



2018 Operating Budget

Minneapolis-St. Paul

Metropolitan Airports Commission



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Mission

Connecting you to your world

Vision

Providing your best airport experience

Values

- Our Employees
- Innovation and Excellence
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- Integrity
- Fiscal Responsibility
- Teamwork



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Executive Summary

December 29, 2017

To The Public:

We are pleased to present the 2018 Metropolitan Airports Commission (Commission) Budget which was adopted by the Board of Commissioners on December 18, 2017. Total Operating Revenue for 2018 is projected to be \$365,845,596 and Operating Expense is \$188,997,053, excluding depreciation and noise amortization. Non-operating expenses, including non-operating revenue, are budgeted to be \$110,287,523. The approved 2018 budget results in \$66,561,021 of Net Revenues Available for Designation.

The 2018 budget process commenced in May 2017. Some of the key short-term issues faced by the Commission in developing the overall targets for the 2018 Operating Budget included:

- The impact of Transportation Network Companies (TNCs) on the Commission's parking and auto rental revenues
- Changes in the state of the economy and the airline industry in 2017
- The preparation of the MAC's systems of airports for Super Bowl LII in February 2018

Details on how each of these critical issues were addressed in our development of the budget are noted later in the Fund Overview.

Imbedded in this discussion is our Mission Statement and Vision Statement.

Mission Statement: Connecting you to your world

Vision Statement: Providing your best airport experience

Budget Targets

As a result of the key issues, the Commission identified four targets that were to be used in developing the 2018 Operating Budget. These targets and their respective budget results are indicated below.

Target 1:	Maintain a Coverage Ratio of 2.4x on Senior Airport Revenue Bonds and an overall Coverage of 1.4x (with transfer)
Result:	4.44x Senior and 2.04x Total Coverage (with transfer)
Target 2:	Maintain a Six Month Reserve in the Operating Fund
Result:	A transfer of \$4.1 million will be made to the fund on 1/2/18.
Target 3:	Airline Cost/Enplaned Passenger will be in the lower one-third of large hub airports.
Result:	The Commission tied for fifth out of 28 large hub airports surveyed.
Target 4:	The budget shall have the financial resources to operate the MAC's system of airports, meet its debt service obligations, and fund its reserves and capital requirements of the Commission.
Result:	The budget forecasts \$66.6 million in Net Revenues available for designation.

The remainder of this message will discuss:

- Fund Overview (Overall, Operating, Construction, and Debt)
- Budget Development
- Organizational Strategic Plan
- Goals and Objectives
- GFOA Budget Award
- Acknowledgement
- Other Awards

Fund Overview

The Commission is accounted for as an Enterprise Fund. For internal purposes, three funds are maintained. Each fund relates to a specific function: Operating Fund (Budget – operations of the airport), Construction Fund (Budget – Capital Improvement Program), and Debt Service Fund (Debt). The Operating Fund reserve is set by the Commission. Based on current policy, that reserve amount needs to be equivalent to six months of operating expenses (excluding depreciation and noise amortization). Transfers from the Operating Fund to the Debt Fund are made in June and December of each year to make debt service payments and to ensure that the respective debt service reserve accounts are fully funded. At the end of the year, after all operating expenses and debt service have been funded, any balance not designated is typically transferred to the Construction Fund.

The table below shows a consolidated schedule of revenue and expenses for all funds. Descriptions and key issues for each of the three funds follow the summary table.

Summary Fund Table

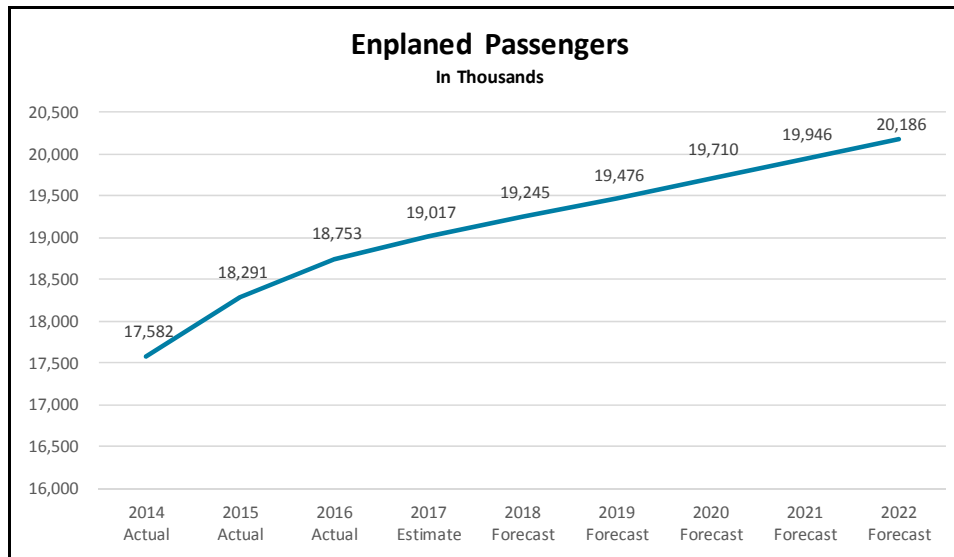
Consolidated Enterprise Fund (\$ = 000)	2016 Actual	2017 Estimate	2017 Budget	2018 Budget	2019 Projection	2020 Projection
Sources All Funds						
Total Beginning All Fund Balances ⁽¹⁾	\$ 729,764	\$ 1,035,582	\$ 1,094,487	\$ 1,027,458	\$ 908,009	\$ 869,964
Operating Fund Revenues						
Airline Rates & Charges	112,653	116,776	116,463	121,311	126,770	128,291
Concessions	160,691	171,504	173,394	175,495	178,829	190,811
Other Operating Revenues	65,588	66,848	65,250	69,040	70,628	72,252
Interest Earnings	4,860	6,350	6,250	6,436	6,500	6,550
Other & Self-Liquidating Revenue	4,576	4,654	4,759	4,902	5,200	5,400
Transfers in Equipment Financing	3,194	3,779	3,779	3,465	4,000	4,000
Construction Fund Revenues						
PFC Funding	72,207	72,345	73,276	74,155	75,045	75,946
Federal & State Grants	17,473	11,431	3,025	9,600	14,100	12,050
Interest Earnings	5,581	5,349	5,692	4,600	3,600	4,500
Bond/Notes Proceeds	388,232	-	-	-	-	-
Short-Term Funding Program	-	28,000	27,800	32,700	11,500	17,600
Other Receipts	3,508	-	-	-	-	-
Transfers In	52,124	74,641	67,331	75,592	66,561	60,715
Debt Fund Revenues						
Interest Earnings	1,703	1,898	985	1,103	1,336	1,658
Bond Proceeds	643,547	-	-	-	42,259	-
Transfers In (PFCs and Garb Requirement)	121,197	118,560	112,450	128,522	134,503	128,012
Total All Receipts	\$ 2,386,898	\$ 1,717,717	\$ 1,754,941	\$ 1,734,379	\$ 1,648,840	\$ 1,577,749
Uses All Funds						
Operating Fund Expenses						
Personnel	78,048	82,350	82,909	88,222	91,486	94,871
Administration	1,723	1,963	1,964	2,066	2,116	2,167
Professional Services	6,217	6,600	6,681	7,050	7,262	7,480
Utilities	18,816	19,300	19,852	19,696	20,444	21,057
Operating Services	23,389	26,225	26,417	28,955	30,432	31,223
Maintenance	36,319	38,100	38,777	38,514	39,515	40,542
Other/Insurance	4,411	5,400	4,172	4,494	4,602	4,712
Equipment & Other Capital Expenditures	10,332	10,929	10,943	11,200	11,145	11,180
Transfers Out - Debt	92,147	92,948	96,996	105,526	113,920	109,041
Transfers Out - Equipment Financing	2,950	4,977	5,040	4,382	4,232	4,441
Transfers Out - Construction	52,124	74,641	67,331	75,592	66,561	60,715
Working Capital/Other	-	-	-	-	-	-
Construction Fund Expenses						
Capital Project Costs	197,172	202,489	326,918	291,529	226,841	256,555
Debt Service PFC Transfer	29,788	27,454	27,532	26,244	26,237	26,239
Debt Fund Expenses						
Bond Refundings	645,380	-	-	-	-	-
Bond Principal & Interest Payments	152,500	96,883	122,557	122,900	134,083	151,470
Total All Costs	\$ 1,351,316	\$ 690,259	\$ 838,089	\$ 826,370	\$ 778,876	\$ 821,693
Total Ending All Net Fund Balances	\$ 1,035,582	\$ 1,027,458	\$ 916,852	\$ 908,009	\$ 869,964	\$ 756,056

(1) Includes Operating Fund, Construction Fund and Debt Service Fund.

Budget Development

As previously indicated, the Commission, in developing targets/guidelines for the 2018 budget, discussed a number of critical issues that needed to be addressed in the short term. Key to this discussion was maintaining a firm grip on expenses, looking for opportunities to derive new revenue and a competitive cost per enplaned passenger. At the start of the budget process in May, passenger activity was showing a year-to-date increase of 1.3% which was lower than the 1.6% passenger increase budgeted for 2017. At year-end 2017 enplaned passengers are estimated to increase 1.2%-1.3% over 2016.

The Commission has experienced positive enplanement growth over each of the last six years, with the largest occurring in 2015, representing a 4.0% increase over 2014. 2018 budgeted enplaned passengers are estimated to grow 1.2% over 2017 estimated passengers. For the period 2017-2022, the estimated growth rate in enplaned passengers is forecasted at 1.2% per year. The chart below shows historical enplaned passenger information from 2014 as well as forecasted enplaned passenger counts to 2022.



In 2017, the Commission added eight new positions, with Police (three positions) and Information Technology (two positions) receiving the majority of new headcount. Continued demand for IT support and the need to increase police presence in the MSP terminals drove the increase in headcount. In 2018, the budget includes funding for eight additional positions with four positions in Police, one in Information Technology (IT), one in Fire and two to be determined. In 2018, the Commission has taken a new approach on certain positions. The 2018 budget approved five unfunded positions for IT which will be added to the full Commission headcount only in the event the department can document long-term savings by hiring an employee as opposed to continuing to pay for service agreements or professional services. In addition, to increase diversity in the Fire Department, the Commission approved two fire trainee positions to replace future retirees. The Commission will then have adequately trained firefighters on hand to fill the vacant positions. The Commission has used this approach in the past to hire for positions that are hard to fill based upon the unique requirements of the job. For details regarding changes in revenues and expenses year over year, see the Operating Budget Revenue and Operating Budget Expense sections of the budget document.

The 2018 and 2019 projections identified in the previous table are prepared using passenger growth and inflation estimates.

Operating Budget

The following table is a summary of 2016 Actual, 2017 Budget, 2017 Estimate, and 2018 Budget Revenue and Expenses. This table includes both operating and non-operating items.

2018 OPERATING BUDGET SUMMARY (\$ = 000)						2017 Estimate vs 2018 Budget Comparison	
	2016 Actual	2017 Budget	2017 Estimate	2018 Budget	Dollars	Percentage	
OPERATING REVENUE							
Airline Rates and Charges	\$ 112,653	\$ 116,463	\$ 116,776	\$ 121,311	\$ 4,535	3.9%	
Concessions	160,691	173,394	171,504	175,495	3,991	2.3%	
Rentals/Fees	48,473	48,622	49,542	51,826	2,284	4.6%	
Utilities & Other Revenues	17,115	16,628	17,306	17,214	(92)	-0.5%	
Total Operating Revenue	\$ 338,933	\$ 355,107	\$ 355,128	\$ 365,846	\$ 10,718	3.0%	
OPERATING EXPENSES							
Personnel	\$ 78,048	\$ 82,909	\$ 82,350	\$ 88,222	\$ 5,872	7.1%	
Administrative Expenses	1,723	1,964	1,963	2,066	103	5.2%	
Professional Services	6,217	6,681	6,600	7,050	450	6.8%	
Utilities	18,816	19,852	19,300	19,696	396	2.1%	
Operating Services	23,389	26,417	26,225	28,955	2,730	10.4%	
Maintenance	36,319	38,777	38,100	38,514	414	1.1%	
Other	4,411	4,172	5,400	4,494	(906)	-16.8%	
Total Operating Expenses (Excludes Depreciation)	\$ 168,923	\$ 180,772	\$ 179,938	\$ 188,997	\$ 9,059	5.0%	
Net Operating Revenues	\$ 170,010	\$ 174,335	\$ 175,190	\$ 176,849	\$ 1,659	0.9%	
Non-Operating Revenues (Expenses)							
Add: Other Non-operating Revenue	\$ 15,136	\$ 14,788	\$ 14,903	\$ 14,933	30	0.2%	
Less: Debt Service/Equipment/Other	(110,504)	(116,501)	(114,501)	(125,221)	(10,720)	9.4%	
Total Non-Operating Revenues (Expenses)	\$ (95,368)	\$ (101,713)	\$ (99,598)	\$ (110,288)	\$ (10,690)	10.7%	
Net Revenues	\$ 74,642	\$ 72,622	\$ 75,592	\$ 66,561	\$ (9,031)	-11.9%	

Capital Improvement Process

Each year the Commission approves a seven-year Capital Improvement Program which is divided into three areas. The first area is approval of projects that will be initiated in year one of the program. The second area identifies projects which may be reviewed in detail to determine cost and feasibility. The third area of the program is the identification of potential projects in years three through seven. At the same time the final Capital Improvement Program is presented for approval, a plan for funding the first three years of the program is provided. The following table summarizes the most recent past program year (2017), the current three-year program (2018 – 2020), and funding summary.

CAPITAL IMPROVEMENT PLAN (CIP) SUMMARY (\$=000)				
	2017	2018	2019	2020
CIP				
Minneapolis/St. Paul International Airport				
End of Life/Replacement Projects	\$ 16,600	\$ 35,750	\$ 10,800	\$ 30,350
Information Technology	21,900	11,600	13,400	12,000
Long Term Comprehensive Plan Projects	353,400	92,100	117,600	98,300
Maintenance Facility Upgrade Projects	11,990	20,755	23,570	67,813
Ongoing Maintenance Programs	33,800	16,700	24,550	24,000
Noise Mitigation Projects	3,200	6,500	11,500	13,100
Tenant Projects	5,900	39,700	6,400	3,200
Total Minneapolis/St. Paul International	446,790	223,105	207,820	248,763
Reliever Airports	8,350	5,600	18,400	9,000
Total All Airports	\$ 455,140	\$ 228,705	\$ 226,220	\$ 257,763
Funding				
Passenger Facility Charges (PFC's)	\$ 71,600	\$ 110,850	\$ 87,700	\$ 111,790
Federal and State Grants	3,025	9,600	14,100	12,050
General Airport Revenue Bonds-Line of Credit	320,800	32,700	57,800	72,310
Internal/Airline Funds	59,715	75,555	66,620	61,613
Total Funding	\$ 455,140	\$ 228,705	\$ 226,220	\$ 257,763

Debt Service

Going into the future, the Commission's plan is to issue new debt in 2019 to fund the capital program. The bond issue in 2016 will finance projects in the 2016-2018 time frame, primarily a new auto rental/public parking facility at MSP. The 2019 bond issue is expected to fund various projects around MSP, with the majority of the work in Terminal 1-Lindbergh.

Refundings

Throughout the past seven years, the Commission has aggressively pursued the refunding options of its outstanding debt. The following table illustrates the results of this action.

Debt Service Summary (\$=000)				
Series Refunded	Refunding Year	Total Savings	Annual Savings	Present Value % Savings
1998A, 1999A, 2001A & 2001C ¹	2007	\$ 33,050	\$ 2,330	5.19%
1998B ¹	2008	2,440	365	3.32%
1999B & 2000B ¹	2009	8,140	990	4.95%
2001B & 2001D ¹	2010	9,640	1,150	8.94%
GO 13 ²	2010	633	214	4.50%
2003A ¹	2011	3,318	369	6.10%
2003A ¹	2012	5,272	293	12.50%
2005A, B & C ¹	2014	60,235	3,011	14.69%
2007A & B ¹	2016	164,340	10,956	25.74%
		<u>\$ 287,068</u>	<u>\$ 19,678</u>	
Average Present Value Savings				9.55%
Total Average Interest Rate Prior to Refundings			5.25%	
Total Average Interest Rate After Refundings			3.31%	
¹ General Airport Revenue Bond Refunding				
² General Obligation Revenue Bond Refunding				

Recent Debt

The Commission issued \$885 million in debt in 2016. The first 2016 issue amounted to \$483 million which refunded a 2007 issue. As the table above shows, the Commission realized an average annual debt service savings of approximately \$11 million per year. The second issue amounted to \$402 million which is a new money issue. The projects identified with this bond issue are the construction of a new, 11-level parking structure adjacent to the existing parking facilities at MSP's Terminal 1-Lindbergh. The garage will provide public parking on levels 6-11, with rental car parking facilities on levels 2-5. In connection with the parking facility, roadway, parking management building and parking exit plaza relocation are part of the overall project. In addition to the parking structure, some of the bond proceeds were used to retire a portion of the Commission's short-term debt that was used to construct an additional four gates at Terminal 2-Humphrey. The four gates at Terminal 2-Humphrey opened in October 2016.

Short-Term Debt

In 2011, the Commission entered into a Short-Term Borrowing Program which replaced a Commercial Paper Program that was terminated in 2010. The Commission looked at many financing alternatives and selected a \$75 million revolving line of credit. During 2017, the Commission increased its line of credit to \$150 million. The increase in the line of credit will enable the MAC to interim fund a number of terminal building projects. The

amounts utilized from the line of credit will be paid off with future PFC applications and bond issues. At December 31, 2017, the Commission had approximately \$40 million outstanding in its line of credit. The Commission estimates that by December 31, 2018 the Commission will have approximately \$68 million outstanding in its line of credit. This Short-Term Borrowing Program also allows the Commission some flexibility in financing unanticipated or unforeseen capital improvements.

Air Service

Maintaining and adding air service is very important to the Commission. The Air Service Business Development Department is responsible for three primary areas: 1) developing air service by marketing MSP for new international passenger, cargo, and new low-fare domestic passenger flights; 2) promoting the facilities and services of MSP and the MAC's system of airports both domestically and internationally; and 3) building community relations by establishing partnerships with public and private sectors to increase their awareness of the importance of air service in the region, and to solicit their support for such services.

As of December 2017:

- 131 domestic destinations and 28 international destinations—159 total
- MSP has competitive service (at least two airlines providing service) to 58 destinations (42 domestic and 16 international).
- All of the top 20 domestic destinations are competitive destinations.
- Low-cost carriers (Frontier, Southwest, Spirit, and Sun Country) serve 42 domestic destinations and 14 international destinations nonstop.



***Visible From the Sky, MSP Thanks Travelers for a Record-Setting 2017
with More than 38 Million Passengers***



Organizational Strategic Plan

In 2016, the MAC Board of Commissioners approved a new, multi-year strategic plan for the organization. The 2017-2022 plan is an evolution from key initiatives to strategic goals and objectives. The plan's structure is streamlined, increasing cross-departmental collaboration and creating stronger connections between its components and department plans.

