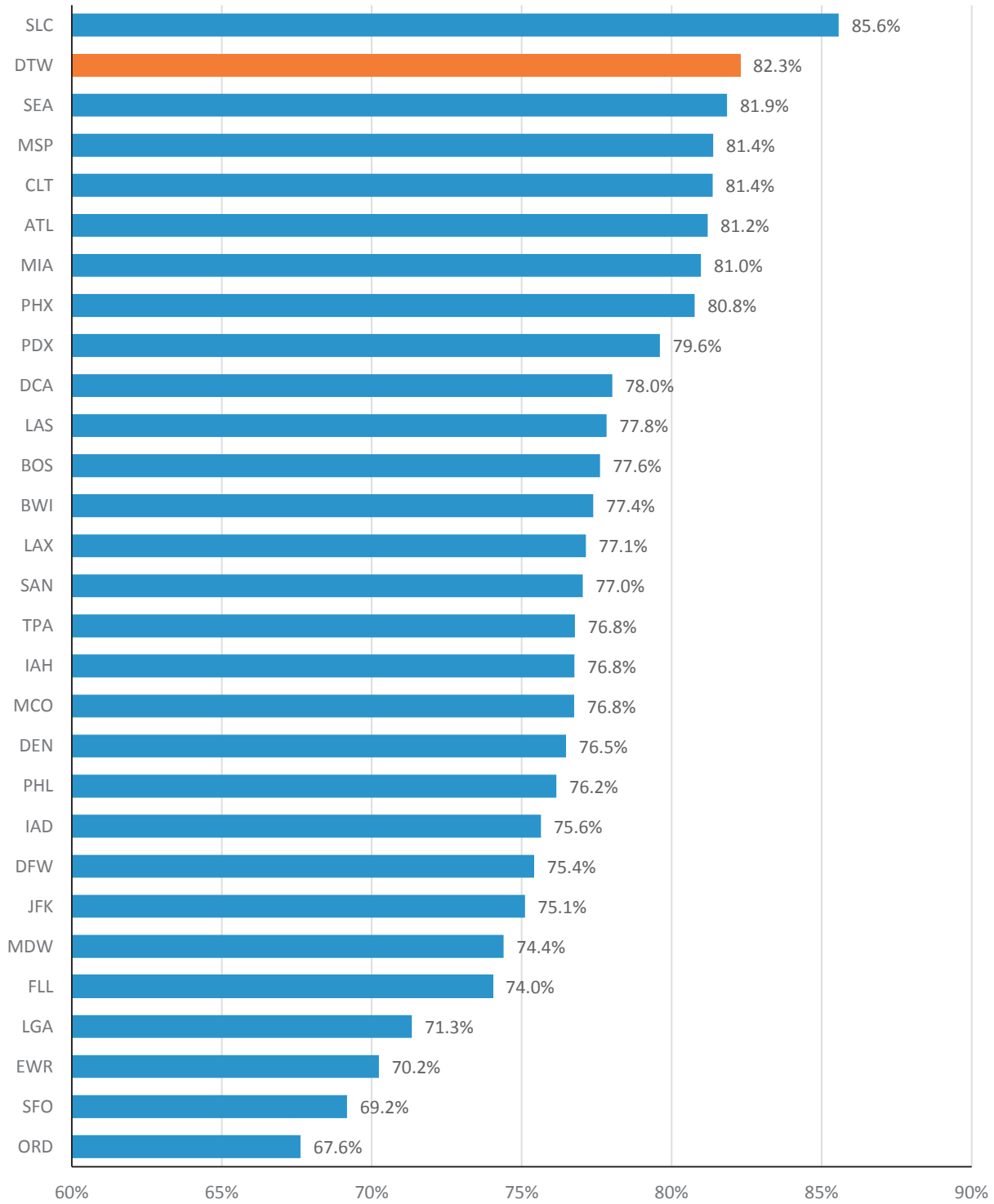


Figure APDX - 8: CY 2014 Ranking of Major Airport On-Time Arrival Performance



Source: Bureau of Transportation Statistics, Airline On-Time Data

## APPENDIX C: AIRPORT CODES

CODE	CITY / AIRPORT NAME		
<b>ATL</b>	Atlanta, GA: Hartsfield-Jackson	<b>PHL</b>	Philadelphia, PA: Philadelphia International
<b>BOS</b>	Boston, MA: Logan International	<b>PHX</b>	Phoenix, AZ: Sky Harbor International
<b>BWI</b>	Baltimore, MD: Baltimore/Washington International Thurgood Marshall	<b>SEA</b>	Seattle, WA: Seattle/Tacoma International
<b>CLT</b>	Charlotte, NC: Charlotte Douglas International	<b>SFO</b>	San Francisco, CA: San Francisco International
<b>DEN</b>	Denver, CO: Denver International	<b>SLC</b>	Salt Lake City, UT: Salt Lake International
<b>DFW</b>	Dallas/Ft. Worth, TX: Dallas/Ft. Worth International	<b>YYZ</b>	Toronto, ON, Canada: Pearson International
<b>DTW</b>	Detroit, MI: Detroit Metro Wayne County	<b>AIR TRADE AREA AND ALTERNATIVE COMMERCIAL SERVICE FACILITIES WITHIN A 150 MILE RADIUS</b>	
<b>DVT</b>	Phoenix, AZ: Deer Valley Airport		
<b>EWR</b>	Newark, NJ: Newark Liberty International	<b>TOL</b>	Toledo, OH: Toledo Express Airport
<b>FLL</b>	Fort Lauderdale, FL: Fort Lauderdale International	<b>FWA</b>	Fort Wayne, IN: Fort Wayne International Airport