Development of the MAC 2017-2022 Strategic Plan

- Identify strategic priorities for the MAC over the course of the plan
- Determine challenges to these priorities and design potential solutions to achieving them
- Interview representatives from key stakeholder groups
- Review survey results, align priorities, and set strategic plan framework
- Develop strategic plan mission, vision, goals, and objectives
- Approve strategic plan mission, vision, goals, and objectives

Short-term Organizational Strategic Goals



Goals and Objectives

We have identified in prior sections the current or near-term issues facing the MAC in this budget year. Looking to the future, the following will be the areas where we will focus our resources. These include:



Customer Experience

Delight our passengers. Objectives on which the MAC will focus during 2018 include the following:

- Reimagine and renew our airports to continually evolve our customer experience
- Advance the culture of customer experience at our airports
- Enhance surface transportation options to MSP



Air Service

Grow and enhance air service at MSP. Objectives on which the MAC will focus during 2018 include the following:

- Increase competition, attract new airlines, and expand service for non-stop destinations
- Maintain our appeal as a hub operation



Safety, Security, Preparedness

Keep our airports safe and secure. Objectives on which the MAC will focus during 2018 include the following:

- Prepare for current and potential threats to public safety and critical infrastructure through robust and aligned airport planning processes
- Engage, support, and expand emergency preparedness and response training for the airport community
- Ensure capacity to respond and recover effectively to changes in our facilities, passenger growth, and situations that impact our community



Economic

Maintain our competitive cost structure while maximizing our airports' economic benefit. Objectives on which the MAC will focus during 2018 include the following:

- Maintain MAC's competitive cost structure
- Grow non-aeronautical revenues in concessions, parking, and property development
- Measure and communicate our airports' economic benefit to the region



Engagement

Grow and enhance the narrative. Objectives on which the MAC will focus during 2018 include the following:

- Lead conversations on strategic topics with stakeholders
- Leverage communication tools for a balanced public engagement process



Innovation

Innovate through opportunities in technology and sustainability. Objectives on which the MAC will focus during 2018 include the following:

- Modernize and accelerate technology use, enabling enterprise solutions
- Integrate sustainability into our culture



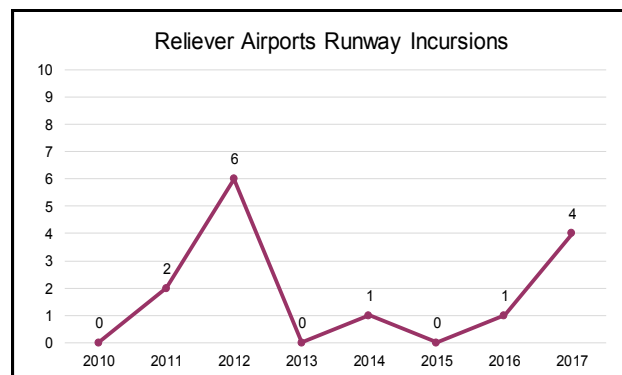
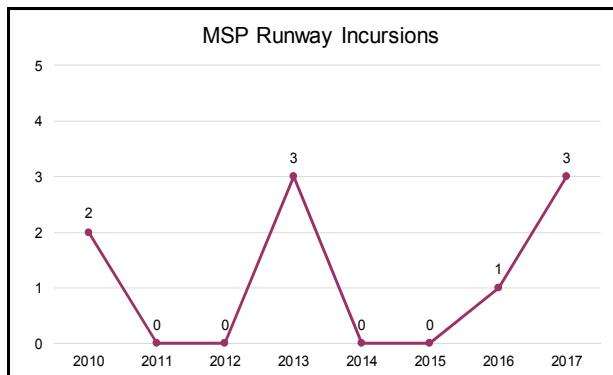
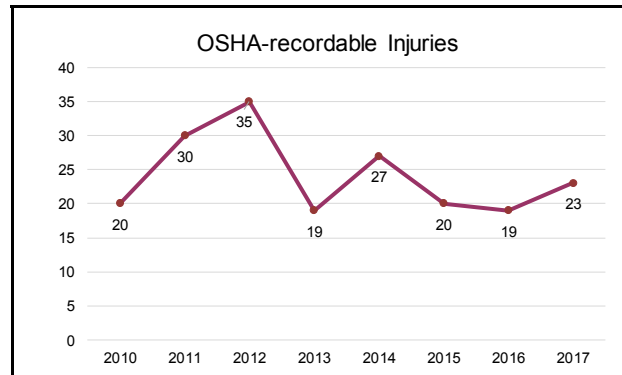
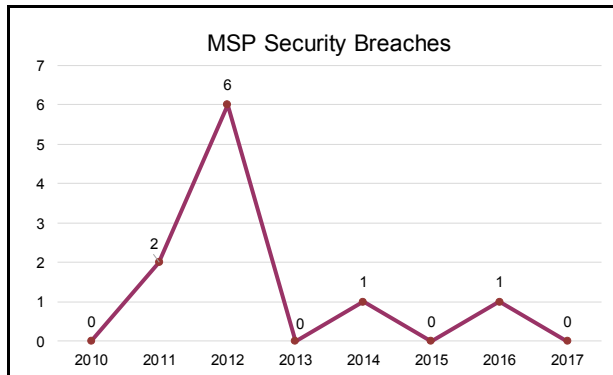
Talent

Be a model employer. Objectives on which the MAC will focus during 2018 include the following:

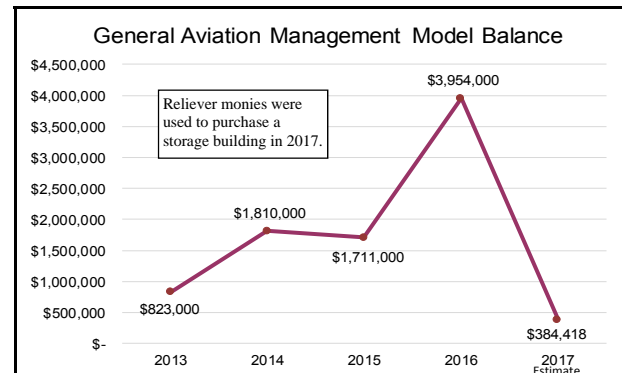
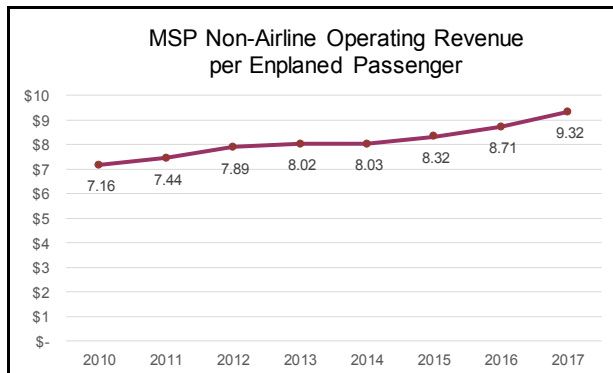
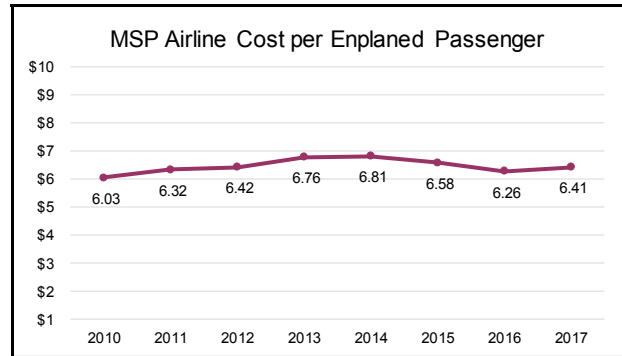
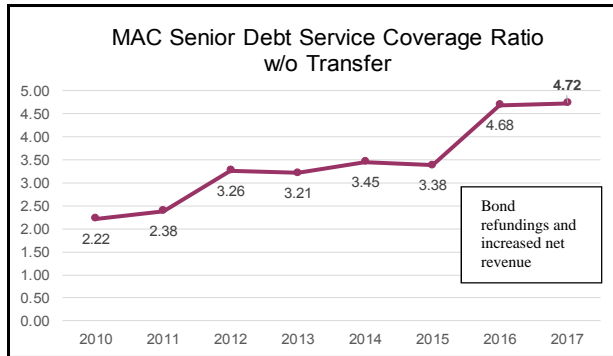
- Cultivate an engaged workforce
- Increase diversity, inclusion, and equity at MAC
- Invest in training and professional development opportunities that align with our goals

Performance Measures

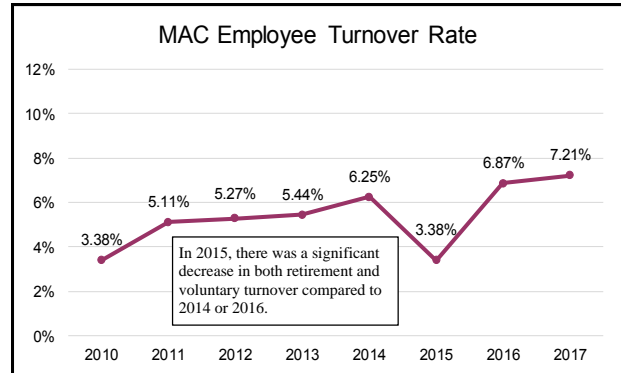
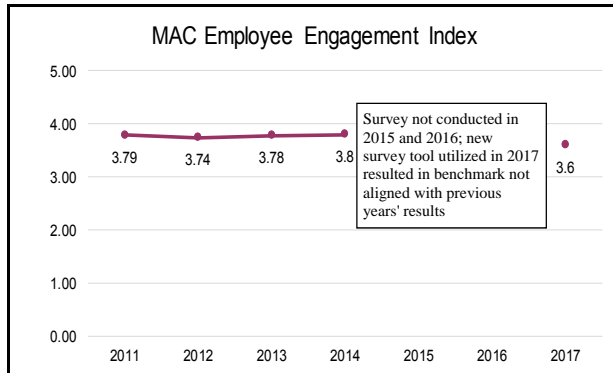
Safety and Security



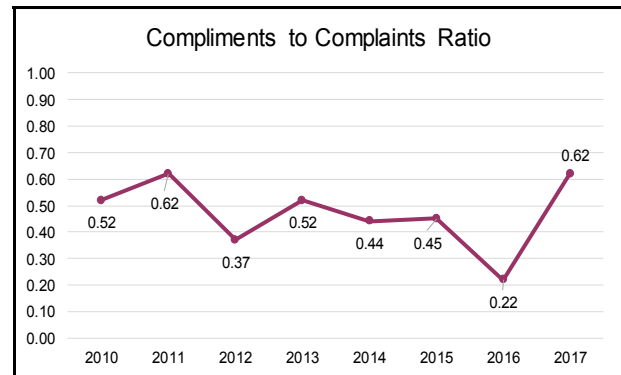
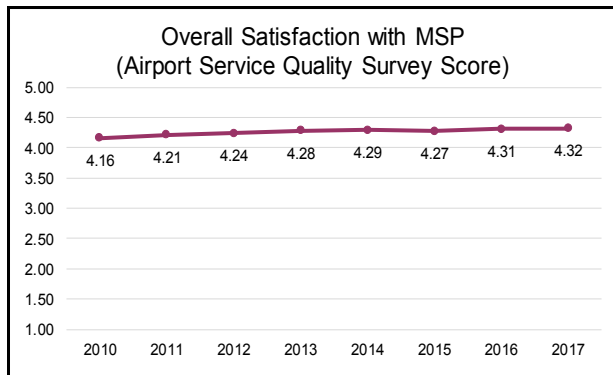
Financial



Employee Engagement

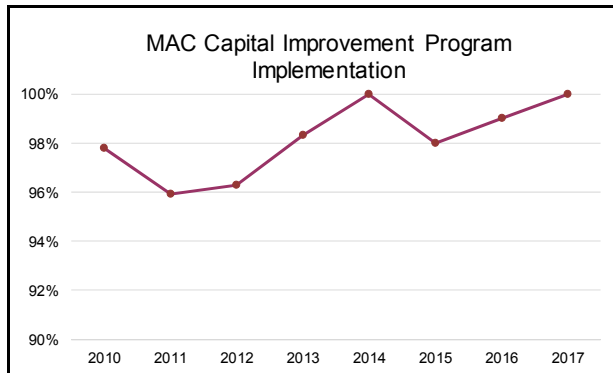


Customer Experience



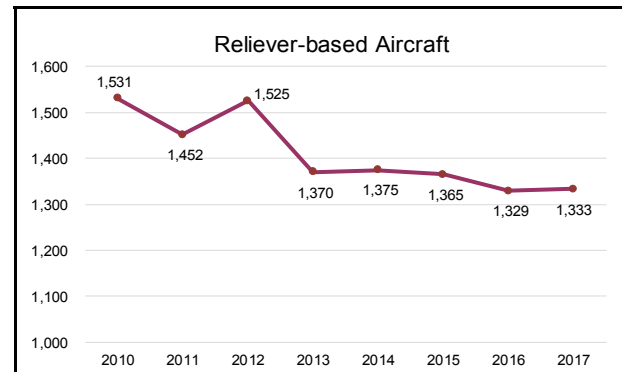
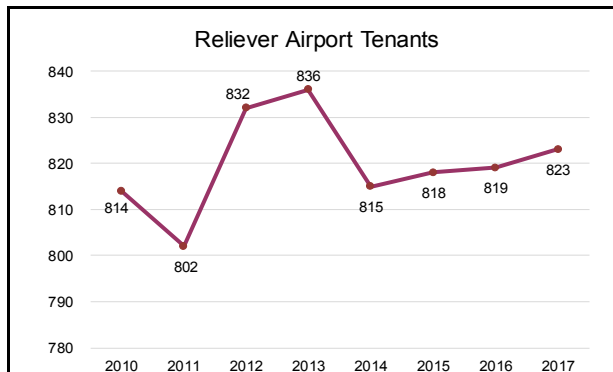
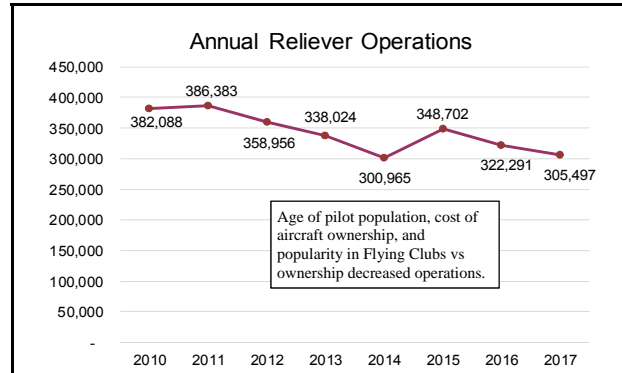
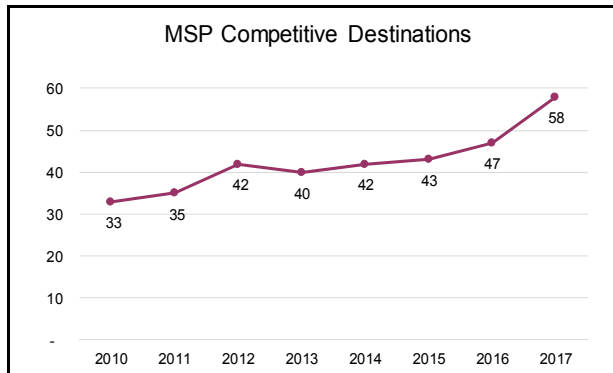
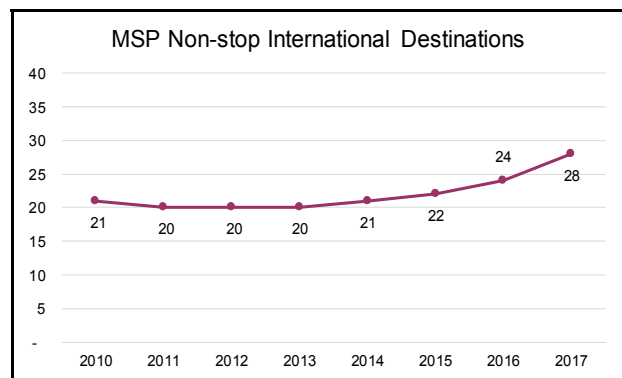
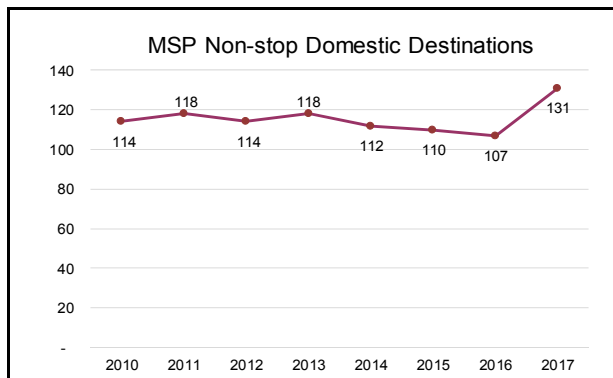
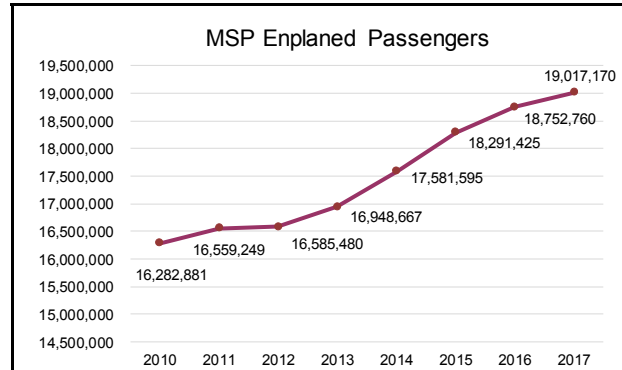
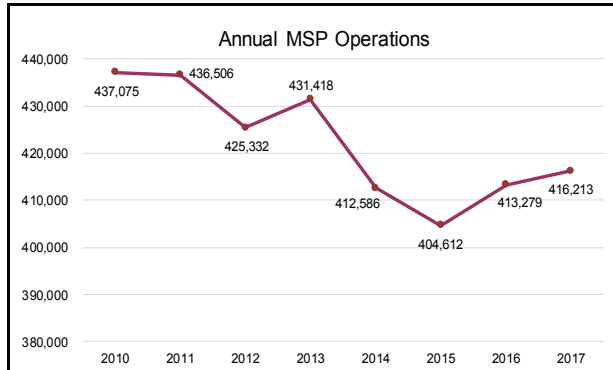
*The compliment-to-complaint ratio declined in 2016 due to external entities promoting campaigns to influence decisions by the Metropolitan Airports Commission.

Development



The following Performance Measures are common benchmark measures; however, the MAC has limited ability to impact these numbers directly.

Operations



GFOA Budget Award

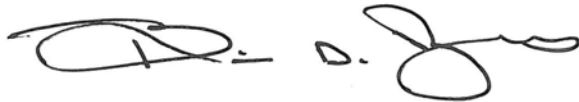
The Government Finance Officers Association of the United States and Canada (GFOA) presented a Distinguished Budget Presentation Award to the Metropolitan Airports Commission for its annual budget for the fiscal year beginning January 1, 2017. In order to receive this award, a government unit must publish a budget document that meets program criteria as a policy document, as an operations guide, as a financial plan, and as a communications device.

This award is valid for a period of one year only. We believe our current budget continues to conform to program requirements, and we are submitting it to GFOA to determine its eligibility for the 2018 award.

Acknowledgement

The budget is the result of countless hours of work by the staff of the Finance Department and by Commissioners who served on the Finance and Administration Committee. A very special thanks goes out to all MAC staff who worked especially hard to develop the final 2018 Budget. Through this hard work and effort, we hope that the MAC will continue to be one of the most safe, efficient, and cost-effective airport operators in the nation. It is significant to note that the Distinguished Budget Presentation Award has been presented to the Commission annually by the GFOA since 1985.

Respectfully submitted,



Brian Ryks
Executive Director/CEO



Stephen L. Busch
Chief Financial Officer



Robert Schauer
Director – Finance



2017 Budget Award

Awards Received During 2017



Airport of the Year, Best Airport Staff in North America – SKYTRAX

Balchen/Post Award for Excellence in the Performance of Airport Snow and Ice Control, Honorable Mention – International Aviation Snow Symposium

Best Airport in North America, 25-40 million passengers per year – Airport Council International

Best Airport Newsstand/Travel Essential – Airport Revenue News

Best New Food & Beverage, Quick Service – Airports Council International-North America

Best New News & Gift Concept – Airports Council International-North America

Bronze Workplace Health Achievement Award – American Heart Association

Certificate of Achievement for Excellence in Financial Reporting, 33 consecutive years – Government Finance Officers Association



Design and Aesthetics Renovation/Remodel, Interior Retail over 15,000 Square Feet – Minnesota Shopping Center Association

Distinguished Budget Presentation Award, 33 consecutive years – Government Finance Officers Association



Environmental Achievement Award, Special/Innovative Projects Category – Airports Council International-North America

Excellence in Airport Concessions Best Retail Program, Large Airport – Airports Council International-North America

Interior Design, Quick Service/Fast Casual/Fast Food – Minnesota Shopping Center Association

Most Efficient Airport in North America – Airport Transportation Research Society

Navigating MSP Program – Autism Society of Minnesota

Platinum + Green Wellness by Design Worksite – Hennepin County

Property Manager of the Year – Airport Revenue News

Randy Jones Award for Excellence in Noise Mitigation – American Association of Airport Executives/Airports Council International

Sixth Best Airport in Customer Satisfaction, Mega Airport Category – J.D. Power

Step 2 Carbon Accreditation – Airports Council International-North America

Terminal 2-Humphrey Solar Array – Association of Energy Engineers

Top 10 U.S. Airports – Travel + Leisure



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The Organization



Overlooking Downtown St Paul



Overlooking Downtown Minneapolis

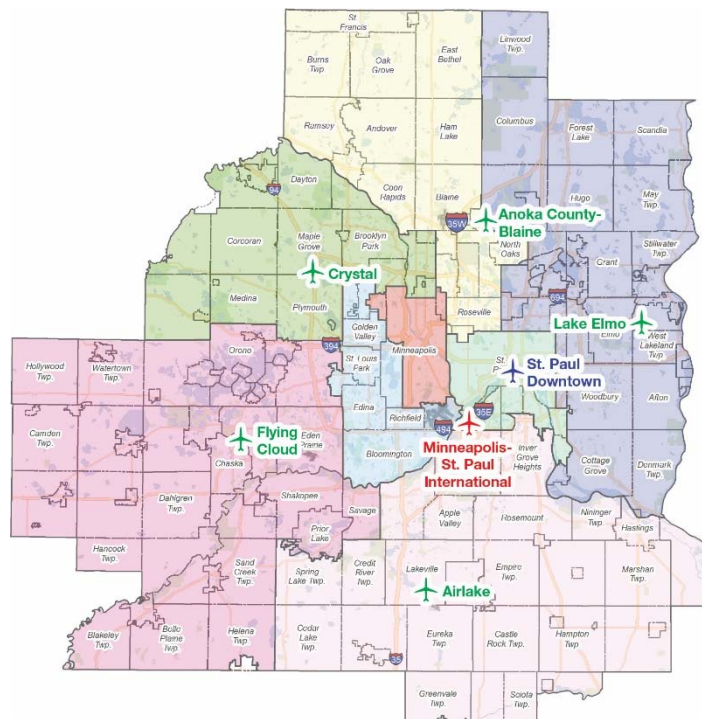
The Commission

The Minneapolis-St. Paul Metropolitan Airports Commission was created by an act of the Minnesota State Legislature in 1943 as a public corporation of the State. The purpose of the Commission is to:

- Promote air navigation and transportation (international, national, and local) in and through the State of Minnesota.
- Promote the efficient, safe, and economic handling of air commerce and to assure the inclusion of the State in national and international programs of air transportation. To those ends, develop the full potentialities of the metropolitan area as an aviation center.
- Assure minimum environmental impact from air navigation and transportation for residents of the metropolitan area, promote the overall goals of the State's environmental policies, and minimize the public's exposure to noise and safety hazards around the airports.

Commission Jurisdiction 35 Mile Radius

The area over which the Commission exercises its jurisdiction is the Minneapolis-St. Paul Metropolitan Area which includes Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington Counties, and extends approximately 35 miles out in all directions from the Minneapolis and St. Paul City Halls. The Commission owns and operates seven airports within the Metropolitan Area. Scheduled air carriers are served by the Minneapolis-St. Paul International Airport. Six Reliever Airports serve business and general aviation.



The Chair and fourteen Commissioners govern the Metropolitan Airports Commission. The Governor of the State of Minnesota appoints the Chair and twelve Commissioners. Of these twelve Commissioners, eight are from designated districts within the Metropolitan Area and four are from outside of the Metropolitan Area. The Mayors of St. Paul and Minneapolis also have seats on the Commission, with the option to appoint a surrogate to serve in their place. While the Commissioners' terms are four years, the Chair serves at the pleasure of the Governor.