<b>IAD</b>	Washington, DC: Dulles International	<b>LAN</b>	Lansing, MI: Lansing Capital City Airport
<b>IAH</b>	Houston, TX: Houston Intercontinental	<b>FNT</b>	Flint, MI: Bishop International Airport
<b>JFK</b>	New York, NY: Kennedy International	<b>CLE</b>	Cleveland, OH: Cleveland-Hopkins International Airport
<b>LAS</b>	Las Vegas, NV: McCarran International	<b>YIP</b>	Ypsilanti, MI: Willow Run Airport
<b>LAX</b>	Los Angeles, CA: Los Angeles International	<b>IND</b>	Indianapolis, IN: Indianapolis International Airport
<b>LGA</b>	New York, NY: LaGuardia International Airport	<b>MDW</b>	Chicago, IL: Chicago Midway
<b>MCO</b>	Orlando, FL: Orlando International	<b>CMH</b>	Columbus, OH: Port Columbus International Airport
<b>MIA</b>	Miami, FL: Miami International	<b>YQG</b>	Windsor, ON: Windsor International Airport
<b>MSP</b>	Minneapolis/St. Paul, MN: Minneapolis St Paul International		
<b>ORD</b>	Chicago, IL: Chicago-O'Hare		

## APPENDIX D: GLOSSARY

Appendix A provides a glossary of abbreviations and key terms that are referenced in the budget document. In addition, some abbreviations and terms not referenced in the budget document are provided as a reference for commonly used terminology as it relates to the aviation industry.

## ABBREVIATIONS

<b>AAAE</b>	American Association of Airport Executives	<b>CLEMIS</b>	Courts Law Enforcement Management Information Systems
<b>ACH</b>	Automatic Clearing House (Standard Bank Wire Transfer)	<b>CM</b>	Construction Manager
<b>ACI</b>	Airports Council International of North America	<b>CMMS</b>	Computerized Maintenance Management System
<b>ACM</b>	Airport Certification Manual	<b>CMRS</b>	Concessions Management Revenue System
<b>ADF</b>	Airport Development Fund (also Aircraft Deicing Fluid)	<b>COBRA</b>	Consolidated Omnibus Budget Reconciliation Act
<b>ADO</b>	FAA Airport District Office	<b>CPE</b>	Cost Per Enplanement
<b>A/E</b>	Architecture/Engineering	<b>CUPP</b>	Common Use Passenger Processing
<b>AED</b>	Automated External Defibrillator	<b>CUPPS</b>	Common Use Passenger Processing System
<b>AIP</b>	Airport Improvement Program	<b>CUSS</b>	Customer Use Self-Service (for kiosks in airports)
<b>ALO</b>	Airline Liaison Office	<b>CUTE</b>	Common Use Terminal Equipment
<b>ALP</b>	Airfield Layout Plan (or Airport Layout Plan)	<b>CY</b>	Calendar Year
<b>AOA</b>	Aircraft Operations Area	<b>DAAAC</b>	Detroit Airline Airport Affairs Committee
<b>APO</b>	Aviation Policy and Plans Office	<b>DANTeC</b>	Detroit Airlines North Terminal Consortium
<b>AR</b>	Airport Revenue Bonds	<b>DBE</b>	Disadvantaged Business Enterprise
<b>ARFF</b>	Aircraft Rescue and Firefighting	<b>DCS</b>	Departure Control System
<b>ASAP</b>	Airport Safety and Program Preservation	<b>DF</b>	Drug Forfeiture Fund
<b>ASDEIII</b>	Airport Surface Detection System Program	<b>DHS</b>	Department of Homeland Security
<b>ASQ</b>	Airport Service Quality-worldwide customer satisfaction survey sponsored by ACI	<b>DOT</b>	Department of Transportation
<b>ATA</b>	Air Trade Area (also Air Transportation Association)	<b>DTW</b>	IATA code for Detroit Metropolitan Airport
<b>ATMS</b>	Advanced Traffic Management System	<b>DWSD</b>	Detroit Water and Sewerage Department
<b>ATC</b>	Air Traffic Control	<b>EA</b>	Environmental Analysis
<b>AVI</b>	Automatic Vehicle Identification	<b>EEO</b>	Equal Employment Opportunity
<b>BGR</b>	Boarding Gate Readers	<b>EEOC</b>	Equal Employment Opportunity Commission
<b>BLS</b>	US Department of Labor Bureau of Labor Statistics	<b>EDS</b>	Explosive Detection System
<b>C/A</b>	Construction/Alteration	<b>EIS</b>	Environmental Impact Study
<b>CAD</b>	Computer Aided Design	<b>EMS</b>	Emergency Medical Services
<b>CAR</b>	Center for Automotive Research	<b>EOC</b>	Emergency Operations Center
<b>CASM</b>	Cost per Available Seat Mile	<b>EPAX</b>	Enplaned Passenger
<b>CBA</b>	Collective Bargaining Agreement	<b>ETDS</b>	Explosive Trace Detection System
<b>CBP</b>	Customs and Border Protection	<b>FAA</b>	Federal Aviation Administration
<b>CEO</b>	Chief Executive Officer	<b>FAQ</b>	Frequently Asked Questions
<b>CFO</b>	Chief Financial Officer	<b>FAR</b>	Federal Aviation Regulation
<b>CFC</b>	Customer Facility Charge	<b>FASB</b>	Financial Accounting Standards Board
<b>CFR</b>	Code of Federal Regulations	<b>FBO</b>	Fixed Based Operator
<b>CIP</b>	Capital Improvement Plan	<b>FF&amp;E</b>	Furniture Fixtures & Equipment
		<b>FG</b>	Federal Grant (from the FAA)