Dan Boivin
Commission Chairman



Brian Ryks
Executive Director/CEO



Carl Crimmins
District A



Rick King
District B



Katie Clark Sieben
District C



Steve Cramer
District D



James Deal
District E



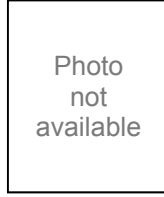
Michael Madigan
District F



Richard Ginsberg
District G



Ibrahim Mohamed
District H



Leili Fatehi
City of Minneapolis



Pat Harris
City of St Paul

Representing the Greater Minnesota Area



Randy Schubring



Patti Gartland



Donald Monaco



Dixie Hoard

The Commission established three committees. Each of the committees (Planning, Development & Environment, Finance & Administration, and Management & Operations) meets on a monthly basis. The committees are responsible for all aspects of business which fall under their respective jurisdiction. Recommendations on all action items are made by the committees to the Full Commission. The Full Commission also meets monthly. All of the committee meetings, as well as the Full Commission meeting, take place in MSP's Terminal 1-Lindbergh. Occasionally, the Full Commission meets outside the terminal to provide easier access for the general public.

Committee	Time of Meeting	Meeting Place
Finance & Administration (F&A)	9:30 a.m., first Monday of the month	Terminal 1-Lindbergh
Planning, Development & Environment (PD&E)	10:30 a.m., first Monday of the month	Terminal 1-Lindbergh
Management & Operations (M&O)	1:00 p.m., first Monday of the month	Terminal 1-Lindbergh
Full Commission	1:00 p.m., third Monday of the month	Terminal 1-Lindbergh

All financial information is reported to and acted upon at the Finance & Administration Committee (F&A) meeting and reported to the Full Commission. The following information summarizes the general financial areas that the F&A Committee dealt with in 2017:

- Audits
 - Annual Internal Audit Plan
 - Financial Audits
 - Internal Policy/Procedure Audits
 - Approval of Internal Audit Director
- Operating Budget
 - Monthly Reports
 - Ratification of 2016 Expenditures
 - Distribution of 2016 Net Revenues/Unrestricted Cash
 - 2018 Budget Targets
 - 2018 Preliminary and Final Budgets
- Financial Policies
 - Purchasing Policy Updates
 - Consultant Policy Updates
 - General Aviation Financial Model
- Bonds/Debt/Capital Funding
 - Passenger Facility Charge Application(s) and Amendments
 - Financial Feasibility Consulting Services
 - IT Capital Equipment Approval
 - Short-Term Borrowing Program Selection
- Investments
 - Investment Policy Revisions
- Human Resources and Affirmative Action
 - Human Resources and Affirmative Action Policies and Procedures
 - Employee Benefits and Compensation
 - Ratification of Labor Agreements

Divisions

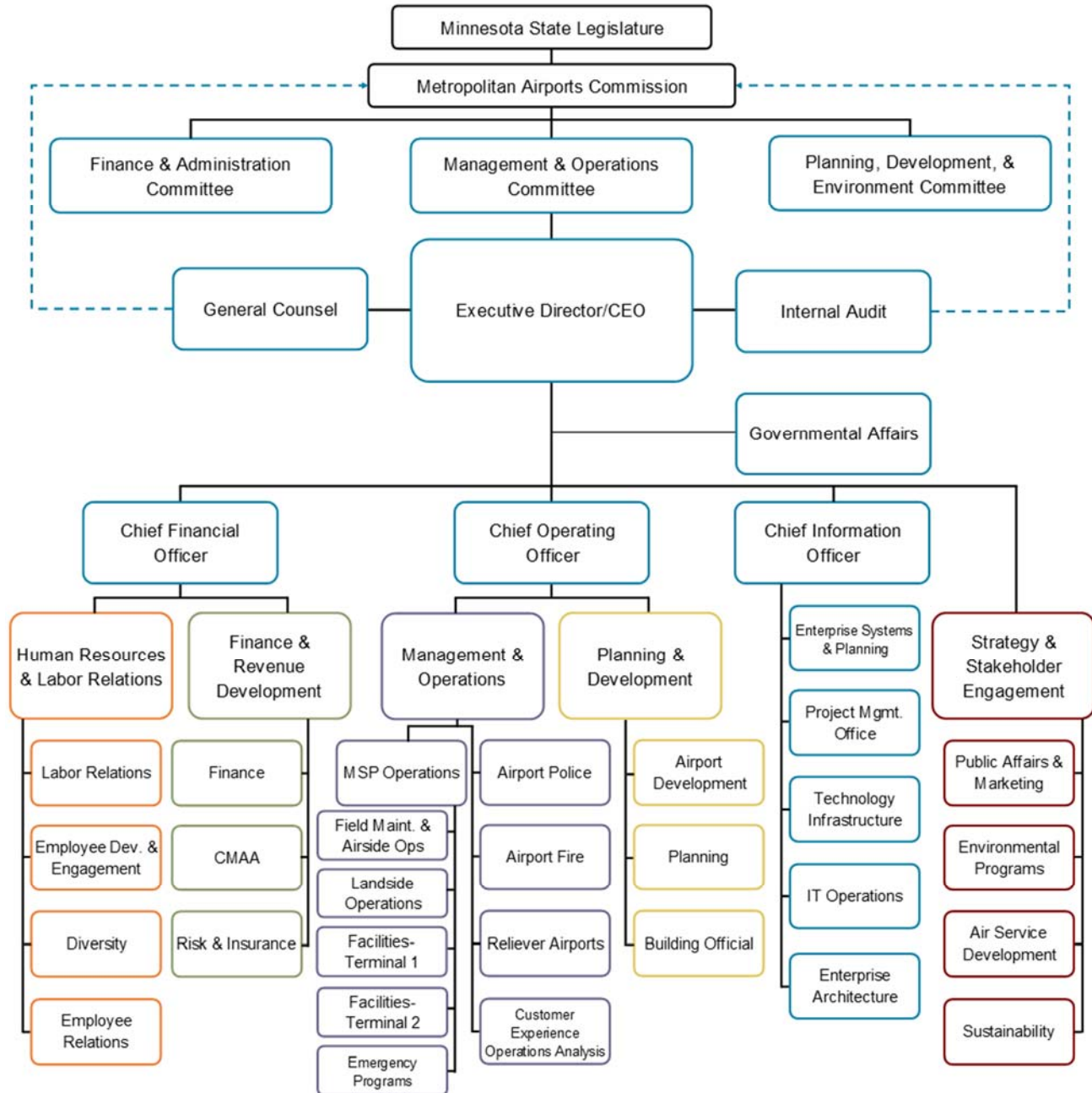
Under the direction of the Commission, the MAC's organizational structure is made up of six divisions within the Operating Fund. The six divisions are: Executive; Finance & Administration; Planning & Development; Management & Operations; Human Resources & Labor Relations; and Strategy & Stakeholder Engagement. The Executive Division oversees all MAC business and is directly responsible to the MAC's Board of Commissioners. The chart on the following page identifies the organizational structure by division.

The following are the changes made in the organization in recent years to better reflect the service center responsibilities and reporting structure:

- In 2017, the structure changed from four divisions to the six divisions described above.
- In 2017, the Human Resources & Labor Relations Division was created. This service center, as well as Employee Development & Engagement, Employee Relations, and Diversity moved to this new division.

- In 2017, the Strategy & Stakeholder Engagement Division was created. The Public Affairs & Marketing, Air Service Development, Sustainability & Strategy, and all Environmental service centers moved to this new division.

Organizational Chart



Service Centers

Service centers are the lowest budget levels in the organization. A combination of service centers is sometimes referred to as a department. These service centers are responsible for specific functions that relate to one another. The department format provides department heads with an opportunity to review functions they manage as one (example: Finance includes Purchasing). The following page shows a listing of service centers and the divisions in which they reside.

Organizational Structure by Division and Service Center

Division		Service Center
	Number	Name
Executive	75100	Executive-Commissioner
	75000	Executive-General
	75600	Finance & Administration
	81000	General Counsel
	78300	Internal Audit
	79500	Governmental Affairs
	79000	Information Technology
Strategy & Stakeholder Engagement	76000	Public Affairs & Marketing
	85000	Environment-General
	85100	Environmental Affairs
	85300	Aviation Noise Program
	76100	Air Service Business Development
	76200	Sustainability & Strategy
Finance & Revenue Development	76700	Live Well, Stay Well
	76800	Insurance/Risk Management
	78000	Finance
	78100	MAC General
	78200	Purchasing
	80000	Commercial Management & Airline Affairs
	80100	Concessions & Business Development
	82050	MSP Airport Conference Center
Human Resources & Labor Relations	75700	Human Resources & Labor Relations
	76600	Employee Development & Engagement
	80600	Diversity
	81500	Employee Relations
Planning & Development	75500	Planning & Development
	77000	Airport Development
	77100	Building Official
Management & Operations	75800	Management & Operations
	82000	MSP Airport Operations
	83400	Landside-Administration
	85500	Facilities-Terminal 2
	86100	Facilities-Terminal 1
	86300	Facilities-Energy Management Center
	88400	Trades-Administration
	88000	Trades-Electricians
	88100	Trades-Painters
	88200	Trades-Carpenters
	88300	Trades-Plumbers
	89000	Field Maintenance
	82600	Airside Operations
	83600	Fire
	84200	Police
	90000	Relievers-Administration
	90200	Relievers-St. Paul
	90300	Relievers-Lake Elmo
	90400	Relievers-Airlake
	90500	Relievers-Flying Cloud
	90600	Relievers-Crystal
	90700	Relievers-Anoka

Full-Time Equivalent Positions (FTEs)

The total overall 2018 budgeted FTEs are 645.5, which is an increase of 18 FTEs over 2017. The additional positions are allocated between the service centers based on needs of the organization. The increased FTE count in 2018 is necessary to address enterprise technology needs, airport safety and security, succession planning for the Fire Department, and to provide flexibility in organization staffing needs.

In 2014, six temporary operations staff at MSP Terminal 2-Humphrey were made into regular status positions resulting in 591 budgeted FTEs.

2015 brought about 10 new positions to fill in departments that required extra support such as Trades staffing needed to assume the operational control of the G Concourse from Delta. Also, 9.5 part-time and provisional PSA staff became full-time to reflect the actual hours worked by these employees.

Nine FTEs were added in 2016 to meet legal mandates and regulatory requirements to ensure a safe and secure airport system and to stay current with information technology and systems. This created a total of 619.5 approved FTEs.

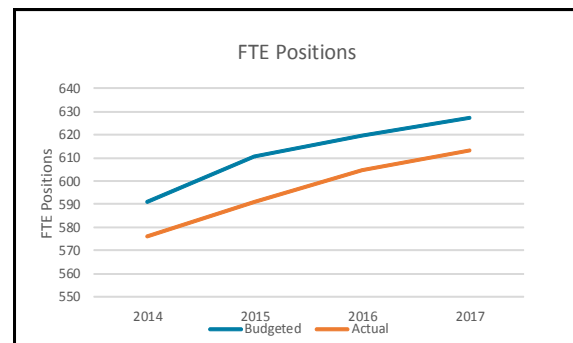
In 2017, eight FTEs were added to meet growing technology and airport safety needs. Total approved FTEs in 2017 were 627.5.

As shown in the chart below, the Commission authorized an additional 18 FTEs in 2018. A previous Information Technology study concluded the MAC needs more resources to meet the ever-changing and increasing demand for technology. Five of these positions will be unfunded Information Technology FTEs. They will be filled only if a cost savings can be shown over the current cost of hiring a professional service contractor. In addition, the actual salary amount for budgeted positions is adjusted to reflect a limited vacancy factor to account for time to fill open positions.

The following table and graph compares budgeted and actual FTEs. Although budgeted FTEs are authorized to meet legal mandates and regulatory requirements, the actual position counts are lower than budget each year because the MAC re-evaluates each vacated position to determine if it is needed, if it should be changed or if the duties can be merged into another position. This process is necessary to keep down costs. Also, a number of retirements occur each year as many staff members are reaching retirement age.

The graph shows an overall increase in positions across the years as passenger counts increase and the MAC adds positions to cover areas in need of additional staffing.

FTE Positions	2014	2015	2016	2017	2018
Budgeted	591	610.5	619.5	627.5	645.5
Actual	576	591	604.5	613	TBD



Field Maintenance Staff Pose with Equipment



Environment Staff Receive International Award

Regular Status Full-Time Equivalent Position Count by Service Center within each Division

Service Center	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2017 Budget	2018 Budget
Executive	As of 12/15/14	As of 12/28/15	As of 12/19/16	As of 12/18/17		
75000 Executive-General	3	3	3	3	3	3
75100 Executive-Commissioner	0.5	0.5	0.5	0.5	0.5	0.5
75600 Finance & Administration	2	2	2	3	2	3 ¹
78300 Internal Audit	4	4	4	4	4	4
79000 Information Technology	26	28	32	37	38	45 ²
79500 Governmental Affairs	1.5	1.5	1.5	1.5	1.5	1.5
81000 General Counsel	8.5	8.5	8.5	8	9	9
Total Executive	45.5	47.5	51.5	57	58	66
BUDGET	45.5	46	55	58	58	66
Strategy & Stakeholder Engagement						
76000 Public Affairs & Marketing	7	8	10	10	10	10
76100 Air Service Business Development	0	0	0	0	0	1 ³
76200 Sustainability & Strategy	0	0	2	1	3	3
85000 Environment-General	5	5	3	3	4	4
85100 Environmental Affairs	3	3	3	3	3	4 ⁴
85300 Aviation Noise Program	5	5	5	5	5	5
Total Strategy & Stakeholder Engagement	20	21	23	22	25	27
BUDGET	19	22	24	25	25	27
Finance & Revenue Development						
76800 Insurance/Risk Management	6	6	6	6	6	6
78000 Finance	15	15	15	15	15	15
78100 MAC General	0	0	0	0	0.5	2.5 ⁵
78200 Purchasing	7.5	7.5	6	6	6	6
80000 Commercial Mgmt & Airline Affairs	5	5	5	5	5	5
80100 Concessions & Business Development	4	5	5	4	5	5
82050 MSP Airport Conference Center	3	3	2	3	3	3
Total Finance & Revenue Development	40.5	41.5	39	39	40.5	42.5
BUDGET	40	45	40.5	40.5	40.5	42.5
Human Resources & Labor Relations						
75700 Human Resources & Labor Relations	3	5	5	5	5	5
76600 Employee Development & Engagement	3	2	3	3	3	1 ⁶
80600 Diversity	2	2	2	2	2	2
81500 Employee Relations	5	3	3	3	3	5 ⁶
Total Human Resources & Labor Relations	13	12	13	13	13	13
BUDGET	14	13	13	13	13	13



MAC Employees at the Annual Employee Recognition Luncheon, Hosted at MAC Fire Station #1

Regular Status Full-Time Equivalent Position Count by Service Center within each Division

Service Center	2014	2015	2016	2017	2017	2018
	Actual	Actual	Actual	Actual	Budget	Budget
	As of 12/15/14	As of 12/28/15	As of 12/19/16	As of 12/18/17		
Planning & Development						
75500 Planning & Development	2	2	2	2	2	2
77000 Airport Development	13	14	16	15	16	16
77100 Building Official	2	2	2	1	2	2
Total Planning, Dev. & Environment	17	18	20	18	20	20
BUDGET	20	20	20	20	20	20
Management & Operations						
75800 Management & Operations	3.5	3.5	3.5	3.5	3.5	3.5
82000 MSP Airport Operations	3	3	3	3	3	3
82600 Airside Operations	15	16	16	15	16	15 ²
83400 Landside-Administration	24.5	31.5	34.5	36.5	35.5	37.5 ⁷
83600 Fire	49	46	46	50	50	51 ⁸
84200 Police	125	128	129	132	137	141 ⁹
85500 Facilities-Terminal 2	9	9	9	9	9	9
86100 Facilities-Terminal 1	10	9	9	7	9	9
86300 Facilities-Energy Management Center	21	21	23	22	22	22
88000 Trades-Electricians	18	19	19	19	19	19
88100 Trades-Painters	8	8	10	10	9	9
88200 Trades-Carpenters	9	10	10	10	10	10
88300 Trades-Plumbers	9	10	10	10	9	9
88400 Trades-Administration	2	2	2	2	2	2
89000 Field Maintenance	107	108	108	109	110	110
90000 Relievers-Administration	8	8	7	7	8	8
90200 Relievers-St. Paul	7	7	7	7	7	7
90300 Relievers-Lake Elmo	1	1	1	1	1	1
90400 Relievers-Airlake	1	1	1	1	1	1
90500 Relievers-Flying Cloud	3	3	4	4	4	4
90600 Relievers-Crystal	3	3	3	3	3	3
90700 Relievers-Anoka	4	4	3	3	3	3
Total Management & Operations	440	451	458	464	471	477
BUDGET	452.5	464.5	467	471	471	477
TOTAL ACTUAL FTEs	576	591	604.5	613	NA	NA
TOTAL BUDGET FTEs	591	610.5	619.5	627.5	627.5	645.5

FTEs differ between the 2017 and 2018 budgets for the following reasons:

¹ The Vice President of Finance and Revenue Development position was created in June 2017.

² IT continues to be an area of prioritized organizational growth to fully meet current needs. One unspecified FTE has been added to the Information Technology service center. One FTE was moved from Airside Operations. Five additional unfunded FTEs were added. These positions will be filled as anticipated cost savings prove out.

³ The Assistant Director of Air Service Development position was created in June 2017 and will be filled in 2018.

⁴ The Vice President of Strategy and Stakeholder Engagement position was created in June 2017 and will be filled in 2018.

⁵ MAC General includes two new FTEs for 2018 that have not been assigned to service centers.

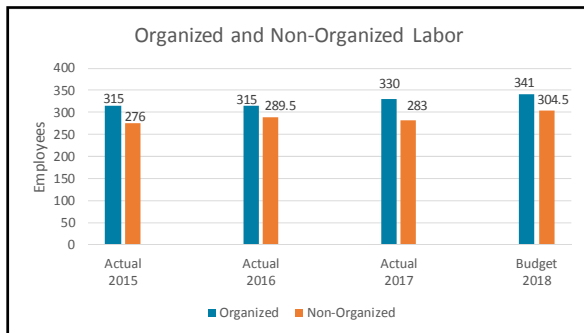
⁶ Two FTEs moved from Employee Development & Engagement to Employee Relations in 2018. The reclassification more accurately reflects the service center that these employees' work supports.

⁷ Two FTEs were added during 2017 for Operations Agents, due to increased Transportation Network Company activity.

⁸ One FTE was added as a Fire Fighter Trainee. This position was created to ensure no gap in staffing as expected retirements take place within the Airport Fire Department.

⁹ Four FTEs were added for additional Police Officers. Safety and security of the airport is a primary focus of the organization. These additional FTEs will bolster the MAC's ability to maintain safety and security as security and campus needs evolve.

Regular Status Full-Time Equivalent Position Count by Job Classification				
	2015	2016	2017	2018
	<u>Actual</u>	<u>Actual</u>	<u>Actual</u>	<u>Budget</u>
Organized				
Local 70 Operating Engineers	21	19	22	22
49er's Equipment Maintenance	21	18	20	20
320's - MSP Int'l - Field	73	75	76	79
320's - MSP Int'l - Facilities	1	1	0	0
320's - Reliever Airports	19	19	22	22
Painters -386	8	10	10	10
Carpenters - CAR	10	10	10	10
Plumbers -034	10	10	10	10
Electricians - 292	19	19	19	19
Emergency Communications Specialists	12	12	12	13
Police Lieutenants/Sergeants - 307	19	18	19	19
Police Officers - 302	60	62	65	71
Firefighters - S6	33	33	36	37
Fire Captains - S6	9	9	9	9
Total Organized	315	315	330	341
Non-Organized				
Chairperson/Executive Director-CEO	1.5	1.5	1.5	1.5
Vice Presidents/Directors/Assistant Directors	25.5	27.5	30	33
Managers/Assistant Managers/Supervisors	88	92	68	72
Police Chief/Fire Chief	2	2	2	2
Community Service Officers	5	7	4	5
Passenger Service Assistants	20.5	21.5	22.5	23.5
Fire Marshall/Training Coordinator	2	2	2	2
Police Commander/Deputy Chief/Training Coordinator	3	3	3	3
Administrative/Professional/Technical Support	128	133	150	155
Unassigned	0.5	0	0	7.5
Total Non-Organized	276	289.5	283	304.5
Total MAC	591	604.5	613	645.5



The above chart shows staff by job classification. "Organized" refers to those work areas or employees which are represented by a labor union contract. All unions represented have specific contracts which dictate wages, benefits, and work rules. Currently, the MAC has 14 represented labor groups. "Non-Organized" refers to all other employees outside the labor unions. The graph to the left shows Organized FTE positions are greater than Non-Organized FTE positions.

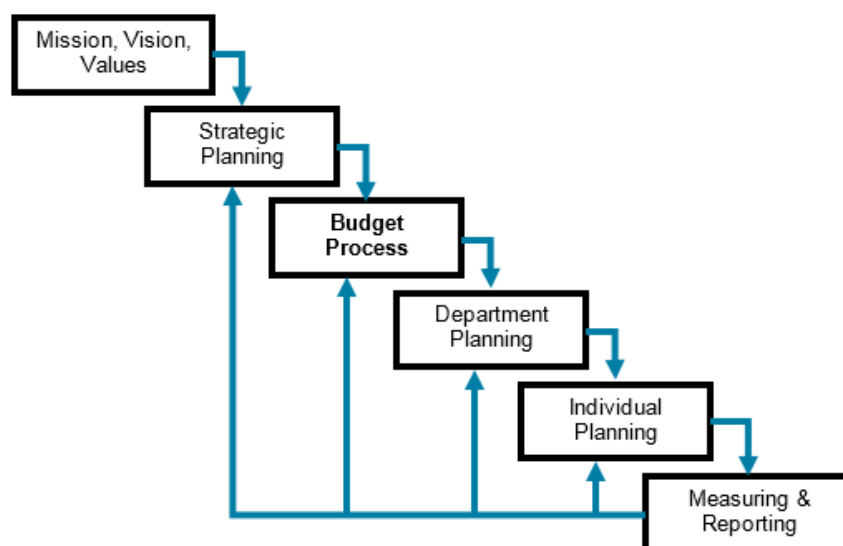


**MAC Teams Participate in Events to Raise Money for Special Olympics Minnesota:
Plane Pull (left), Polar Plunge (right)**

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Budget Process & Financial Policies

Budget Process



The MAC's Mission, Vision, and Values drive the Strategic Planning process which is updated annually to establish organizational priorities. The budget process is the third step in the MAC's annual planning process.

Input is received from the Commissioners, Senior Staff, and various levels of management through planning sessions that identify critical issues, strategic goals, and organizational objectives.