<b>FIS</b>	Federal Inspection Station	<b>MERC</b>	Michigan Employment Relations Commission
<b>FHWA</b>	Federal Highway Administration Grant	<b>MII</b>	Majority-in-Interest
<b>FOD</b>	Foreign Object Debris (or Foreign Object Damage)	<b>MIOSHA</b>	Michigan Occupational Safety and Health Administration
<b>FOIA</b>	Freedom of Information Act (1966) pertains to fulfillment of requests for government records	<b>MITSC</b>	Michigan Intelligent Transportation System Center
<b>FP&amp;A</b>	Financial Planning & Analysis	<b>MUFIDS</b>	Multi-User Flight Information Display System
<b>FTE</b>	Full Time Equivalent	<b>MUNIS</b>	Financial management software used by the Authority
<b>FTZ</b>	Free Trade Zone	<b>NBEG</b>	Narrow Body Equivalent Gates
<b>FY</b>	Fiscal Year	<b>NITC</b>	New International Trade Crossing
<b>FYTD</b>	Fiscal Year to Date	<b>NCCI</b>	National Council on Compensation Insurance, Inc.
<b>GA</b>	General Aviation	<b>NOTAM</b>	Notice to Airmen
<b>GARB</b>	General Airport Revenue Bond	<b>NPDES</b>	Natural Pollutant Discharge Elimination System
<b>GASB</b>	Government Accounting Standards Board	<b>NTR</b>	North Terminal Redevelopment Project
<b>GFOA</b>	Government Finance Officers Association	<b>OAG</b>	Official Airline Guide
<b>GMP</b>	Guaranteed Maximum Price	<b>OCC</b>	Operations Control Center
<b>GPRC</b>	Gate Planning and Review Committee (Applies to DTW – North Terminal)	<b>OIG</b>	Office of the Inspector General
<b>GTC</b>	Ground Transportation Center	<b>O&amp;D</b>	Origin & Destination
<b>HAZMAT</b>	Hazardous Materials	<b>O&amp;M</b>	Operating and Maintenance (generally refers to fund for operating expenses)
<b>HIPAA</b>	Health Insurance Portability and Accountability Act of 1996	<b>OPEB</b>	Other Post-Employment Benefits
<b>HVAC</b>	Heating Ventilation and Air Conditioning System	<b>OSHA</b>	Occupational Safety and Health Administration (Federal)
<b>HR</b>	Human Resources	<b>PAE</b>	Public Affairs and the Environment Division
<b>IATA</b>	International Air Transportation Association	<b>Part 77</b>	Code of Federal Regulations – Title 14 (Aeronautics and Space): Objects Affecting Navigable Airspace
<b>ICAO</b>	International Civil Aviation Organization	<b>Part 139</b>	Code of Federal Regulations – Title 14 (Aeronautics and Space): Certification of Airports
<b>IFR</b>	Instrument Flight Rules	<b>Part 150</b>	Code of Federal Regulations – Title 14 (Aeronautics and Space): Airport Noise Compatibility Planning
<b>IFUF</b>	International Facility Use Fee	<b>Part 158</b>	Code of Federal Regulations – Title 14 (Aeronautics and Space): Passenger Facility Charges
<b>ILLWAS</b>	Low level wind shear alert system	<b>Part 1542</b>	Code of Federal Regulations – Title 49 (Transportation): Airport Security
<b>ILS</b>	Instrument Landing System (radio-based guidance system)	<b>PAX</b>	Passengers
<b>IMS</b>	Inventory Management System	<b>PCCS</b>	Procurement/Contract Compliance System
<b>ISO</b>	International Organization for Standards	<b>P-Card</b>	Procurement Charge Card
<b>IT</b>	Information Technology	<b>PFC</b>	Passenger Facility Charge
<b>ITS</b>	Intelligent Transportation System		
<b>LAN</b>	Local Access Network		
<b>LED</b>	Light Emitting Diode		
<b>LOI</b>	Letter of Intent, a multiyear commitment or promise by the FAA to fund a large project at a particular airport		
<b>LTD</b>	Long Term Disability		
<b>MDCR</b>	Michigan Department of Civil Rights		
<b>MDEQ</b>	Michigan Department of Environmental Quality		
<b>MDOT</b>	Michigan Department of Transportation		