The draft Strategic Plan is presented to the Commission in conjunction with the proposed annual budget targets. The targets for the 2018 budget are presented in the Executive Summary section.

Following Commission approval, the Strategic Plan is communicated to the service centers along with guidelines and the budget targets. The service centers link their objectives to the Organizational Strategic Goals and Objectives.

The next step is to develop the budget requests for resources based on organizational priorities. Position requests and other costs are evaluated using the following criteria:

Full-Time Equivalent (FTE) Requests

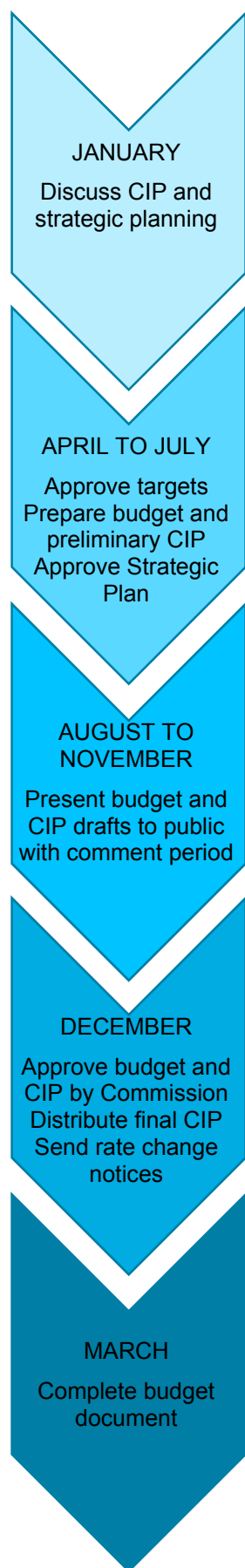
First priority	Necessity to meet legal mandates and regulatory requirements
Second priority	Ability to maintain a safe and secure airport system
Third priority	General business need

Other Costs

First priority	Additional costs required to meet security requirements
Second priority	Embedded cost increases such as scheduled increases in contracts, salary adjustments for organized labor, utility rate increases, etc.
Third priority	Costs to maintain facilities

Controllable Expenses

The MAC prepares a line item budget for each service center. Controllable expenses allow a service center to budget for those line items for which they have direct responsibility and control. In addition to the account number, expenses are also budgeted using the appropriate subledger, which is part of the account code. Expenses are budgeted to the appropriate subledger through either direct cost or allocation. Expenses of the organization are key factors in revenue calculations. Rates and charges revenue collected from the airlines are governed by the Airline Use Agreement and corresponding amendments. Other revenue collections are dictated by either lease or ordinance. The summarized costs from the subledgers determine the calculation of various rates and charges. The Subledger Report is in the Operating Budget Expense section.



Budget Schedule

The MAC's fiscal year is January through December. Preparation for the next year begins in January with discussions on the Capital Improvement Program (CIP) and strategic planning. The budget process begins in March. Each department assigns a budget specialist to coordinate budget information for their respective service centers and inputs the budgets into the database. The database includes history which includes the prior year actual data.

In April, the Finance & Administration Committee provides direction to staff with regard to growth and allocation of funds and budget targets. The direction provided by the Finance & Administration Committee is communicated to staff at various informational meetings and is included in the budget documents. The Commission approves the targets in June after a 30-day public comment period.

The budget database is available to service centers to input their data in June. Service centers have four weeks to complete their budget. Finance reviews and summarizes information.

The staffing matrix is the first item reviewed by Executive Staff.

August is spent compiling summary reports and completing the revenue budget, with the exception of airline rates and charges. The expense budget must be complete in order to determine airline rates and charges. Once these rates are calculated and final revenue figures are available, total revenue and expense is completed. Non-operating revenue and expenses are also taken into consideration and become part of the budget documents. Staff revisions are made as required to ensure the targets as established are met.

During September, presentations and supporting documents are prepared for the Finance & Administration Committee, Senior Staff, and airlines. In addition, a draft budget is sent to the Minnesota State Legislature. The airlines receive a formal budget presentation in October. The month of October is reserved for presentations to the Finance & Administration Committee and revisions prior to requesting final approval.

The Finance & Administration Committee will receive updates from staff during October and November. The recommendation from the Finance & Administration Committee for final approval is requested at the December Commission meeting. Final approval of the 2018 Operating Budget was given at the December Commission meeting. Notifications of rate changes are sent at the beginning of December based upon assumed approval from the Full Commission. Changes, if necessary, are communicated upon final approval.

Capital Improvement Program – Schedule

Initial discussions of the Capital Improvement Plan (CIP) begin in January. All requests for projects, along with data related to the proposed projects, are submitted. Airport Development analyzes the project scope, costs, and priorities with a preliminary draft developed in June and July.

In September, approval of the preliminary CIP plan is requested from the Planning, Development & Environment Committee for environmental review. At this time, mailings are sent to the affected communities and municipalities. In October, a 30-day notice of public hearing is published. A public hearing is held in November.

Recommendation for approval of the CIP from the Planning, Development & Environment Committee is requested at the December Commission meeting.

Distribution of the approved CIP is made to MAC Departments, Metropolitan Council, State Historical Society, and affected communities in December.

Calendar

The following schedule provides additional details for the budget cycle, which begins in January. The Metropolitan Airports Commission fiscal year also begins in January.

JANUARY	Task <ul style="list-style-type: none"> • Discuss initial CIP • Discuss initial strategic planning 	Responsibility Airport Development Full Commission
APRIL	Task <ul style="list-style-type: none"> • Provide direction to staff regarding growth and allocation of funds and budget targets • Prepare service center historical information and update databases • Approve Strategic Plan 	Responsibility F&A Committee Finance Full Commission
MAY	Task <ul style="list-style-type: none"> • Provide direction to budget specialists • Provide information regarding inflation factors, wage, and contract adjustments to the departments • Adopt budget targets after 30-day public comment period 	Responsibility Finance Finance Finance
JUNE	Task <ul style="list-style-type: none"> • Input budget information into budget and strategic planning databases • Present preliminary budget to F&A Committee, a requirement to comply with State Statutes – taxing purposes • Develop draft preliminary CIP 	Responsibility Finance Finance Airport Development
JULY	Task <ul style="list-style-type: none"> • Compile positions and headcount requests summary • Compile summary of capital assets requests • Present budget requests to Executive Director/CEO • Initiate budget revisions as needed 	Responsibility Finance & HR Finance & MAC Staff Finance Finance
AUGUST	Task <ul style="list-style-type: none"> • Approve preliminary position and headcount requests • Approve preliminary summary of capital assets requests • Prepare summary of controllable expense requests and supporting schedules • Compile revenue analysis and projections • Complete revenue forecast 	Responsibility Executive Staff/ HR Executive Director/CEO Finance Finance Finance
SEPTEMBER	Task <ul style="list-style-type: none"> • Compile budget presentation information • Distribute budget packages to airlines, State Legislature, and the F&A Committee • Present draft budget to MAC staff, F&A Committee and the airlines • Implement budget revisions to projected expenses • Present preliminary CIP to PD&E Committee • Approve preliminary CIP for environmental purposes • Mail CIP to affected communities 	Responsibility Finance MAC Staff, Finance, & Senior Staff Finance Finance Airport Development PD&E Committee Airport Development

OCTOBER

Task	Responsibility
<ul style="list-style-type: none"> • Present budget update to the F&A Committee • Revise budget as required • Present budget to airlines • Publish notice of CIP public hearing 	Finance & Senior Staff Finance Finance Airport Development

NOVEMBER

Task	Responsibility
<ul style="list-style-type: none"> • Present budget update to F&A Committee • Revise budget as required • Hold public hearing regarding CIP 	Finance Finance Airport Development

DECEMBER

Task	Responsibility
<ul style="list-style-type: none"> • Present preliminary notice of rate changes to all tenants • Approve budget for recommendation to Full Commission • Approve budget • Approve final CIP • Distribute CIP to MAC Departments, Metropolitan Council, State Historical Society and affected communities 	Finance F&A Committee Full Commission PD&E Committee Airport Development

MARCH

Task	Responsibility
<ul style="list-style-type: none"> • Complete Budget Document 	Finance

Amendment Process

The process to amend the budget is set forth in the MAC Bylaws, Article IV, Section 8(a) and presented below:

"8(a) Establishment of the annual budget setting out anticipated expenditures by type of expenditure and/or upward or downward revision of that budget in the course of the corporation's fiscal year shall constitute prior approval of each type of expenditure. Authorization by vote of the Commission is required for transfer of budgeted amounts between or among line items or to appropriate additional funds for each line item. The Executive Director/Chief Executive Officer is directed to provide for the daily operation and management of the Commission within the expenditure guidelines of the annual budget. Commission approval of a contract shall constitute prior approval of the disbursements made pursuant to terms of the contract within the constraints of the budget for all contract payments, except final construction contract payments which shall require Commission approval.

The Executive Director/Chief Executive Officer shall have the responsibility of securing adequate quantities of office, janitorial, maintenance and repair materials and supplies, and the rent of sufficient equipment necessary for the smooth, continuous operation of the Commission's system of airports and all facilities associated with the system of airports. The Executive Director/Chief Executive Officer's authority to secure these items shall be subject to the Commission's purchasing procedures and be subject to the line-item budget constraints of the annual budget.

At any time during the fiscal year, the Executive Director/Chief Executive Officer may recommend to the full Commission that all or any unencumbered appropriation balances of individual line-items be transferred to those line-items that require additional budgeted funds. In addition, the Executive Director/Chief Executive Officer may recommend to the full Commission the appropriation of additional funds above and beyond those approved at the time of budget adoption."

The individual line-items will include the following:

Personnel

Salaries & Wages
Benefits
Total Personnel

Administrative Expenses**Professional Services****Utilities****Operating Services**

Parking Management
Shuttle Bus Services
Service Agreements
Storm Water Monitoring
Other
Total Operating Services

Maintenance

Trades
Building
Field Equipment
Cleaning
Total Maintenance

Other

General Insurance
Other
Minor Equipment
Total Other

Non-Operating Expenses

Debt Service
Equipment Purchases
Other
Total Non-Operating Expenses

New Concessions Opened at MSP during 2016-2017

Approved Summary of Operating and Non-Operating Revenue and Expense

The Commission approved the 2018 budget in December 2017. The following tables summarize revenue and expense, including non-operating revenue and expense, and compare the 2018 budget to the 2017 year-end estimate.

Metropolitan Airports Commission Operating & Non-Operating Summary 2018 Budget						
					2018 Budget vs 2017 Estimate	
	2016 Actual	2017 Budget	2017 Estimate	2018 Budget	Dollar Change	% Change
OPERATING REVENUE						
Airline Rates & Charges						
Airline Agreement						
Landing Fees	\$ 59,428,277	\$ 63,808,136	\$ 64,200,000	\$ 67,137,865	\$ 2,937,865	4.6%
Ramp Fees	7,407,993	7,557,247	7,510,000	7,489,093	(20,907)	-0.3%
Airline R&R	4,558,611	4,666,311	4,666,000	4,673,574	7,574	0.2%
T1 Rentals	39,360,189	38,520,773	37,800,000	39,567,165	1,767,165	4.7%
T1 Other	5,935,241	6,301,094	6,900,000	6,131,467	(768,533)	-11.1%
Concessions Rebate	(15,827,376)	(16,970,000)	(17,150,000)	(17,367,105)	(217,105)	1.3%
Total Airline Agreement	100,862,935	103,883,561	103,926,000	107,632,059	3,706,059	3.6%
T2 Lobby	8,607,924	9,742,003	9,950,000	10,358,269	408,269	4.1%
T2 Other /Passenger	3,182,298	2,837,017	2,900,000	3,320,267	420,267	14.5%
Total Airline Rates & Charges	\$ 112,653,157	\$ 116,462,581	\$ 116,776,000	\$ 121,310,595	\$ 4,534,595	3.9%
Concessions						
Terminal						
Food & Beverage	\$ 21,043,955	\$ 22,857,000	\$ 23,037,000	\$ 24,022,753	\$ 985,753	4.3%
News	3,703,743	4,200,000	4,676,000	4,878,547	202,547	4.3%
Retail Stores	4,997,530	6,150,000	5,293,000	5,407,208	114,208	2.2%
Passenger Services	6,107,200	5,939,122	6,200,000	6,431,423	231,423	3.7%
Total Terminal	35,852,428	39,146,122	39,206,000	40,739,931	1,533,931	3.9%
Parking/Ground Transport						
Parking	91,234,678	100,702,000	96,300,000	97,469,494	1,169,494	1.2%
Ground Transportation	7,907,394	8,600,656	10,250,000	11,477,183	1,227,183	12.0%
MSP Employee Parking	3,652,905	3,645,708	4,158,136	4,158,136	0	0.0%
Auto Rental - On Airport	19,876,356	19,200,000	19,490,000	19,490,000	-	0.0%
Total Parking/Ground Transport	122,671,333	132,148,364	130,198,136	132,594,813	2,396,677	1.8%
Other Concessions	2,167,290	2,100,000	2,100,000	2,160,482	60,482	2.9%
Total All Concessions	\$ 160,691,051	\$ 173,394,486	\$ 171,504,136	\$ 175,495,226	\$ 3,991,090	2.3%
Rentals & Fees						
Buildings & Facilities	\$ 9,105,037	\$ 9,376,150	\$ 9,800,000	\$ 11,071,914	\$ 1,271,914	13.0%
Auto Rental CFC	21,924,370	21,850,000	21,850,000	21,850,000	0	0.0%
Ground Rentals	9,699,338	10,092,284	10,392,000	10,868,813	476,813	4.6%
Reliever Airports	7,744,487	7,303,336	7,500,000	8,034,970	534,970	7.1%
Total Rentals & Fees	\$ 48,473,232	\$ 48,621,770	\$ 49,542,000	\$ 51,825,697	\$ 2,283,697	4.6%
Utilities & Other Revenues						
Utilities	\$ 4,348,000	\$ 5,048,955	\$ 4,900,000	\$ 4,866,563	\$ (33,437)	-0.7%
General Aviation/Airside Fees	4,269,967	3,936,900	3,975,000	4,228,978	253,978	6.4%
Consortium Fees	3,522,546	3,812,000	3,930,845	4,121,886	191,041	4.9%
Other Revenues	2,135,776	1,700,000	2,000,000	1,823,936	(176,064)	-8.8%
Reimbursed Expense	2,838,811	2,130,000	2,500,000	2,172,715	(327,285)	-13.1%
Total Utilities & Other Revenue	\$ 17,115,100	\$ 16,627,855	\$ 17,305,845	\$ 17,214,078	\$ (91,767)	-0.5%
Total Operating Revenue	\$ 338,932,540	\$ 355,106,692	\$ 355,127,981	\$ 365,845,596	\$ 10,717,615	3.0%

Metropolitan Airports Commission Operating & Non-Operating Summary 2018 Budget						
					2018 Budget vs 2017 Estimate	
	2016 Actual	2017 Budget	2017 Estimate	2018 Budget	Dollar Change	% Change
Total Operating Revenue	\$ 338,932,540	\$ 355,106,692	\$ 355,127,981	\$ 365,845,596	\$ 10,717,615	3.0%
OPERATING EXPENSE						
Personnel	\$ 78,047,511	\$ 82,908,614	\$ 82,350,000	\$ 88,221,586	\$ 5,871,586	7.1%
Administrative Expenses	1,722,678	1,964,430	1,963,250	2,065,974	102,724	5.2%
Professional Services	6,217,338	6,681,338	6,600,000	7,050,439	450,439	6.8%
Utilities	18,815,869	19,851,846	19,300,000	19,696,338	396,338	2.1%
Operating Services/Expenses	23,389,443	26,416,717	26,225,000	28,955,363	2,730,363	10.4%
Maintenance	36,319,009	38,777,072	38,100,000	38,513,805	413,805	1.1%
Other	4,410,851	4,171,951	5,400,000	4,493,548	(906,452)	-16.8%
Total Operating Expense	\$ 168,922,699	\$ 180,771,968	\$ 179,938,250	\$ 188,997,053	\$ 9,058,803	5.0%
<i>(Excludes Depreciation and Noise Amortization)</i>						
Net Operating Revenue	\$ 170,009,841	\$ 174,334,724	\$ 175,189,731	\$ 176,848,543	\$ 1,658,812	0.9%
	2016 Actual	2017 Budget	2017 Estimate	2018 Budget	2018 Budget vs 2017 Estimate	
					Dollar Change	% Change
NON-OPERATING REVENUE (EXPENSE)						
Other Non-Operating Revenue						
Interest Income	\$ 4,860,000	\$ 6,250,000	\$ 6,350,000	\$ 6,436,000	\$ 86,000	1.4%
Self-Liquidating Income	4,576,000	4,654,000	4,654,000	4,902,000	248,000	5.3%
	\$ 9,436,000	\$ 10,904,000	\$ 11,004,000	\$ 11,338,000	\$ 334,000	3.0%
Debt Service						
Short Term Financing	\$ (2,172,000)	\$ (1,967,000)	\$ (2,223,000)	\$ (2,426,000)	\$ (203,000)	9.1%
Bond Principal/Int-Operating Fund Transfer	(89,975,000)	(95,028,509)	(90,725,000)	(103,100,000)	(12,375,000)	13.6%
Equip Financing Principal/Int Pymts	(2,950,000)	(5,040,425)	(4,977,000)	(4,382,000)	595,000	-12.0%
	\$ (95,097,000)	\$ (102,035,934)	\$ (97,925,000)	\$ (109,908,000)	\$ (11,983,000)	12.2%
Equipment						
Capital Expenditures	\$ (987,000)	\$ (999,371)	\$ (985,000)	\$ (1,112,000)	\$ (127,000)	12.9%
Equipment Purchases	(9,345,000)	(9,943,500)	(9,943,500)	(10,087,980)	(144,480)	1.5%
Baggage Handling System	(9,081,000)	-	-	-	-	
Passenger Facility Charge Revenue	9,081,000	-	-	-	-	
Equipment Financing	3,194,000	3,779,000	3,779,000	3,465,000	(314,000)	-8.3%
	\$ (7,138,000)	\$ (7,163,871)	\$ (7,149,500)	\$ (7,734,980)	\$ (585,480)	8.2%
Other						
Six Month Reserve Transfer	\$ (5,076,000)	\$ (3,521,825)	\$ (3,521,825)	\$ (4,112,543)	(590,718)	16.8%
Interstate Settlement/Medicare D	420,000	105,000	120,000	130,000	10,000	8.3%
Grant Reimbursements	-	-	-	-	-	
Easement Receipt	-	-	-	-	-	
Gain (Loss) on Equipment & Other	2,086,000	-	(2,125,000)	-	2,125,000	
	\$ (2,570,000)	\$ (3,416,825)	\$ (5,526,825)	\$ (3,982,543)	\$ 1,544,283	-27.9%
Total Non-Operating Revenue (Expense)	\$ (95,369,000)	\$ (101,712,630)	\$ (99,597,325)	\$ (110,287,523)	\$ (10,690,198)	10.7%
Net Revenue Available for Designation	\$ 74,640,841	\$ 72,622,094	\$ 75,592,406	\$ 66,561,021	\$ (9,031,386)	-11.9%

Summary of Operating Revenue and Expense (GAAP)

The following table is shown below for Generally Accepted Accounting Principles of the United States of America (GAAP) purposes. The financial statements are issued in conformance with GAAP. The "Basis of Budgeting" in this section explains the differences in the approved budget and the GAAP statement.

Metropolitan Airports Commission Operating & Non-Operating Summary GAAP Presentation Summary 2018 Budget (\$ in 000)							2018 Budget vs 2017 Estimate	
OPERATING REVENUE	2016	2017	2017	2018	2018 Budget vs 2017 Estimate			
	Actual	Budget	Estimate	Budget	Dollar	%		
					Change	Change		
Airline Rates & Charges	\$ 112,653	\$ 116,463	\$ 116,776	\$ 121,311	\$ 4,535	3.9%		
Concessions	160,691	173,394	171,504	175,495	3,991	2.3%		
Rentals/Fees	48,473	48,622	49,542	51,826	2,284	4.6%		
Utilities & Other Revenues	17,115	16,628	17,306	17,214	(92)	-0.5%		
Total Operating Revenue	\$ 338,932	\$ 355,107	\$ 355,128	\$ 365,846	\$ 10,718	3.0%		
OPERATING EXPENSE								
Personnel ¹	\$ 94,425	\$ 87,909	\$ 87,350	\$ 93,222	\$ 5,872	6.7%		
Administrative Expenses	1,723	1,964	1,963	2,066	103	5.2%		
Professional Services	6,217	6,681	6,600	7,050	450	6.8%		
Utilities	18,816	19,852	19,300	19,696	396	2.1%		
Operating Services/Expenses	23,389	26,417	26,225	28,955	2,730	10.4%		
Maintenance	36,319	38,777	38,100	38,514	414	1.1%		
Other	4,411	4,172	5,400	4,494	(906)	-16.8%		
Depreciation	139,226	145,202	144,500	150,392	5,892	4.1%		
Total Operating Expense	\$ 324,526	\$ 330,974	\$ 329,438	\$ 344,389	\$ 14,951	4.5%		
Operating Gain (Loss)	\$ 14,406	\$ 24,133	\$ 25,690	\$ 21,457	\$ (4,233)	16.5%		
NON-OPERATING REVENUE (EXPENSE) & CONTRIBUTIONS								
Interest Income and Other	\$ 15,577	\$ 11,009	\$ 12,082	\$ 11,800	\$ (282)	-2.3%		
Passenger Facility Charges (PFCs)	\$ 72,273	\$ 73,276	\$ 75,016	\$ 75,916	\$ 900	1.2%		
Interest Expense	\$ (62,238)	\$ (55,413)	\$ (64,052)	\$ (62,000)	\$ 2,052	-3.2%		
Capital Contributions & Grants	\$ 4,003	\$ 10,801	\$ 6,000	\$ 3,025	\$ (2,975)	-49.6%		
Total Non-Operating Revenue (Expense)	\$ 29,615	\$ 39,673	\$ 29,046	\$ 28,741	\$ (305)	-1.0%		
Change in Net Position	\$ 44,021	\$ 63,806	\$ 54,736	\$ 50,198	\$ (4,537)	-8.3%		
¹ Personnel includes GASB 68 Pension Adjustment								

Financial Policies

The following Metropolitan Airports Commission Financial Policies are addressed:

- Operating Budget
- Cash Management/Investment
- Capital Projects
- Purchasing
- Debt Service and Reserve Policies

The Commission utilizes these policies to provide structure and to ensure the development of the budget meets the MAC's mission, vision and values:

Financial Policies – Operating Budget

The Metropolitan Airports Commission uses the budget process to help plan for the future, ensure customer service and satisfaction, and maintain effective cost management and overall performance. The following represent the basic Operating Budget Policies under which the Operating Budget was prepared:

A. Operating Budget Policies

1. The Commission will pay all current expenditures from current revenues.
2. The Budget shall be prepared under the accrual basis of accounting.
3. The Operating Budget will be submitted with operating and non-operating revenue to exceed operating and non-operating expenses with a sufficient margin to provide for replacement of property, plant, and equipment.
4. The budget will provide for adequate funding of all retirement systems.
5. The Finance Department will assist service centers in reviewing monthly variance reports comparing actual versus budget revenue and expense on the financial software system.
6. The budget will provide summary information using the Operating Fund, Construction Fund, and Debt Service Fund projected for the next three years.
7. Where possible, the Commission will integrate performance measurement and/or efficiency indicators in the budget.
8. Department heads will review monthly reports comparing actual revenues and expenses to budgeted amounts. Any variance in expense (spending category or capital expenditures for their department as a whole projected to exceed \$100,000 by year-end) will be reported in writing to the Director of Finance and the Executive Director/Chief Executive Officer.

B. Budget Targets

The Commission will adopt budget targets to provide direction to staff in the preparation of the annual Operating Budget for the upcoming year. Budget targets may be established in the areas of non-airline revenue, operating expense (less depreciation), total airline charges and debt service coverage ratios. Targets will be developed taking into account items such as the Capital Improvement Program, the rate of inflation, the state of the airline industry, and existing labor and vendor contracts. To allow for public input into the Operating Budget, the following will occur:

1. When targets are presented to the Commission, final adoption will occur no earlier than the following month. Targets will be presented no later than May of the preceding budget year.
2. A draft of the Operating Budget must be presented to the Commission and mailed to the appropriate legislative committees ninety days prior to anticipated budget approval.

C. Operating Reserve

The Operating Reserve was established by the Finance & Administration Committee at six months of operating expenses less depreciation. The 2018 operating budget expenses are \$189.0 million with the reserve account reflecting a balance of \$94.5 million or six months of expenses. If the Commission deems it appropriate to reduce the operating reserve for the portion above the formula amount, such reductions shall not exceed 50% of the excess in any one year. In the event of a revenue shortfall in a current budget year, the Executive Director/Chief Executive Officer could freeze new hires, reduce temporary work force, defer cost of living wage increases, reduce discretionary spending, decrease capital and project expenditures, and may recommend a transfer from the Commission's operating reserve.

D. Revenue

The Commission monitors revenues on a monthly basis to ensure revenue from each source is at the maximum, with deviations from budget identified.

1. One-Time Revenues include, but are not limited to, grants and rebates. Grants are accounted for as contributions while rebates are accounted for as miscellaneous operating revenue. This revenue generated will become available to the Construction Fund, Capital equipment purchases, or other one-time expenditures as approved by the Commission.
2. Revenue Diversification is a Commission policy. The Commission maintains a diversified revenue system which is consistently monitored to help protect from possible short-term fluctuations.
3. Although the Commission has the ability to levy ad valorem property taxes upon properties at the airport and, under certain circumstances, upon all taxable property within the Metropolitan Area, the Commission is not currently levying taxes for these purposes. Rentals, rates and charges and other fees will be sufficient to meet all operational and maintenance expenses.

Basis of Budgeting

The annual Operating Budget is prepared based on targets established by the Commission. The MAC uses the accrual basis of accounting for budgeting. The accrual basis of accounting in the operating budget contains certain elements that are not expensed under GAAP such as debt service and reserve requirements. In addition, the budget excludes depreciation, noise amortization, and GASB 68 pension expense while these expenses are included on the financial statements.

The Commission operates as an Enterprise Fund with three segregated areas: Operating Fund (used for day to day operations), Debt Service Fund (used to pay required debt principal and interest payments), and Construction Fund (used to pay capital costs associated with the Capital Improvement Program).

An Enterprise Fund may be used to “report any activity for which a fee is charged to external users for goods or services.” GASB-34 states that an Enterprise Fund *must* be used to account for an activity if any one of the following criteria is satisfied (GASB-34, par. 67):

- The activity is financed with debt that is secured *solely* by a pledge of the net revenues from fees and charges of the activity.
- Laws or regulations require that the activity’s costs of providing services, including capital costs (such as depreciation or capital debt service) be recovered with fees and charges, rather than with taxes or similar revenues.
- The pricing policies of the activity establish fees and charges designed to recover its costs, including capital costs (such as depreciation or debt service).

Each year the Finance Department projects revenue for the upcoming budget year with the assistance of Airport Development, Landside-Administration, Reliever Airports, Concessions and Commercial Management Departments.

Accrual Basis of Accounting

The budgets for all three Segregated Funds identified above are prepared using the accrual basis of accounting in accordance with GAAP (Generally Accepted Accounting Principles) as this is the same method used for MAC accounting. The accrual basis of accounting attempts to record financial transactions in the period they occur rather than recording them in the period they are paid. In addition, the audited fund financial statements are also produced using the same accrual method of accounting. Strictly speaking, the accrual basis of accounting is described as follows:

Accrual accounting attempts to record the financial effects on an enterprise of transactions and other events and circumstances which have cash consequences for an enterprise in the periods in which those transactions, events and circumstances occur, rather than only in the periods in which cash is received or paid by the enterprise. Accrual accounting is concerned with the process by which cash expended on resources and activities is returned as more (or perhaps less) cash to the enterprise, not just with the beginning and end of that process.

Balanced Budget

Minnesota Statute 473.661, Subd. 1 refers to the general law regarding expenditure of public funds for public purposes. The appropriate Minnesota Legislative Committee and the public provide input prior to the budget approval. By December of each year, the Commission will adopt an annual balanced budget, defined as all revenues and non-operating revenues exceeding expenses and non-operating expenditures in all funds. Year-end operating surpluses will be used in maintaining reserves and may be available to the Construction Fund for capital projects as approved by the Commission.

Use of Estimates

The use of 2017 estimates in the reporting of the 2018 budget financial statements is based upon assumptions and estimates at the time of completion of the final budget draft. Actual results could differ from those estimates.

Budget Monitoring

Throughout the year the budget is monitored and compared to actual expenses. Various service centers utilize controls. For example, Purchasing verifies requisitions and budget amounts and Human Resources compares wages and hiring with the budgets along with managers responsible for their service center budgets. Reports are distributed monthly to the Commissioners.

Financial Policies – Cash Management/Investment

The Cash Management/Investment Policies are as follows:

Investment/Cash Management Policies

1. Cash Management
 - All securities are safekept at one institution.
 - All deposits must be insured or collateralized.
2. Investments
 - All investment purchases require bids to be taken from several different dealers.
 - Investments purchased will be diversified under legal requirements trying to maximize the rate of return.
 - The average rate of return on MAC managed investments will exceed the six-month Treasury Bill.
 - All repurchase agreements are required to be collateralized. The maturity of any investment shall not exceed four years (average portfolio life of no greater than 12 years for post-retirement medical funds).
 - To the extent possible, the MAC will attempt to match its investments with anticipated cash flow requirements.
 - The addition of new accounts shall require the written authorization of the Director of Finance and Executive Director/Chief Executive Officer.
3. Collateral
 - Collateral must always be held by an independent third party with whom the MAC has a custodial agreement.
 - A clear marked evidence of ownership (safekeeping) must be supplied to the entity and retained.
 - To the extent that funds deposited are in excess of the available Federal Deposit Insurance, the MAC shall require the financial institutions to furnish collateral, security, or corporate surety bond executed by a company authorized to do business in the State.

Financial Policies – Capital Projects

Each year, the Commission reviews, revises, and approves capital projects that will start within the next twelve months and adopts a Capital Improvement Program (CIP) which covers all projects to be started during the second calendar year. Commission approval authorizes staff to proceed with plans and specifications and to obtain bids for contract award by the Commission. In addition, a CIP that covers an additional five years is adopted. These serve as a basis for determining funding requirements and other operational planning decisions. The Commission's policy is to include in the CIP those projects which enable the Commission to maximize federal aid, enhance safety, and those that are customer service oriented. Projects which have a metropolitan significance are also submitted to the Metropolitan Council for review and approval. The

Metropolitan Council is a regional planning agency responsible for coordinating and planning certain governmental services for the metropolitan area.

Projects

Commission policies for Capital Projects:

1. Are safety and customer service oriented;
2. Maximize all federal aid;
3. Require Metropolitan Council approval on Reliever Airport projects in excess of \$2 million and MSP International projects in excess of \$5 million if they are viewed as having a metropolitan significance;
4. Include project priority categories, in order of importance:
 - Projects which the Commission has made a commitment to complete
 - Projects that enhance or ensure continued safety at each of the airports in the airport system
 - Projects that cannot be accomplished by Commission maintenance crews but are essential for reasons of economics or continued operation
 - Projects that are necessitated by regulatory requirements, such as FAA regulations and local, state, or federal laws
 - Projects which address various environmental issues ranging from asbestos abatement to wetland mitigation
 - Projects constituting preventative maintenance
 - Projects which improve customer service and/or convenience
 - Projects which have been identified as improving various operational aspects of the airport system, whether applicable to aircraft, tenants, Commission staff, or off-airport service providers
 - Estimated useful life of a capital improvement project typically range from 5 to 40 years.

Capital Equipment

All equipment purchases for 2018 will be accounted for based on the MAC's capital equipment guidelines:

1. The total cost of each piece of equipment is amortized over its useful life through depreciation charges.
2. Snow plowing equipment qualifies for state and federal aid. Total eligible aid is limited.
3. Aid for equipment purchases must compete with eligible construction projects.
4. All equipment purchases must follow the MAC's purchasing policies.
5. All equipment or project costs must be greater than or equal to \$10,000.
6. Estimated useful life for capital equipment ranges from 3 to 15 years.

Financial Policies – Purchasing

The Purchasing Department is responsible for the purchase, rental, sale, and disposal of equipment, supplies, minor construction, repair, or maintenance of real and/or personal property for the MAC. Its primary responsibility is to provide purchases that ensure the following: 1) availability; 2) quality; and 3) price consistency with the needs of the MAC. The Purchasing objective is to provide a foundation for effective, consistent, and complete consideration of all aspects of purchasing including:

1. Ensuring fair and equitable treatment of all suppliers and persons who deal with the MAC's procurement system
2. Fostering public confidence in the procurement procedures followed by the MAC
3. Ensuring compliance with applicable state and federal laws
4. Securing the advantages and economies derived from a centralized and standardized purchasing system
5. Promoting the use of modern, professional, and ethical business methods when using public funds to secure supplies, materials, equipment (or the rental thereof) or the minor construction, alteration, repair or maintenance of real or personal property.

Financial Policies – Debt Service and Reserve Policies

The Debt Service and Reserve Policies are as follows:

A. Debt

1. Currently the Commission is able to issue General Obligation Revenue Bonds and General Airport Revenue Bonds, both fixed and variable rate.
2. Funds will be managed to avoid any property tax levy.
3. The MAC will maintain the highest rating available from Fitch, Moody's, and/or Standard and Poor's Rating Agencies.
4. Procedures/mechanisms will be developed and maintained to obtain the highest possible rating on the General Airport Revenue Bonds.
5. All refundings of General Obligation Revenue Bonds or Airport Revenue Bonds must show a minimum 3% Net Present Value (NPV) savings as specified in Minnesota Statute Section 475.67, Subdivision 12.
6. The current remaining authorized level of issuance for General Obligation Revenue Bonds is \$55 million.
7. The MAC will endeavor to keep the total maturity length of General Obligation Bonds below 20 years and retire at least 50% of the principal within 10 years. In all cases, the maturity shall be shorter than the life of the related assets.
8. Regarding Special Facility Bonds, staff will adhere to Administrative Policy 2701 dealing with Special Facility Financing.
9. In December 2003, the Commission approved a policy to deal with derivative financing products. The Commission, along with its Financial Advisor and Bond Counsel, refined this policy further in July 2004. The refinements include establishing separate savings criteria and efficiency criteria in dealing with derivative financing products.

B. Reserve - The Commission is required to have a restricted investment balance on October 10 each year for General Obligation Revenue Bonds in an amount sufficient to cover debt service to the end of the second following year. For General Airport Revenue Bonds, a one-year maximum annual debt service reserve is required.

C. Debt Limits - Currently the Commission has three forms of indebtedness: Revolving Line of Credit, General Airport Revenue Bonds (GARBs), and General Obligation Revenue Bonds (GORBs). The GORB instrument has the most straightforward legal limit. That is, the Commission must receive Legislative approval to authorize and issue this type of debt. Currently the Commission is authorized to issue up to \$55 million of additional GORB debt. With regard to Revolving Line of Credit, the total authorized limit is currently \$75 million. The legal limit for GARBs is based on the Commission's ability to generate sufficient revenues to pass the Additional Bonds Test required under the Master Bond Indenture. As long as there are adequate revenues to pass the test, additional debt can be issued.

Compliance Statement

The Metropolitan Airports Commission is in compliance with all of the above stated policies.

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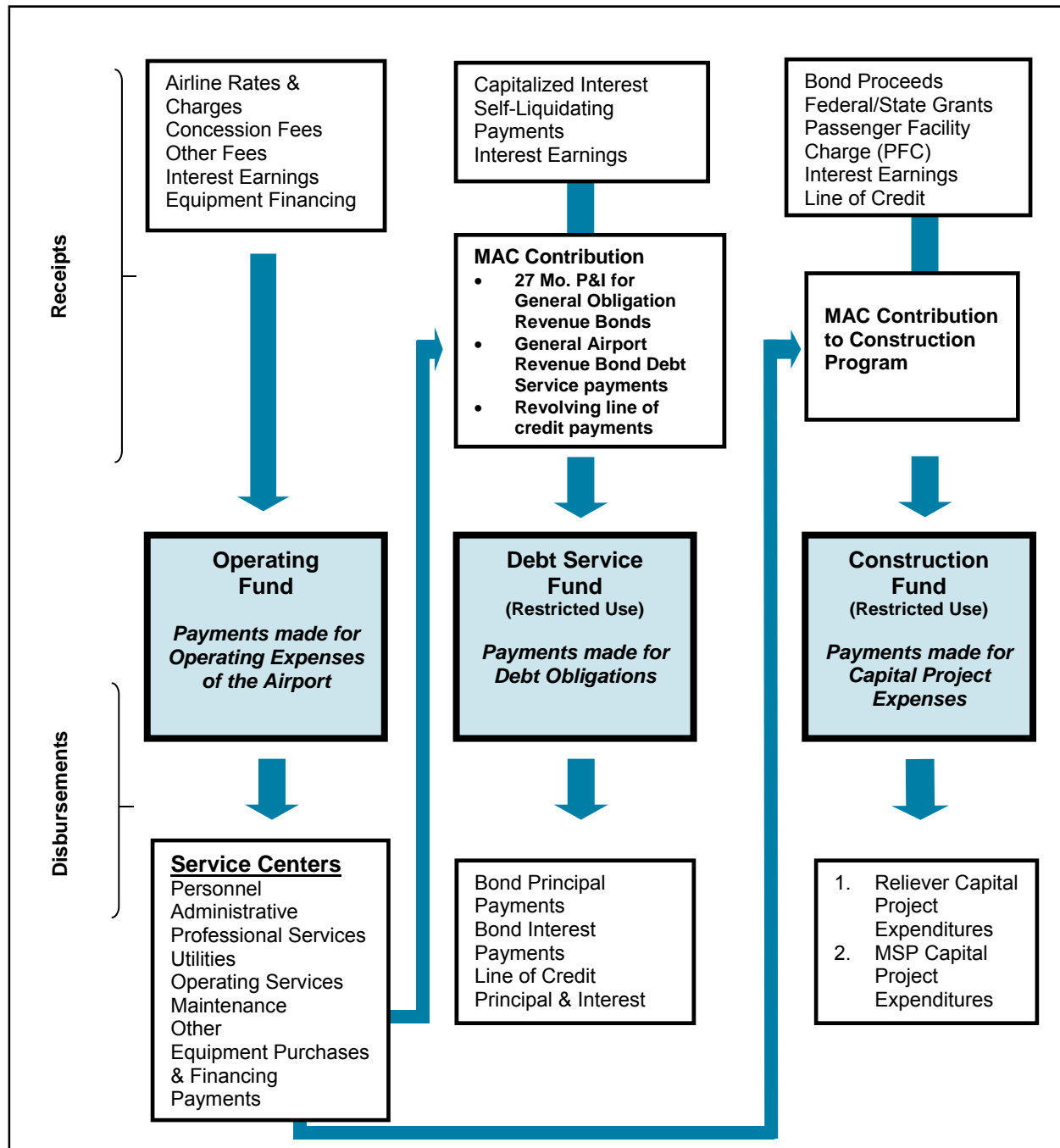
Fund Structure

The MAC is accounted for as an Enterprise Fund. An Enterprise Fund reports any activity for which a fee is charged to external users for goods or services. Amounts are restricted, internally or externally, for construction and debt redemption. For internal purposes, The MAC maintains three funds corresponding to three major functions: Operating Fund, Construction Fund, and Debt Service Fund. The budgets for all three segregated funds identified here are prepared using the accrual basis of accounting in accordance with (GAAP) Generally Accepted Accounting Principles and is the same method used for MAC accounting.

Service center expenses are within the Operating Fund as shown in the below chart.

Fund Relationship

The Flow of Funds chart below identifies the sources and uses of dollars within each fund and between funds.



Fund Balance Summary

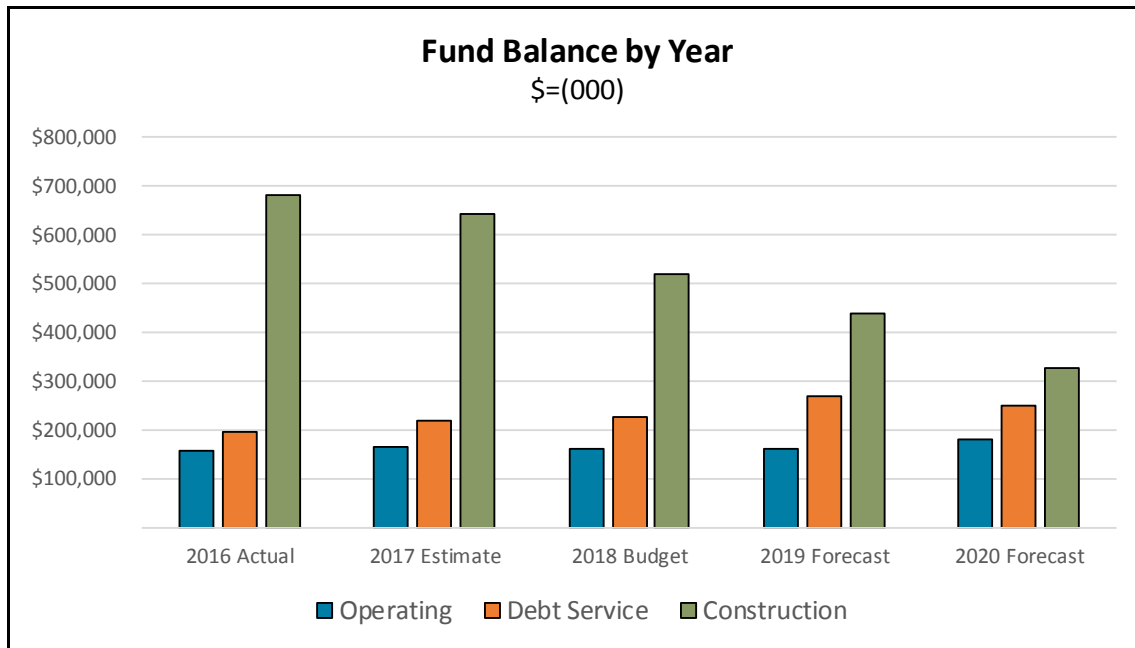
The table below is presented to show the general overview of the flow of funds and the amount of dollars moving through each fund on an annual basis. The details for each fund are shown in their respective sections of the budget.

FUND BALANCE SUMMARY - 2018 BUDGET (\$ = 000)						
	<u>2016</u> <u>Actual</u>	<u>2017</u> <u>Budget</u>	<u>2017</u> <u>Estimate</u>	<u>2018</u> <u>Budget</u>	<u>2019</u> <u>Projection</u>	<u>2020</u> <u>Projection</u>
OPERATING FUND						
1/1 Balance	\$ 133,912	\$ 154,149	\$ 158,998	\$ 165,476	\$ 160,428	\$ 160,640
Total Sources of Funds	351,562	369,895	369,911	380,649	391,927	407,304
Total Uses of Funds	(326,476)	(361,082)	(363,433)	(385,697)	(391,715)	(387,429)
Transfers	-	-	-	-	-	-
Ending Balance	\$ 158,998	\$ 162,962	\$ 165,476	\$ 160,428	\$ 160,640	\$ 180,515
CONSTRUCTION FUND						
1/1 Balance	\$ 368,365	\$ 688,408	\$ 680,530	\$ 642,353	\$ 521,227	\$ 438,955
Total Sources of Funds	539,125	177,124	191,766	196,647	170,806	170,811
Total Uses of Funds	(226,960)	(354,450)	(229,943)	(317,773)	(253,078)	(282,794)
Ending Balance	\$ 680,530	\$ 511,082	\$ 642,353	\$ 521,227	\$ 438,955	\$ 326,972
DEBT SERVICE FUND						
1/1 Balance	\$ 227,487	\$ 251,930	\$ 196,054	\$ 219,629	\$ 226,354	\$ 270,369
Total Sources of Funds	766,447	113,435	120,458	129,625	178,098	129,670
Total Uses of Funds	(797,880)	(122,557)	(96,883)	(122,900)	(134,083)	(151,470)
Ending Balance	\$ 196,054	\$ 242,808	\$ 219,629	\$ 226,354	\$ 270,369	\$ 248,569
TOTAL ALL FUNDS						
1/1 Balance	\$ 729,764	\$ 1,094,487	\$ 1,035,582	\$ 1,027,458	\$ 908,009	\$ 869,964
Total Sources of Funds	1,657,134	660,454	682,135	706,921	740,831	707,785
Total Uses of Funds	(1,351,316)	(838,089)	(690,259)	(826,370)	(778,876)	(821,693)
Transfers	-	-	-	-	-	-
Ending Balance	\$ 1,035,582	\$ 916,852	\$ 1,027,458	\$ 908,009	\$ 869,964	\$ 756,056
Funds are described in detail and show all sources/uses of funds in their respective sections of the document.						