<b>PM</b>	Preventative Maintenance (also Project Manager)	<b>Title VI</b>	Federal legislation (Civil Rights Act of 1964) that prohibits discrimination on the basis of race, color and national origin in programs and activities receiving federal financial assistance
<b>PMT</b>	Project Management Team	<b>Title 49</b>	Code of Federal Regulations parts 23 & 26 – guidance providing for the inclusion of disadvantaged business enterprises for programs receiving federal financial assistance
<b>PRASM</b>	Passenger Revenue per Available Seat Mile	<b>TPA</b>	Third-Party Administration
<b>RASM</b>	Revenue per Available Seat Mile	<b>TRACON</b>	Terminal Radar Approach Control (FAA Control Tower)
<b>RevPar</b>	Revenue Per Available Room	<b>TSA</b>	Transportation Security Administration
<b>RFID</b>	Radio Frequency Identification	<b>TW</b>	Taxiways
<b>RFP</b>	Request for Proposal	<b>USDOT</b>	United States Department of Transportation
<b>RFQ</b>	Request for Qualifications	<b>VALE</b>	Voluntary Airport Low Emission
<b>ROI</b>	Return on Investments	<b>VEBA</b>	Voluntary Employee Beneficiary Association
<b>RON</b>	Rest Over Night (airplane parked at gate overnight)	<b>VLJ</b>	Very Light Jet
<b>R&amp;R</b>	Renewal and Replacement Fund	<b>WC</b>	Wayne County
<b>RSA</b>	Runway Safety Area	<b>WCAA</b>	Wayne County Airport Authority
<b>RSIP</b>	Residential Sound Insulation Program	<b>WMP</b>	Wildlife Management Plan
<b>RW</b>	Runways	<b>WWTP</b>	Wyandotte Wastewater Treatment Plant
<b>SCAN</b>	In-pavement Surface Sensor System	<b>YIP</b>	Industry code for Willow Run Airport
<b>SCAS</b>	Security Card Access System		
<b>SCUBA</b>	Self-contained Breathing Apparatus		
<b>SG</b>	State Grant (Michigan)		
<b>SOP</b>	Standard Operating Procedure		
<b>SWPP</b>	Stormwater Pollution Plan		
<b>TBD</b>	To Be Determined		
<b>TIN</b>	Taxpayer Identification Number		

## KEY TERMS

The terms noted below were added to assist the unfamiliar reader to better understand certain aviation terminology or other terms used in the budget document.

**Airline Revenues** – Landing fee revenues and terminal rental revenues.

**Airport Improvement Program (AIP)** – The Airport and Airway Improvement Act of 1982 created the Airport Improvement Program (AIP) to provide grants for airport improvement projects, including projects that would increase airport capacity. Increasing airport capacity is one way to reduce aircraft delays and better accommodate passenger and cargo traffic. AIP funds are provided through three categories: entitlement, set-aside and discretionary funds. Grants cannot extend beyond the AIP's authorization period. FAA distributes entitlement funds by formula to specific airports and states. Set-aside and discretionary funds are distributed by type of project to any eligible airport sponsor. The airport sponsor is the public agency or private entity that owns or operates the airport. Set-aside subcategories include reliever airports, non-primary commercial service airports, airport noise compatibility programs, integrated airport system plans and the Military Airport Program. A congressionally mandated percentage of total AIP funds are allocated to each set-aside subcategory.

**Airport Master Plan** – A comprehensive study that describes short, medium and long-term plans for airport development.

**Airport Service Region (ASR)** – The primary geographical area served by an airport. In the case of Detroit Metro, the ten counties of Genesee, Lapeer, Lenawee, Livingston, Macomb, Monroe, Oakland, St. Clair, Washtenaw and Wayne (the Detroit-Ann Arbor-Flint CMSA) constitute the Airport Service Region.

**Air Trade Area (ATA)** – See Airport Service Region.

**Aviation Trust Fund** – Fund established by Congress to pay for improvements to the nation’s airports and air traffic control system. Money in the fund comes solely from users of the system - primarily a tax on domestic airline tickets.

**Balanced Budget** – The Airport Authority defines a balanced budget as current revenues equal to current expenditures plus available fund balance. The Airport has a residual funding structure. Under this structure the Signatory Airlines have guaranteed to pay the expenses of the airport therefore the operating fund is guaranteed to be balanced with current revenues always equaling expenditures. No reserve or fund balance is ever required.

**Capital Improvement Program (CIP)** – An ongoing program of major capital projects which are required to replace, reconstruct, or rehabilitate assets which have reached the end of their service life; or to add, expand, or improve facilities or infrastructure. The projects allow the airport to continue to meet the needs of the passengers, the airlines and the regulatory agencies that oversee it.