The overall change in the Operating Fund balance from estimated 2017 (\$165 million) to projected 2020 (\$181 million) increases by \$16 million. Increases in operating revenues, primarily concessions, are keeping up in increases in operating expenses as well as additional debt service requirements associated with the new debt issue in 2016.

A change occurs in the Construction Fund from a high of \$681 million in 2016 to a low of \$327 million in 2020. In order to implement a \$713 million Capital Improvement Program (CIP) from 2018-2020, the Commission sold \$402 million bonds in 2016 and anticipates selling another \$100 million in 2019. The remainder of the CIP will be financed with PFCs, Federal grants and State grants, utilizing the Commission's short-term borrowing program as well as funds generated from operations.

The Debt Service Fund is expected to increase from a low of \$196 million in 2016 to a high of \$270 million in 2019. The increases from 2016 to 2017 estimate are a result of a new debt issue in 2016 partially offset by the savings associated with the 2016 bond refunding issue. The increase in fund balance in 2019 is a result of the new 2019 bond issue. For new money bond issues, the Commission typically borrows the capitalized interest portion of that bond issue to cover the interest payments due on the debt during the period of construction. Upon completion of the associated project, the Commission will start to collect from the users of the airport the debt service requirements.



Taxing Authority

The Commission has the ability to levy ad valorem property taxes upon properties at the Airport and, under certain circumstances, upon all taxable property within the Metropolitan Area. Such taxing authority includes:

1. The power to levy property taxes on land leased at the Airport for police and fire protection, operation, and maintenance of roadway systems.
2. The power to levy property taxes not in excess of .00806 percent in each year upon the net tax capacity of all taxable property in the Metropolitan Area for Airport operation and maintenance costs of Airport facilities, provided revenues are not otherwise available.

Although the Commission may levy property taxes for operation and maintenance expenses, the Commission is not currently levying taxes for these purposes. The Commission has entered into agreements, in accordance with the Airport Law and the Resolution, whereby rental received by the Commission, together with other charges, rates, and fees imposed by the Commission, are sufficient to meet all expense of operation and maintenance of the Commission's property.

If the Commission were to have levied a tax based on recent values, the maximum amount available for maintenance and operations of the Commission would have been approximately \$25.0 million.

Sources and Uses of Funds

In this section, revenues and expenses from operating the facilities are combined with non-operating revenues and expenses. The summary on the following page illustrates how dollars are received and disbursed.

OPERATING FUND (\$ = 000)	2016	2017	2017	2018	2019	2020
	Actual	Budget	Estimate	Budget	Projection	Projection
Sources						
1/1 Balance	\$ 133,912	\$ 154,149	\$ 158,998	\$ 165,476	\$ 160,428	\$ 160,640
Operating Revenues						
Airline Rates & Charges	112,653	116,463	116,776	121,311	126,770	128,291
Concessions	160,691	173,394	171,504	175,495	178,829	190,811
Other Operating Revenues	65,588	65,250	66,848	69,040	70,628	72,252
Subtotal Operating Revenues	\$ 338,932	\$ 355,107	\$ 355,128	\$ 365,846	\$ 376,227	\$ 391,354
Other/Non Operating Revenues						
Interest Earnings ¹	4,860	6,250	6,350	6,436	6,500	6,550
Self-Liquidating Revenue	4,576	4,654	4,654	4,902	5,200	5,400
Transfer from Construction Fund	-	-	-	-	-	-
Gain (Loss) on Assets and Other	-	105	-	-	-	-
Subtotal Other/Non Operating Revenue	9,436	11,009	11,004	11,338	11,700	11,950
Total Sources	\$ 348,368	\$ 366,116	\$ 366,132	\$ 377,184	\$ 387,927	\$ 403,304
Uses						
Operating Expenses						
Personnel	\$ 78,048	\$ 82,909	\$ 82,350	\$ 88,222	\$ 91,486	\$ 94,871
Administration	1,723	1,964	1,963	2,066	2,116	2,167
Professional Services	6,217	6,681	6,600	7,050	7,262	7,480
Utilities	18,816	19,852	19,300	19,696	20,444	21,057
Operating Services	23,389	26,417	26,225	28,955	30,432	31,223
Maintenance	36,319	38,777	38,100	38,514	39,515	40,542
Other/Insurance	4,411	4,172	5,400	4,494	4,602	4,712
Subtotal Operating Expenses	\$ 168,923	\$ 180,772	\$ 179,938	\$ 188,997	\$ 195,857	\$ 202,052
Non Operating Expenses						
Equipment						
Equipment Purchases/Capital Expenditures	(10,332)	(10,943)	(10,929)	(11,200)	(11,145)	(11,180)
Equipment Financing	3,194	3,779	3,779	3,465	4,000	4,000
Principal/Interest-Equip. Financing	(2,950)	(5,040)	(4,977)	(4,382)	(4,232)	(4,441)
Subtotal Equipment	\$ (10,088)	\$ (12,204)	\$ (12,127)	\$ (12,117)	\$ (11,377)	\$ (11,621)
Debt Service						
Transfer Out - Debt Service	(92,147)	(96,996)	(92,948)	(105,526)	(113,920)	(109,041)
Subtotal Debt Service	(92,147)	(96,996)	(92,948)	(105,526)	(113,920)	(109,041)
Total Uses	\$ (271,158)	\$ (289,972)	\$ (285,013)	\$ (306,640)	\$ (321,154)	\$ (322,714)
Unrestricted Net Transfer Out-Construction	(52,124)	(67,331)	(74,641)	(75,592)	(66,561)	(60,715)
Operating Fund Balance	\$ 158,998	\$ 162,962	\$ 165,476	\$ 160,428	\$ 160,640	\$ 180,515

¹ Interest Rate Assumed 1.5% for 2018 - 2020

Sources of Funds

Generally, there are three sources of revenues within the Operating Fund.

1. The 1/1 Balance reflects the Operating Reserve established by the Commission plus the amount to be transferred to the Construction Fund in the following year. In 2006 the Commission established a six month reserve of operating expenses. The operating reserve figure for 2018 is \$94.5 million.
2. Operating Revenues consist of Airline Rates and Charges, Concessions, Rentals/Fees, Utilities, and Other Revenues. The changes in each of these areas are explained in detail in the Operating Budget Revenue Section. In general, Airline Rates and Charges will increase beginning in 2018 as a result of inflationary increases as well as increases in headcount. Concessions rose in almost all areas as a result of increases in (a) passenger activity, (b) parking rates and (c) opening of new concession concepts in 2018 and 2020. Rentals/Fees, Utilities, and Other Revenues increases can be attributed to rent changes, primarily a new ground rental ordinance that became effective in July 2016, a hotel facility charge starting in 2018, as well as an increase in rental rates for space leased to non-airline tenants. Operating Revenues total \$365.8 million for 2018.

3. Other Non-Operating Revenues consist of Interest Earnings, Self-Liquidating Revenue and Gain/Loss on Disposal of Assets and Other Sources. Interest Earnings is assumed to be 1.5% for the period 2018-2020. Interest is earned on the balance in the Operating Fund which includes self-liquidating leases. Interest earnings are increasing slightly due to a small increase in interest rates and larger cash balances. Self-liquidating leases are those facilities built by MAC and then leased to tenants.



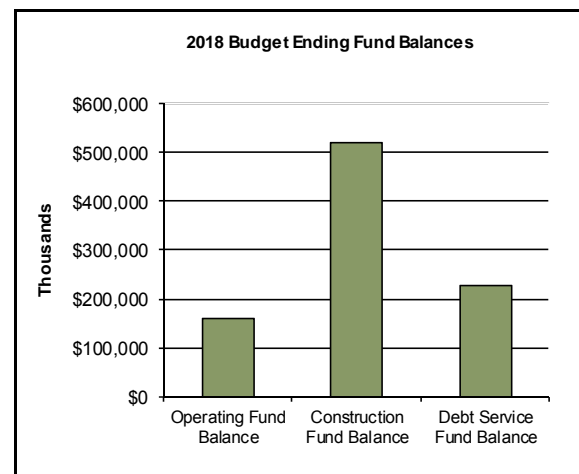
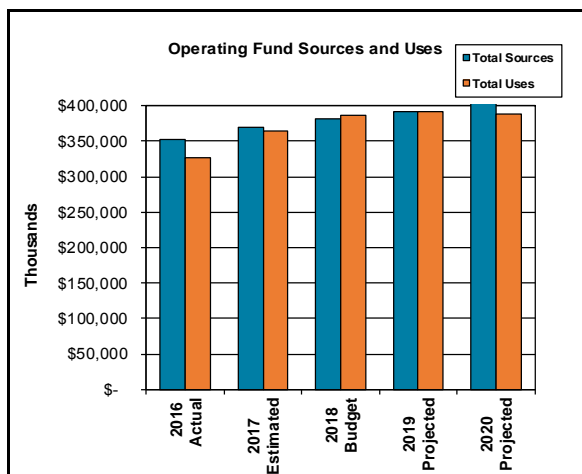
MSP Terminal 1-Lindbergh Retail Shops

Uses of Funds

In general, there are three uses of operating revenues.

1. Operating expenses consist of Personnel, Administration, Professional Services, Utilities, Operating Services, Maintenance, and Other/Insurance. Details of changes for each of these areas are identified in the Operating Budget Expense section. The total expense for 2018 is \$189.0 million.
2. Non-Operating Expenses is comprised of an Equipment section and Debt Service section.
 - A. Equipment includes capital equipment (cost greater than \$10,000) to be purchased based on Commission approval. The anticipated amount for 2018 is \$10.1 million and includes other capital expenditures. A portion of this equipment will be leased. The offset to the equipment is shown as Equipment Financing (\$3.5 million). Finally, the actual lease financing cost and miscellaneous other capital expenditures are shown.
 - B. Debt Service – Transfers are required to cover all debt service. In June and December, the Commission must transfer the required amount for the General Airport Revenue Bond (GARB) reserve. The debt service portion also includes payments on the Commission revolving line of credit. The total payments for the GARB's and the revolving line of credit are expected to be approximately \$105.5 million.
3. Unrestricted Net Transfer Out - Construction represents the amount of internally generated funds that are transferred to the Construction Fund after payment of all operating expenses have been made, all debt service requirements accounted for and the Operating Reserve is funded at six months of Operating Expenses. \$74.6 million is anticipated for 2018 based on 2017 estimates and \$75.6 million anticipated for 2019 based on 2018 budgeted amounts.

The graphs below illustrate the sources and uses of revenue and the three 2018 budgeted fund balances.



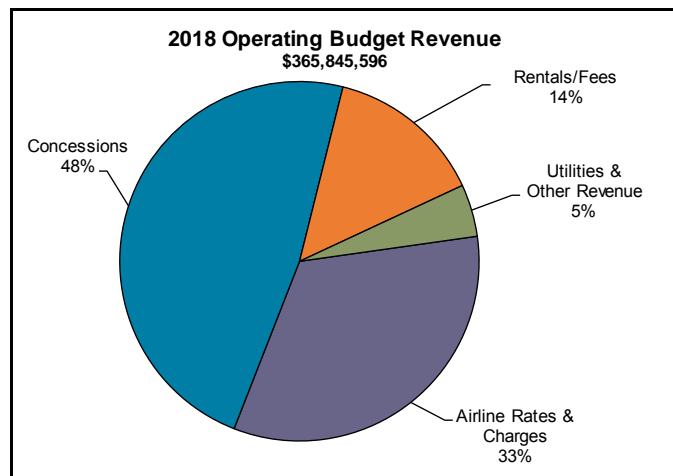
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Operating Budget Revenue

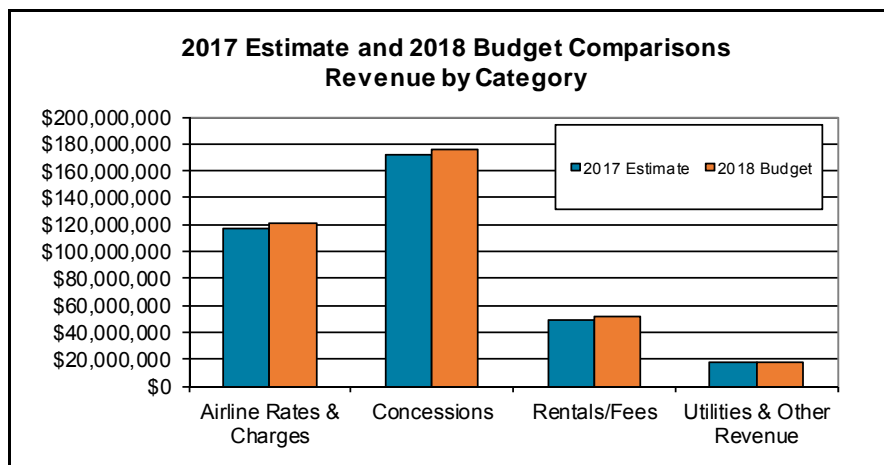
Total Operating Budget Revenue for 2018 is \$365.8 million, which is a \$10.7 million or 3.0% increase compared to 2017 estimates. The detailed explanations for Airline Rates & Charges, along with other major changes in revenue, are included in this section.

Operating budget revenue is divided into four categories: Airline Rates & Charges, Concessions, Rentals/Fees, and Utilities & Other Revenue.

Revenue Summary (\$=000)				2018 Budget vs 2017 Estimate		
	2016 Actual	2017 Budget	2017 Estimate	2018 Budget	Dollar Change	% Change
REVENUE						
Airline Rates & Charges	\$112,653	\$116,463	\$116,776	\$121,311	\$4,535	3.9%
Concessions	160,691	173,394	171,504	175,495	3,991	2.3%
Rentals/Fees	48,473	48,622	49,542	51,826	2,284	4.6%
Utilities & Other Revenue	17,115	16,628	17,306	17,214	(92)	-0.5%
Total Operating Revenue	\$338,933	\$355,107	\$355,128	\$365,846	\$10,718	3.0%



The following chart compares 2017 estimate and 2018 budget revenue by category:



2018 Operating Revenue

	2016 Actual	2017 Budget	2017 Estimate	2018 Budget	Dollar Change	% Change
Airline Rates & Charges						
Airline Agreement						
Landing Fees	59,428,277	63,808,136	64,200,000	67,137,865	2,937,865	4.6%
Ramp Fees	7,407,993	7,557,247	7,510,000	7,489,093	(20,907)	-0.3%
Airline R&R	4,558,611	4,666,311	4,666,000	4,673,574	7,574	0.2%
T1 Rentals	39,360,189	38,520,773	37,800,000	39,567,165	1,767,165	4.7%
T1 Other	5,935,241	6,301,094	6,900,000	6,131,467	(768,533)	-11.1%
Concessions Rebate	(15,827,376)	(16,970,000)	(17,150,000)	(17,367,105)	(217,105)	0.0%
<i>Total Airline Agreement</i>	100,862,936	103,883,561	103,926,000	107,632,059	3,706,059	3.6%
Terminal 2 Fees						
T2 Lobby	8,607,924	9,742,003	9,950,000	10,358,269	408,269	4.1%
T2 Other/Passenger	3,182,298	2,837,017	2,900,000	3,320,267	420,267	14.5%
<i>Total Airline Rates & Charges</i>	112,653,158	116,462,581	116,776,000	121,310,595	4,534,595	3.9%
Concessions						
Terminal						
Food & Beverage	21,043,955	22,857,000	23,037,000	24,022,753	985,753	4.3%
News	3,703,743	4,200,000	4,676,000	4,878,547	202,547	4.3%
Retail Stores	4,997,530	6,150,000	5,293,000	5,407,208	114,208	2.2%
Passenger Services	6,107,200	5,939,122	6,200,000	6,431,423	231,423	3.7%
<i>Total Terminal</i>	35,852,429	39,146,122	39,206,000	40,739,931	1,533,931	3.9%
Parking/Grnd Transport						
Parking	91,234,678	100,702,000	96,300,000	97,469,494	1,169,494	1.2%
Ground Transportation	7,907,394	8,600,656	10,250,000	11,477,183	1,227,183	12.0%
MSP Employee Parking	3,652,905	3,645,708	4,158,136	4,158,136	0	0.0%
Auto Rental - On Airport	19,876,356	19,200,000	19,490,000	19,490,000	0	0.0%
<i>Total Parking/Grnd Transport</i>	122,671,332	132,148,364	130,198,136	132,594,813	2,396,677	1.8%
Other						
Other Concessions	2,167,290	2,100,000	2,100,000	2,160,482	60,482	2.9%
<i>Total Concessions</i>	160,691,051	173,394,486	171,504,136	175,495,226	3,991,090	2.3%
Rentals/Fees						
Buildings & Facilities	9,105,037	9,376,150	9,800,000	11,071,914	1,271,914	13.0%
Auto Rental CFC	21,924,370	21,850,000	21,850,000	21,850,000	0	0.0%
Ground Rentals	9,699,338	10,092,284	10,392,000	10,868,813	476,813	4.6%
Reliever Airports	7,744,487	7,303,336	7,500,000	8,034,970	534,970	7.1%
<i>Total Rentals/Fees</i>	48,473,232	48,621,770	49,542,000	51,825,697	2,283,697	4.6%
Utilities & Other Revenue						
Utilities	4,348,000	5,048,955	4,900,000	4,866,563	(33,437)	-0.7%
GA/Airside Fees	4,269,967	3,936,900	3,975,000	4,228,978	253,978	6.4%
MCD Fees	3,522,546	3,812,000	3,930,845	4,121,886	191,041	4.9%
Other Revenues	2,135,776	1,700,000	2,000,000	1,823,936	(176,064)	-8.8%
Reimbursed Expense	2,838,811	2,130,000	2,500,000	2,172,715	(327,285)	-13.1%
<i>Total Utilities & Other Revenue</i>	17,115,100	16,627,855	17,305,845	17,214,078	(91,767)	-0.5%
Total Operating Revenue	338,932,541	355,106,692	355,127,981	365,845,596	10,717,615	3.0%

Revenue Assumptions and Guidelines

The revenue projections for 2018 are based on the following assumptions and guidelines:

- Revenue will be prepared on an accrual basis. This basis of accounting attempts to record financial transactions in the period in which they occur, rather than recording them in the period in which they are received. The Commission uses this method for both accounting and budgeting.
- The revenue projections are based on estimates compiled from the following sources:
 - Lease agreements
 - Contracts
 - Projected enplaned passengers and operations activity provided by the airlines and other users of MAC facilities
 - Expense projections, which determine Airline Rates and Charges
 - Historical trends
 - MAC Ordinances
- Airline Rates and Charges are based on the Airline Use Agreement.

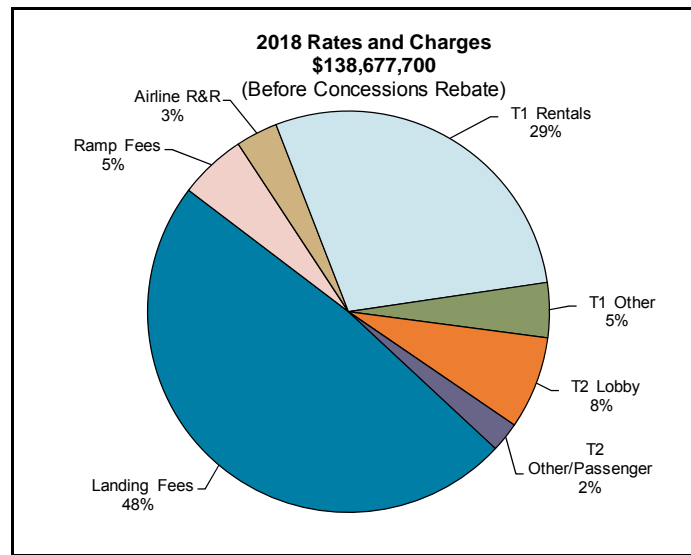
The explanations for revenue assumptions are based on a comparison of 2018 budget figures versus 2017 estimates.

Airline Rates and Charges

The Airline Rates and Charges category, which is approximately \$121.3 million or 33% of the MAC's \$365.8 million in revenues, is generated from rates charged to the airlines. This category is projected to increase \$4.5 million or 3.9% from 2017 estimated levels. The formulas for the rates are established in the Airline Use Agreement and are composed of landing fees, ramp fees, airline Terminal 1-Lindbergh rental rates, and the Terminal 1 International Arrivals Facility (IAF) use fees. This agreement incorporates debt service in the calculation of rates and charges, instead of depreciation and interest, for the recovery of capital improvements. In accordance with this Agreement, expenses from Police, Fire, Maintenance Labor, Maintenance Equipment, and Administration service centers are allocated to the Field & Runway, Ramp, Terminal Building, and International Arrivals Facility service centers, as detailed in the Operating Budget Expense section. Total costs plus allocations are then used to determine Airline Rates and Charges. Fluctuations in allocated costs can cause a change in the airline rates. For 2018, rates for landing fees, ramp fees, and airline Terminal 1 rental rates are calculated as per the Airline Use Agreement. Rates for Terminal 2 are set by ordinance, which is primarily based on the recovery of budgeted operating and maintenance costs. The Concessions Rebate of \$17.4 million represents the revenue sharing found in the Airline Use Agreement.

2018 Airline Rates and Charges (\$=000)	2018 Budget vs 2017 Estimate					
	2016 Actual	2017 Budget	2017 Estimate	2018 Budget	Dollar Change	% Change
Airline Rates & Charges						
Landing Fees	\$59,428	\$63,808	\$64,200	\$67,138	\$2,938	4.6%
Ramp Fees	7,408	7,557	7,510	7,489	(21)	-0.3%
Airline R&R	4,559	4,666	4,666	4,674	8	0.2%
T1 Rentals	39,360	38,521	37,800	39,567	1,767	4.7%
T1 Other	5,935	6,301	6,900	6,131	(769)	-11.1%
Concessions Rebate	(15,827)	(16,970)	(17,150)	(17,367)	(217)	1.3%
T2 Lobby	8,608	9,742	9,950	10,358	408	4.1%
T2 Other/Passenger	3,182	2,837	2,900	3,320	420	14.5%
Total Airline Rates & Charges	\$112,653	\$116,463	\$116,776	\$121,311	\$4,535	3.9%

The following pie chart indicates the percentage of each revenue source in Airline Rates & Charges and compares it to the total Airline Rates & Charges revenue, excluding the Concessions Rebate.



Landing Fees

The landing fee is based upon total estimated expense in the Field & Runway service center. By dividing total field and runway expenses by the estimated landed weight (provided by the airlines and historical data), a budgeted landing fee is established for use during the year. This is a residual (breakeven) calculation. At year-end, an adjustment will be made for any overage or shortage.

The landing fee is expected to increase \$0.07 in 2018 from 2017 estimates. Higher labor, benefits, security, snow removal material costs, and airline contributions for field and runway repair and replacement contributed to the higher landing fee.

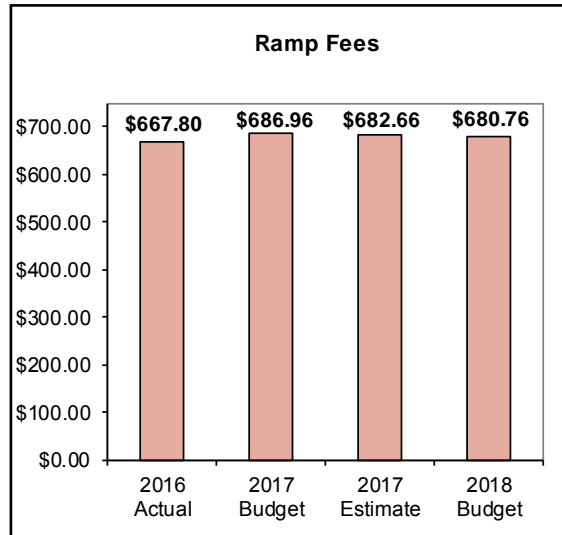
<u>Landing Fee</u>	<u>2016</u>	<u>2017</u>	<u>2017</u>	<u>2018</u>
	<u>Actual</u>	<u>Budget</u>	<u>Estimate</u>	<u>Budget</u>
Landing Fee	\$2.68	\$2.79	\$2.83	\$2.90
Landed Weight (000)	22,175	22,870	22,686	23,151
Revenue (000)	\$59,428	\$63,808	\$64,200	\$67,138

Ramp Fees

Aircraft parking ramp fees are calculated in the same manner as landing fees. Ramp fees are determined by dividing the total Terminal 1 ramp expenses by total lineal feet of ramp available. The ramp fee rate calculation is also residual (breakeven). At year-end, an adjustment will be made for any overage or shortage.

Ramp fees are expected to be relatively flat from 2017 estimate to 2018 budget. Increases in labor and benefits were offset by lower debt service and ramp maintenance costs.

<u>Ramp Fee</u>	<u>2016</u>	<u>2017</u>	<u>2017</u>	<u>2018</u>
	<u>Actual</u>	<u>Budget</u>	<u>Estimate</u>	<u>Budget</u>
Ramp Fee (Per Lineal Ft.)	\$667.80	\$686.96	\$682.66	\$680.76
Ramp Footage	11,427	11,179	11,001	11,001
Revenue (000)	\$7,408	\$7,557	\$7,510	\$7,489



**Reading Information Boards
in MSP Terminal 1-Lindbergh**

Airline Repair and Replacement Surcharge

Per the Airline Lease Amendment, there is an additional surcharge (R&R) for the airlines leasing space at Terminal 1. This surcharge increases annually at a rate of 3%. The rate for 2018 is \$7.40 per square foot. The small growth in revenue for 2018 is due to a reduction in airline rentable space.

Terminal 1 Rentals

Airline Terminal 1 rates are calculated by allocating Terminal 1 building expense over the total rentable square footage in Terminal 1. Airlines are charged for the space they occupy. Unlike landing fees and ramp fees, which are residual calculations, airline Terminal 1 building rates are a compensatory calculation. Under this calculation method, costs are recovered from the airlines in proportion to the rentable space they occupy in the terminal building. Terminal 1 building rate does not include the Repair and Replacement surcharge.

The Terminal 1 rental rate is increasing from \$59.65 to \$62.04 per square foot. The primary reasons for the increase in the Exclusive rates (\$2.39) between 2017 estimate and 2018 budget is due to increases in debt service for Terminal 1 projects as well as higher wage, benefit, and maintenance costs.

Terminal 1-Lindbergh Rates	2016 Actual	2017 Budget	2017 Estimate	2018 Budget
Exclusive (Per Sq. Ft.)	\$60.42	\$58.34	\$59.65	\$62.04
Exclusive Janitored (Per Sq. Ft.)	\$69.00	\$68.48	\$69.26	\$72.08
Total Revenue (000)	\$39,360	\$38,521	\$37,800	\$39,567

Terminal 1 Other

Revenue from Terminal 1 Other is expected to decrease \$769,000 or 11.1%. Revenues in this area are generated by the International Arrivals Facility (IAF), porter service fees, baggage claim maintenance fees, queue line management fees, and conveyors and carousels. The primary reasons for the decrease are lower IAF rates and queue line management fees.

The agreement for the IAF facility includes a fee calculation similar to the ramp and landing fees (residual). Users of the facility will be charged a passenger use fee based upon projected expenses. At year-end, an adjustment will be made for any overage or shortage.

The table below shows the IAF fees for actual 2016, budgeted 2017, estimated 2017 and budgeted 2018.

International Arrival Fee				
(\$=000)				
	2016	2017	2017	2018
	<u>Actual</u>	<u>Budget</u>	<u>Estimate</u>	<u>Budget</u>
Total Cost	\$3,257	\$3,968	\$3,680	\$3,569
Passengers	769,976	800,000	800,000	811,136
Fee Per Passenger	\$4.23	\$4.96	\$4.60	\$4.40

The \$0.20 decrease in the IAF fee is due to decreases in maintenance costs, service agreements and a slight increase in passengers.

In late 2014, the Commission completed construction and installation of a checked baggage inspection system, which replaces each airline's outbound baggage system. The Commission will be responsible for the maintenance of the baggage system and will charge the airlines the full cost of maintaining the baggage system. The cost is estimated at \$1,250,000, and the charge to the airlines will be based on the number of enplaned passengers.

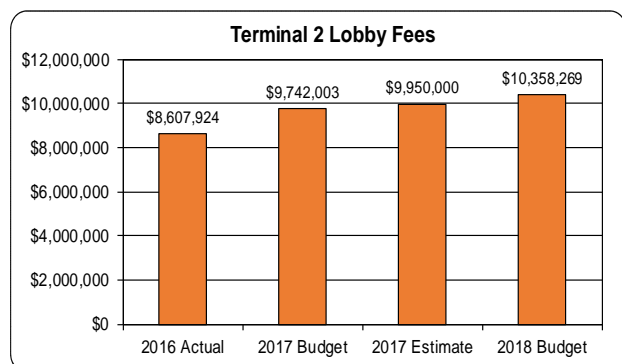
The remaining revenues consisted of conveyors, carousels, porter service, and queue line management fees. These revenues are expected to decrease due to a higher utilization of queue line management services that were needed in 2017.

Concessions Rebate

As part of the Airline Use Agreement, the airlines share a portion of concessions revenue, or selected concessions revenue, from food & beverage, news, retail, and on-airport auto rental revenues. The amount of concessions revenue shared is based upon the Commission achieving certain concessions revenue levels and the airlines achieving certain passenger levels. For the 2018 budget, this rebate is projected to be \$17.4 million. The increase of \$217,000 is due to an increase in food, beverage, and retail revenues due to the opening of new food, beverage, and retail units, plus an increase in passengers. For 2018, the air carriers will share in approximately 33% of the Commission's selected Concessions Revenue.

Terminal 2 Lobby Fees

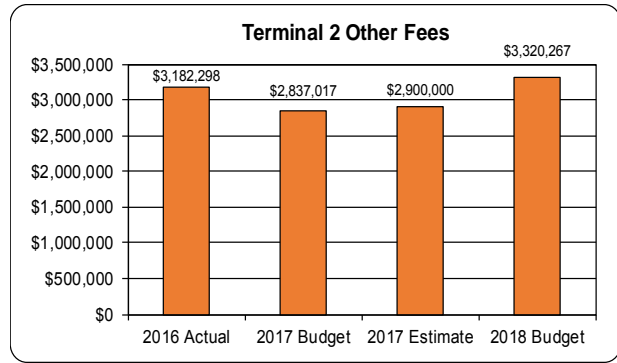
Terminal 2 Lobby Fees are expected to increase \$408,000 or 4.1%. Lobby fees are set by MAC Ordinance in which rates are set on a budgetary basis with no true-up based on actual expenses or year-end operational activity. Each gate at Terminal 2 has a revenue cap (for 2018 the gate cap is \$756,312) by airline associated with it based upon the number of aircraft operations. The Commission opened 4 additional gates in October 2016 for a total of 14 gates. The MAC assumes that, of the 14 gates at Terminal 2, 10 will reach the revenue cap and 4 gates will not. The MAC estimates the revenue from the non-capped gates based upon operational data obtained from historical data and from the airlines. The 2018 budget increase in revenue from 2017 estimates is due to higher debt service and maintenance costs as well as increases in operational activity.



In order to keep both Terminal 1 and Terminal 2 rates competitive for the respective airlines, the Terminal 2 rate calculation limits the increase/decrease in certain elements of the rates charged in Terminal 2 to the percentage increase or decrease in rates in Terminal 1. The Terminal 1 rates increased by 6.3% (on a budget to budget basis) and correspondingly the T2 rates increased accordingly.

Terminal 2 Other/Passenger Fees

Terminal 2 Other/Passenger fee revenue is budgeted to increase \$420,000 or 14.5%. This category includes Federal Inspection Service (FIS) charges for international passengers, Terminal 2 building rentals, and non-signatory landing fees. As with Lobby Fees mentioned above, the FIS charges are based on budgetary data with no year-end true up of actual expenses. For 2018, higher FIS revenue is expected due to a higher number of international passengers utilizing Terminal 2 and higher Terminal 2 building rentals.

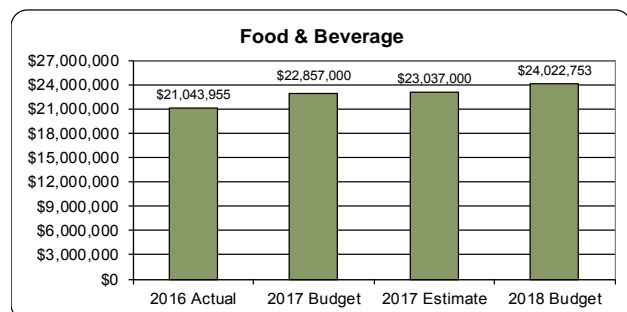
**Concessions**

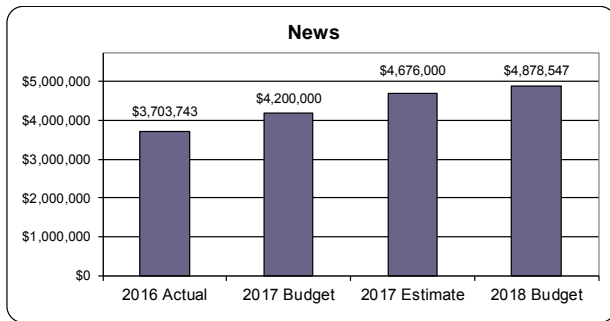
The Concessions category is \$175.5 million or 48% of total operating revenue for 2018. The rates charged for parking are approved by the Commission, while ground transportation fees are authorized according to MAC Ordinances. The revenues from auto rental, food & beverage, news, retail, and passenger services are based on various lease agreements, which allow the concessionaires to operate in MAC facilities. Concessions are projected to increase \$4.0 million or 2.3% from estimated 2017 levels and are based upon the following: 1) New food & beverage, news and retail stores; 2) Revenue from Transportation Network Companies (TNCs); and 3) public parking.

2018 Concessions (\$=000)	2018 Budget vs 2017 Estimate					
	2016 Actual	2017 Budget	2017 Estimate	2018 Budget	Dollar Change	% Change
Concessions						
Food & Beverage	\$21,044	\$22,857	\$23,037	\$24,023	\$986	4.3%
News	3,704	4,200	4,676	4,879	203	4.3%
Retail Stores	4,998	6,150	5,293	5,407	114	2.2%
Passenger Services	6,107	5,939	6,200	6,431	231	3.7%
Parking	91,235	100,702	96,300	97,469	1,169	1.2%
Ground Transportation	7,907	8,601	10,250	11,477	1,227	12.0%
MSP Employee Parking	3,653	3,646	4,158	4,158	0	0.0%
Auto Rental - On Airport	19,876	19,200	19,490	19,490	0	0.0%
Other Concessions	2,167	2,100	2,100	2,160	60	2.9%
Total All Concessions	\$160,691	\$173,394	\$171,504	\$175,495	\$3,991	2.3%

Food & Beverage

Food & Beverage is projected to increase by \$986,000 or 4.3% from the 2017 estimate due to an increase in passengers and the opening of new food and beverage restaurants.



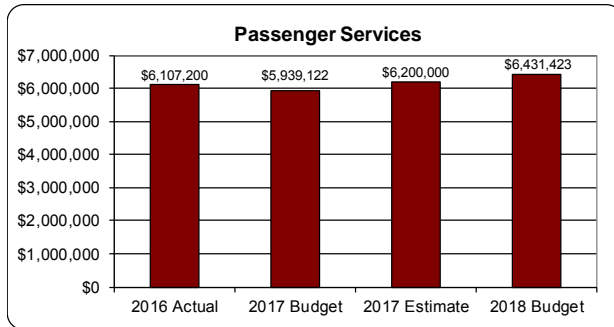
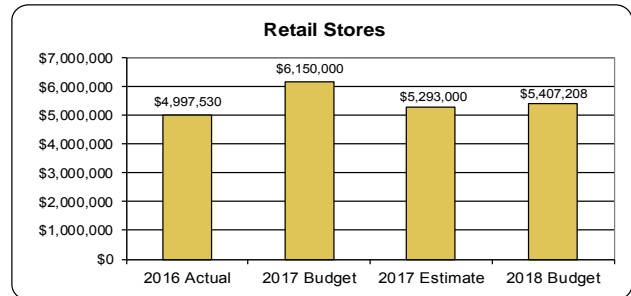


News

News is projected to increase \$203,000 or 4.3% from the 2017 estimate due to an increase in passengers and the opening of new stores.

Retail Stores

Retail is projected to increase by \$114,000 or 2.2% from the 2017 estimate due to an increase in passengers.

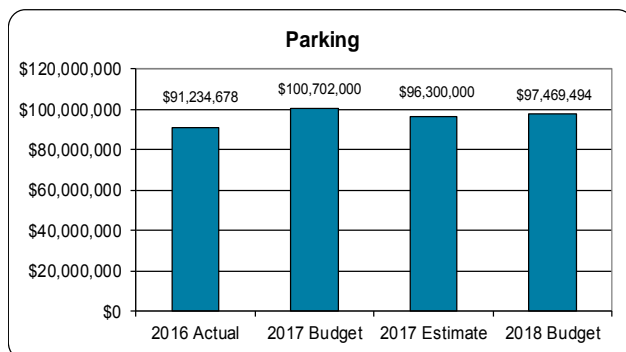


Passenger Services

Passenger Services are budgeted to increase \$231,000 or 3.7% from the 2017 estimate. Indoor advertising and revenue from CLEAR (a program that allows passengers to expedite their passage through security lines) accounted for the majority of the increase.

Parking

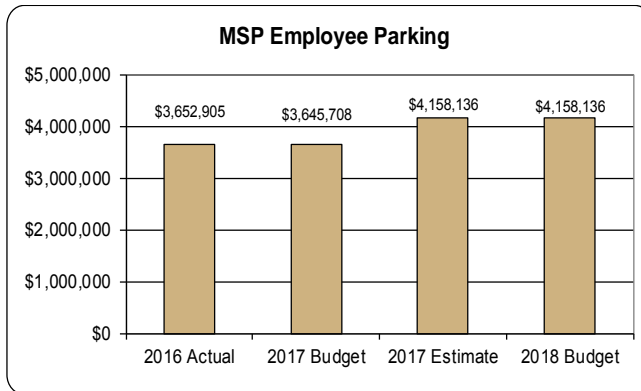
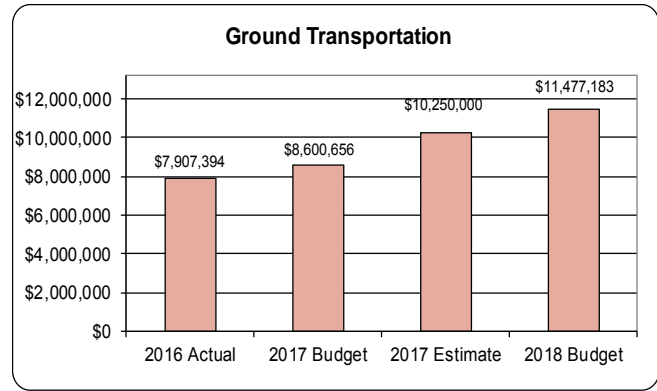
Parking is expected to increase from the 2017 estimate by \$1,170,000 or 1.2%. The increase in revenue is due to a slight increase in transactions.



Parking Facility at MSP Terminal 2-Humphrey

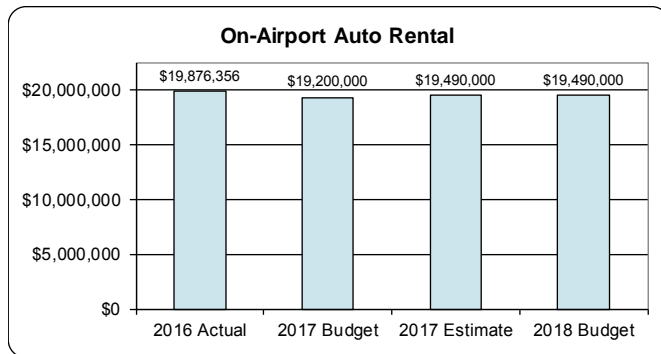
Ground Transportation Fees

Ground Transportation fees are projected to increase \$1,227,000 or 12.0%. This is primarily a result of additional revenue from Transportation Network Companies (e.g. Uber and Lyft) and off-airport auto rental companies.



MSP Employee Parking

MSP Employee Parking includes ePark Elite parking services and is budgeted to remain flat based upon the latest trends available at the time of budget preparation.

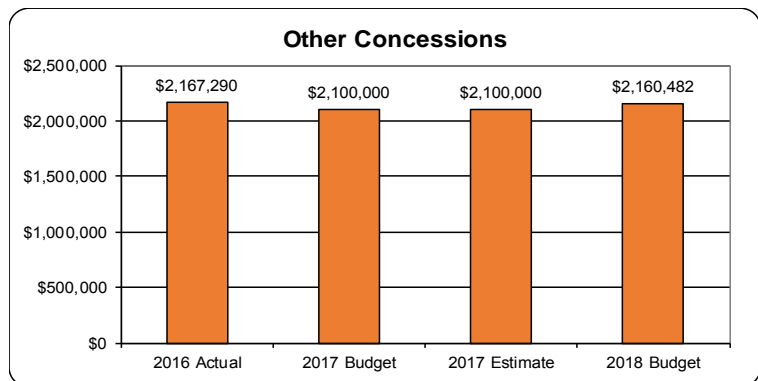


On-Airport Auto Rental

Auto rental fees are projected to be flat based on a conservative estimate of revenue.

Other Concessions

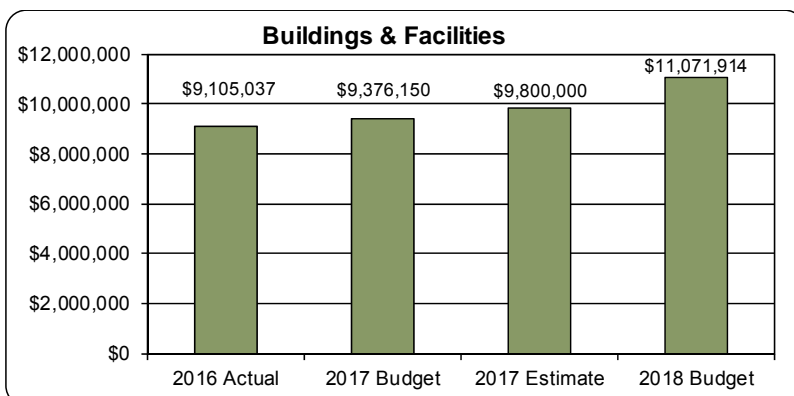
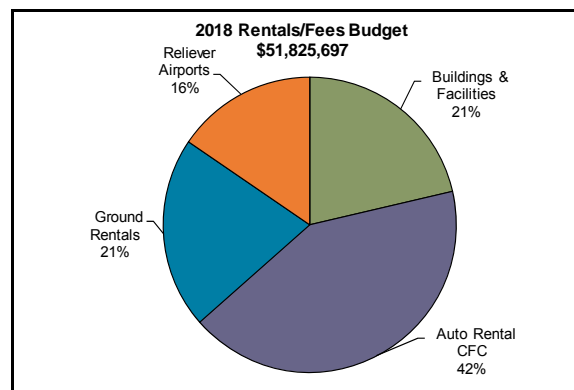
The majority of revenue in the Other Concessions category consists of Outdoor Advertising, auto services, In-Flite Catering, a pet boarding facility, and other miscellaneous concessions. Other Concessions are budgeted to increase slightly from 2017 estimated levels based upon trends and activity at the time of budget preparation.



Rentals/Fees

Rentals/Fees are \$51.8 million or 14% of total operating revenue for 2018 and are projected to increase \$2.3 million or 4.6% from 2017 estimated levels. This revenue section consists of the Auto Rental-Customer Facility Charge (CFC), building rentals (non-airline), ground rental space, and reliever airport fees. Ground rental space revenues and a portion of reliever airport revenue are based on MAC Ordinances, while the remaining revenue items are based on leases and agreements. The following table and pie chart show the revenue sources.