**Cargo** – Anything other than passengers, carried for hire, including both mail and freight.

**Catchment Area** – See Airport Service Region (ASR).

**Compensatory** – this refers to the rate-setting methodology employed under the Airport Use and Lease Agreement, whereby the airport operates “at risk” without any airlines ensuring to keep the airport financially sufficient. It is the airport’s responsibility to budget conservatively to ensure payment of all of its costs and that certain revenues are sufficient to satisfy rate covenant coverage requirements.

**Concession Revenues** – Revenues collected from terminal concessions, public parking, on-airport and off-airport rental car companies, hotels and ground transportation operators.

**Connecting Flight** – A flight requiring passengers to change aircraft and/or airlines at an intermediate stop.

**Coupon** – A document that indicates a contract for a passenger to board a commercial plane and exit a commercial plane at the departure point and arrival point specified on the ticket.

**Coupon Mile** – The distance traveled between the departure point and arrival point specified on a ticket.

**Deregulation** – The term commonly used in referring to the Airlines Deregulation Act of 1978, which ended government regulation of airline routes and rates.

**Department of Transportation (DOT)** – Establishes the nation's overall transportation policy. Under its umbrella there are ten administrations whose jurisdictions include highway planning, development and construction; urban mass transit; railroads; aviation; and the safety of waterways, ports, highways and oil and gas pipelines. The Department of Transportation (DOT) was established by act of October 15, 1966, as amended (49 U.S.C. 102 and 102 note), "to assure the coordinated, effective administration of the transportation programs of the Federal Government" and to develop "national transportation policies and programs conducive to the provision of fast, safe, efficient and convenient transportation at the lowest cost consistent therewith." The FAA is a unit of the DOT.

**Domestic Passengers** – Passengers flying into or out of the Airport on a flight with an origin or destination within the 50 states and all US territories. (WCAA supplies this standard definition with one exception: passengers pre-

clearing US Customs at the originating airport, mostly certain Canadian cities, are counted as domestic arrivals and they do not utilize the Airport's FIS).

**Enplanements** – The number of passengers boarding a flight, including origination, stopovers and connections.

**Federal Aviation Administration (FAA)** – The government agency responsible for air safety and operation of the air traffic control system. The FAA also administers a program, which provides grants from the Airport and Airway Trust Fund for airport development. Formerly the Federal Aviation Agency, the Federal Aviation Administration was established by the Federal Aviation Act of 1958 (49 U.S.C. 106) and became a component of the Department of Transportation in 1967 pursuant to the Department of Transportation Act (49 U.S.C. app. 1651 note). The Administration is charged with: 1) regulating air commerce in ways that best promote its development and safety and fulfill the requirements of national defense; 2) controlling the use of navigable airspace of the United States and regulating both civil and military operations in such airspace in the interest of safety and efficiency; 3) promoting, encouraging and developing civil aeronautics; 4) consolidating research and development with respect to air navigation facilities; 5) installing and operating air navigation facilities; 6) developing and operating a common system of air traffic control and navigation for both civil and military aircraft; and 7) developing and implementing programs and regulations to control aircraft noise, sonic boom and other environmental effects of civil aviation.

**Hybrid** – This is the rate-setting methodology employed under the Airport Use and Lease Agreement, whereby an airport employs both residual and compensatory methodologies. In most cases, an airport sets rates on the airfield using a residual approach, while setting rates on the landside using a compensatory approach.

**Impose Only PFC Approval** – FAA approval to collect PFC funds for future use on a specific PFC-eligible project. A separate request to the FAA must then be submitted for the FAA to approve the spending of those PFCs (i.e. convert the PFCs to Impose and Use status).

**Impose and Use PFC Approval** – FAA approval to collect and spend PFC funds on a specific PFC-eligible project.

**International Passengers** – Passengers flying into or out of the Airport on a flight with an origin or destination outside the 50 states and all US territories. (WCAA supplies this standard definition with one exception: passengers pre-clearing US Customs at the originating airport, mostly certain Canadian cities, are counted as domestic arrivals and they do not utilize the Airport's FIS).

**Itinerant Operations** – All aircraft arrivals and departures, other than local operations.

**Landing Fee Revenues** – Revenues collected from aircraft landings.

**Large Aircraft** – Aircraft of more than 12,500 pounds maximum certificated takeoff weight. (FAR Part 1)

**Large Hubs** – Those airports that account for at least 1 percent of the total passenger enplanements.

**Local Operations** – As pertaining to air traffic operations, aircraft operating in the local traffic pattern or within sight of the tower; aircraft known to be departing for, or arriving from, flight in local practice areas located within a 20-mile radius of the control tower; aircraft executing simulated instrument approaches or low passes at the airport.

**Majority-in-Interest (MII)** – “Majority-in-Interest of the air carriers” means either (1) 75 percent of the Signatory Airlines who together have landed 51 percent of the total landed weight of all such Signatory Airlines during the immediately preceding calendar year (as such weight is reflected by official Airport records), or (2) 51 percent of the Signatory Airlines who have together landed 75 percent of the total landed weight of all such Signatory Airlines during the immediately preceding calendar year (as such weight is reflected by official Airport records).

**Majority-in-Interest Clauses** – Found in some airport use agreements which give the airlines accounting for a majority of traffic at an airport the opportunity to review and approve or veto capital projects that would entail significant increases in the rates and fees they pay for the use of airport facilities.

**Non-Signatory Carriers** – Airlines that have not signed the Airport/Airline Lease and Use Agreement.

**Origin & Destination (O&D)** – Passengers who begin or end their trip at a specific airport.

**Non-Airline Revenue** – This is operating revenue strictly derived from non-aeronautical activities, such as automobile parking revenue, rental car revenue and concessions revenue. Operating revenue derived from passenger airline carriers, cargo airline carriers, lease revenues from aircraft maintenance facilities and fuel farm revenues would not be counted as part of non-airline revenues.

**Passenger Airline Revenue** – Refers to operating revenue strictly derived from passenger airline carriers; revenue derived from cargo airline carriers are excluded.

**Passenger Facility Charges (PFCs)** – A tax authorized by Congress, approved by the Federal Aviation Administration, assessed by airports and collected by airlines as an add-on to the passenger airfare. It is designed to help pay for airport improvements that enhance safety and capacity and is not revenue for airlines.

**Pay-as-you-go** – Refers to PFCs that are spent on project costs.

**Rate Setting Methodology** – There are three possible rate-setting methodologies typically found in an Airport's Use and Lease Agreement:

**Residual** – Airline tenants and users (the airlines) collectively assume financial risk by ensuring payment of all airport costs not covered by non-airline revenue sources; this obligation effectively ensures certain revenues sufficient to satisfy all operating and maintenance costs and rate covenant coverage requirements.

**Compensatory** – Airport operates at risk without any airlines ensuring to keep the airport financially sufficient; it is the airport's responsibility to set the budget at a level to ensure payment of all costs and that certain revenues are sufficient to satisfy rate covenant coverage requirements.

**Hybrid** – Airport employs both residual and compensatory methodologies; in most cases, an airport sets rates on airfield usage using residual approach, while setting rates on the landside using a compensatory approach.

**Revenue Passenger Enplanement** – The number of passengers boarding a flight, including origination, stopovers and connections, which actually paid for the flight. This does not include frequent flier awards, crew, or anyone who did not actually pay for the flight.

**Sarbanes-Oxley** – The Sarbanes-Oxley Act of 2002 is federal legislation which established requirements for annual assessment of the effectiveness of internal financial auditing controls.

**Signatory Airlines** – Airlines that have signed the Airport/Airline Lease and Use Agreement.

**Terminal Rental Revenues** – Revenues collected from airlines for terminal space rentals.

**Through Passengers** – Passengers flying into and out of the Airport without changing aircraft.

**Total Cargo** – Loaded and unloaded air freight, airmail and small air package shipments.

**Total Passengers** – Sum of domestic, international and through passengers.

**Traffic Movements** – Landings and takeoffs of an aircraft.

**Unrestricted Cash and Investments from Audit** – Audited cash and investments that are uncommitted, which can be used for anything. This means funds held in the operations and maintenance reserve and the debt service reserve would be excluded.

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DETROIT METRO • WILLOW RUN  
WAYNE COUNTY AIRPORT AUTHORITY