2018 Rentals/Fees (\$=000)	2018 Budget vs 2017 Estimate					
	2016 Actual	2017 Budget	2017 Estimate	2018 Budget	Dollar Change	% Change
Rentals/Fees						
Buildings & Facilities	\$9,105	\$9,376	\$9,800	\$11,072	\$1,272	13.0%
Auto Rental CFC	21,924	21,850	21,850	21,850	0	0.0%
Ground Rentals	9,699	10,092	10,392	10,869	477	4.6%
Reliever Airports	7,744	7,303	7,500	8,035	535	7.1%
Total Rentals/Fees	\$48,473	\$48,622	\$49,542	\$51,826	\$2,284	4.6%

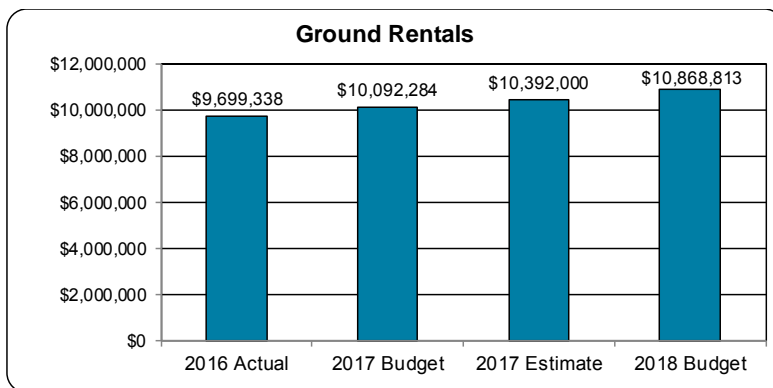
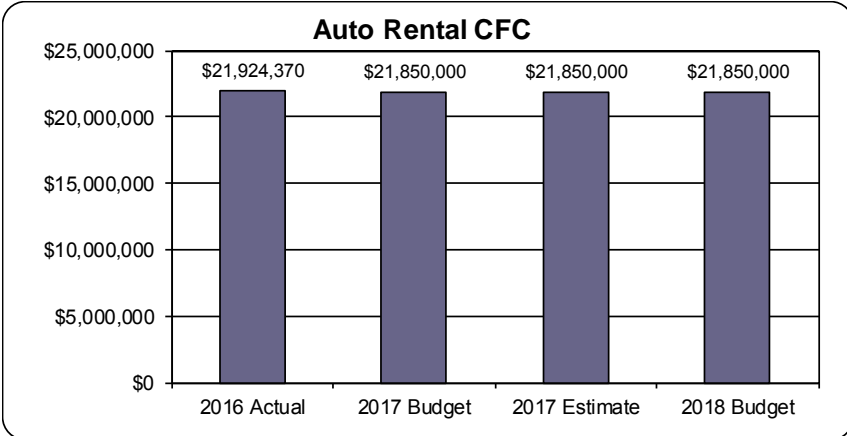
**Buildings & Facilities**

Building and facility rentals are projected to increase \$1,272,000 or 13.0% over the 2017 estimate as a result of new building leases for non-terminal airline tenants, higher rental rates and the implementation of a Hotel Facility Charge (HFC). Commencing in Q2 of 2018, the Commission will begin collecting a HFC (which is based upon 6.5% of gross receipts from room rentals). The proceeds from the HFC will

be used to pay any debt service for the new skyway connector bridge between the hotel and Terminal 1 - Lindbergh, the roadway modifications associated with accessing the hotel, the portion of the Post Office parking facility that will be utilized for the valet parking needs of the hotel, on-going maintenance, and operating costs associated with these facilities.

Auto Rental-Customer Facility Charge (CFC)

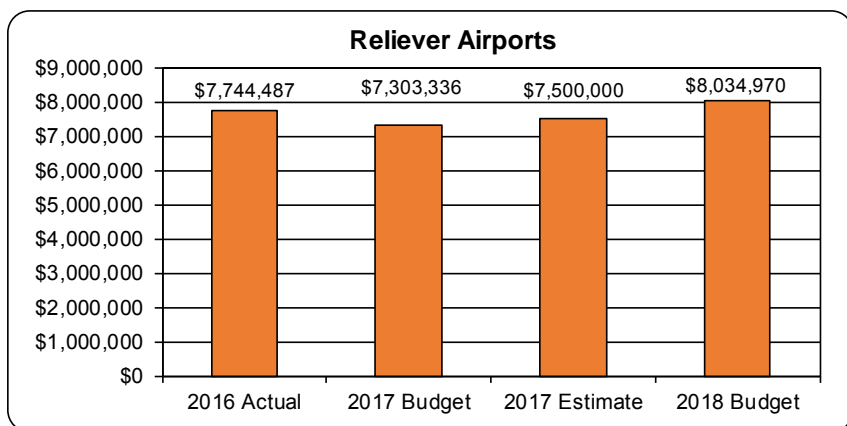
Auto Rental CFCs are budgeted to be flat based on auto rental revenue also being flat. The current CFC rate is \$5.90 per rental car transaction per day.

**Ground Rentals**

Ground Rentals are budgeted to increase by \$477,000 or 4.6% from 2017 estimated levels. New ground area lease rentals, including that of the new hotel that is scheduled to open in 2018, accounted for the majority of the increase.

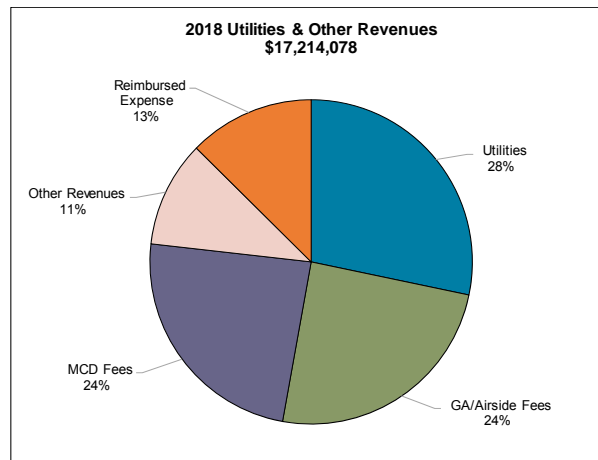
Reliever Airports

Reliever Airports revenue is expected to increase \$535,000 or 7.1% from 2017 estimated levels from new leases and from trends based upon activity at the time of the budget completion.

**Utilities & Other Revenue**

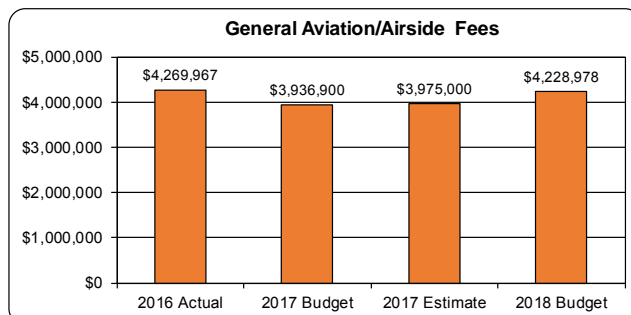
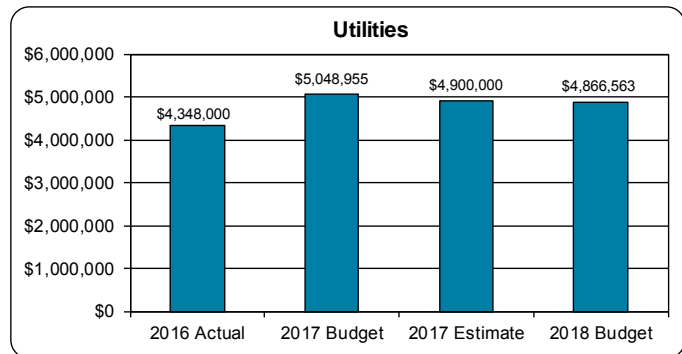
Utilities & Other Revenues are \$17.2 million or 5% of total operating revenue for 2018 and are projected to decrease \$92,000 or 0.5% from 2017 estimated levels. Included in this category are utilities, general aviation/airside fees, Maintenance, Cleaning and Distribution (MCD) fees, other revenues, and reimbursed expense.

2018 Utilities & Other Revenue (\$=000)	2018 Budget vs 2017 Estimate					
	2016 Actual	2017 Budget	2017 Estimate	2018 Budget	Dollar Change	% Change
Utilities & Other Revenue						
Utilities	\$4,348	\$5,049	\$4,900	\$4,867	(\$33)	-0.7%
General Aviation/Airside Fees	4,270	3,937	3,975	4,229	254	6.4%
MCD Fees	3,523	3,812	3,931	4,122	191	4.9%
Other Revenues	2,136	1,700	2,000	1,824	(176)	-8.8%
Reimbursed Expense	2,839	2,130	2,500	2,173	(327)	-13.1%
Total Utilities & Other Revenue	\$17,115	\$16,628	\$17,306	\$17,214	(\$92)	-0.5%



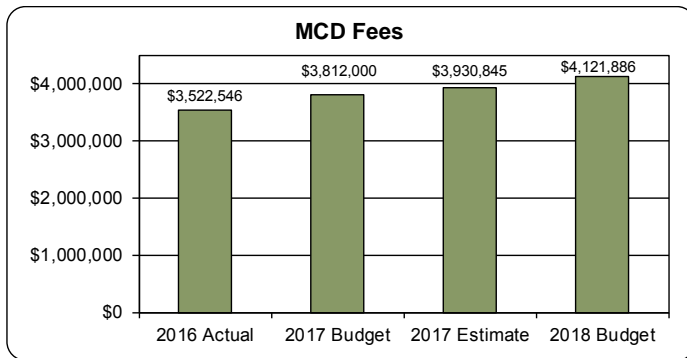
Utilities

Included in Utilities are water, sewer, electricity, heating, and ground power. The decrease of \$33,000 or 0.7% in this category is due to lower consumption of ground power offset partially by an increase in water and sewer rates.



General Aviation/Airside Fees

This category includes general aviation landing fees, ramp fees, fuel flowage fees, and apron services. This category is expected to increase \$254,000 or 6.4% as a result of additional revenue from airside services, including aircraft cleaning, deicing, and other services.

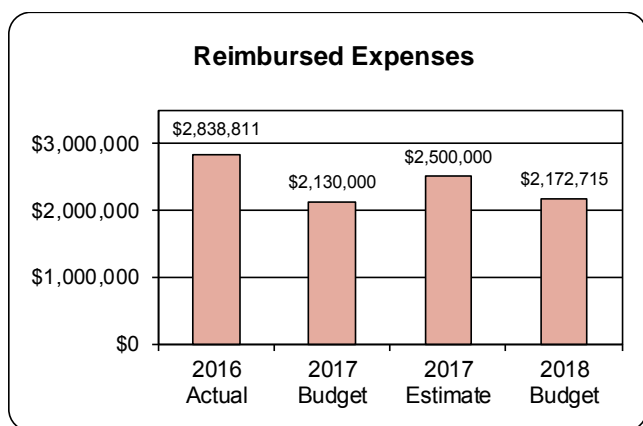
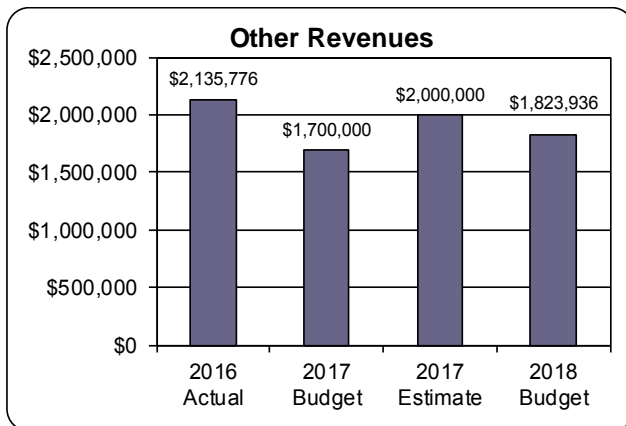


MCD Fees

Maintenance, Cleaning, and Distribution (MCD) fees are expected to increase \$191,000 or 4.9%. These fees are based on a percent of concession sales.

Other Revenues and Reimbursed Expenses

Included in this category are parking fines, auction revenue, building permits, security badges, and miscellaneous revenues and expenses reimbursed by others. These categories combined are expected to decrease \$503,000 or 12.6% as a result of lower building permit revenues. In 2017, revenues were collected from the construction of an on-airport hotel and one-time reimbursements from energy rebates and other miscellaneous items.



Food Truck Alley Opened in 2017 on Concourse E at MSP

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Operating Budget Expense

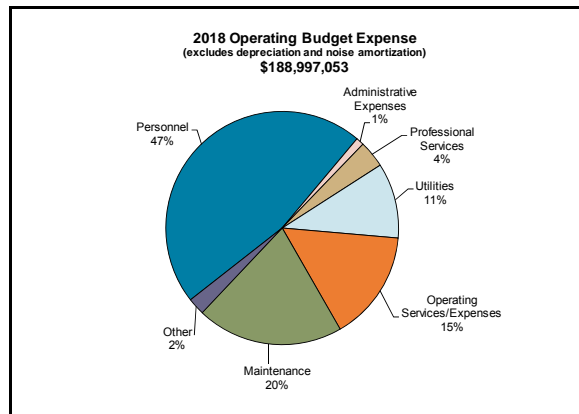
Expenses arise from daily operations and are within the Operating Fund. Expenses are also key factors in determining revenue. For example, Rates and Charges revenue collected from the airlines is based on expenses and is governed by the Airline Use Agreement.

Total Operating Expense for 2018 is \$189.0 million (excluding depreciation and amortization) which is an increase of \$9.0 million or 5.0% over the 2017 estimate. Operating Budget Expense is divided into seven categories: Personnel, Administrative Expenses, Professional Services, Utilities, Operating Services/Expenses, Maintenance, and Other. Major changes in Expenses are included in this section.

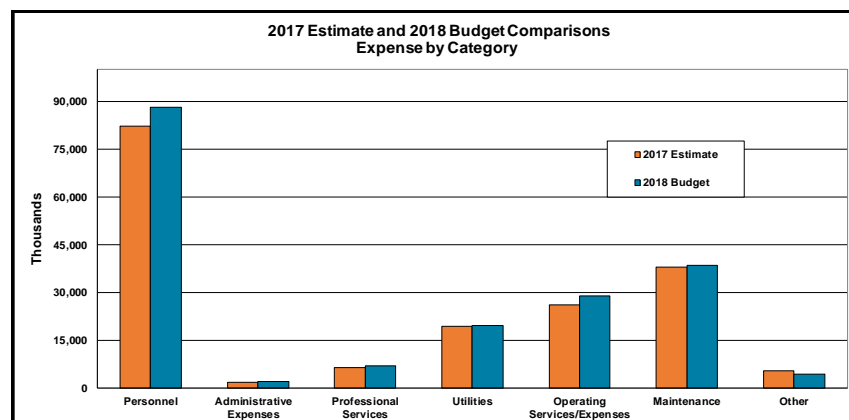
The expense tables and charts throughout this section compare the 2018 budget with the 2017 estimate.

2018 Expense Summary (\$=000)				2018 Budget vs 2017 Estimate		
EXPENSE	2016 Actual	2017 Budget	2017 Estimate	2018 Budget	Dollar Change	% Change
Personnel	\$78,048	\$82,909	\$82,350	\$88,222	\$5,872	7.1%
Administrative Expenses	1,723	1,964	1,963	2,066	103	5.2%
Professional Services	6,217	6,681	6,600	7,050	450	6.8%
Utilities	18,816	19,852	19,300	19,696	396	2.1%
Operating Services/Expenses	23,389	26,417	26,225	28,955	2,730	10.4%
Maintenance	36,319	38,777	38,100	38,514	414	1.1%
Other	4,411	4,172	5,400	4,494	(906)	-16.8%
Total Operating Expense	\$168,923	\$180,772	\$179,938	\$188,997	\$9,059	5.0%

The following pie chart shows Personnel is the greatest expense category with 47% of the total. Maintenance and Operating Services/Expenses follow behind with 20% and 15% respectively.



The bar chart below compares the 2017 estimate and 2018 budget. The largest increase is in Personnel followed by Operating Services/Expenses. The increases are explained in more detail later in this section.



2018 Operating Expense

2018 Budget vs 2017 Estimate

	2016 Actual	2017 Budget	2017 Estimate	2018 Budget	2019 Budget	2020 Budget	Dollar Change	% Change
Personnel								
Salaries & Wages	53,739	57,160	56,629	60,784	59,461	61,667	4,155	7.3%
Benefits	24,309	25,749	25,721	27,438	27,860	28,713	1,717	6.7%
Total Personnel	78,048	82,909	82,350	88,222	87,321	90,380	5,872	7.1%
Administrative Expenses	1,723	1,964	1,963	2,066	2,434	2,461	103	5.2%
Professional Services	6,217	6,681	6,600	7,050	8,313	8,557	450	6.8%
Utilities								
Electricity	13,857	14,006	13,300	13,691	14,307	14,801	391	2.9%
Heating Fuel	2,212	2,999	2,923	2,923	3,222	3,367	0	0.0%
Water & Sewer	2,116	2,211	2,452	2,443	2,296	2,360	(9)	-0.4%
Telephones	631	636	625	639	1,074	1,175	14	2.3%
Total Utilities	18,816	19,852	19,300	19,696	20,899	21,703	396	2.1%
Operating Services/Expenses								
Storm Water Monitoring	1,465	1,554	1,500	1,554	1,604	1,655	54	3.6%
Shuttle Bus Services	1,912	2,016	2,010	2,116	2,179	2,245	106	5.3%
Parking Management	6,417	6,694	6,650	6,873	7,079	7,291	223	3.3%
Service Agreements	8,774	10,725	10,045	10,607	11,276	11,991	562	5.6%
Operating Services - Other	4,821	5,427	6,020	7,806	4,935	5,022	1,786	29.7%
Total Operating Services/Expenses	23,389	26,417	26,225	28,955	27,073	28,203	2,730	10.4%
Maintenance								
Trades	1,782	2,290	2,100	2,261	2,273	2,359	161	7.7%
Field	3,777	4,103	4,950	4,310	4,590	4,932	(640)	-12.9%
Building	12,724	13,625	13,050	14,901	13,892	14,344	1,851	14.2%
Cleaning	15,343	16,007	15,500	14,469	14,924	15,504	(1,031)	-6.7%
Equipment	2,693	2,753	2,500	2,573	1,749	1,910	73	2.9%
Total Maintenance	36,319	38,777	38,100	38,514	37,428	39,049	414	1.1%
Other								
General Insurance	1,948	2,086	2,050	2,147	2,217	2,275	97	4.8%
Minor Equipment	1,646	1,379	1,375	1,383	1,440	1,554	8	0.6%
Other - Other	816	707	1,975	963	590	615	(1,012)	-51.2%
Total Other	4,411	4,172	5,400	4,494	4,247	4,443	(906)	-16.8%
Total Operating Expenses	168,923	180,772	179,938	188,997	187,716	194,797	9,059	5.0%

Expense Assumptions and Guidelines

The operating expense budget is compiled with information provided by MAC departments, utility companies, vendors, and historical analyses. The expense budget projections for 2018 are based on the following assumptions and guidelines:

- The MAC will continue to maintain all facilities at the standards established with its tenants and traveling public.
- The MAC will provide a safe and secure airport.
- As positions in the organization become available due to retirement or separation, each vacant position will be reviewed for business need and prioritized based upon organizational requirements.
- The 2017 budget included eight new FTE positions and five additional positions approved during 2017. The full year's impact is included in the 2018 budget. The 2017 positions were:
 - 2 Information Technology – Administrative Assistant and Information Security & Compliance Manager
 - 1 Concessions & Business Development – Lease File Administrator
 - 3 Police Officers
 - 1 Firefighter
 - 1 Environment General – Air Quality Manager
 - 1 Vice President Finance and Revenue Development
 - 1 Vice President Strategy & Stakeholder/Community Engagement
 - 1 Assistant Director-Air Service Development
 - 2 Landside Agents
- The 2018 budget includes eight additional FTE positions to meet workload demands and the increasing complexity of issues facing the MAC. The positions include:
 - 4 Police Officers
 - 1 Information Technology – Solutions Architect
 - 1 Firefighter trainee to replace a future vacated position
 - 2 Open – Undetermined and awaiting proper placement
- An additional five Information Technology FTEs were requested as part of the 2018 budget process and will be hired and added to the authorized headcount if savings can be achieved in other areas of the service center's budget. These positions are currently unfunded.
- The total FTE position count in the 2018 budget is temporarily at 645.5. The Energy Management Center (EMC) includes two operating engineer trainees to replace future vacated positions as hiring for these specialized positions is difficult.
- Cost increases, such as scheduled contract increases, salary adjustments for existing organized and non-organized workforce, utility rate changes, and insurance rate adjustments have been included.
- Discretionary cost increases were considered only if offset by corresponding annual reduction in expenses, an annual increase in revenue, or was necessary for the ongoing efficient operation of the MAC's airports.

- Expenses are prepared on an accrual basis. This basis of accounting attempts to record financial transactions in the period they occur rather than recording them in the period they are paid. The Commission uses this method for both accounting and budgeting.

Personnel

Personnel costs will increase \$5.9 million or 7.1% over the 2017 estimates.

2018 Personnel (\$=000)	2018 Budget vs 2017 Estimate					
	2016 Actual	2017 Budget	2017 Estimate	2018 Budget	Dollar Change	% Change
Personnel						
Salaries & Wages	\$53,739	\$57,160	\$56,629	\$60,784	\$4,155	7.3%
Benefits	24,309	25,749	25,721	27,438	1,717	6.7%
Total Personnel	\$78,048	\$82,909	\$82,350	\$88,222	\$5,872	7.1%

Major differences between the 2017 estimate and 2018 budget are as follows:

Salaries & Wages – Increase of \$4.2 million or 7.3% due to the following:

- Wages – Regular – Effective January 2018, a 2.75% cost of living wage increase was included in the budget for non-organized and organized employees. In total, wages increased approximately \$1.9 million for cost of living and step increases. The 2018 budget includes:
 - Two operating engineer trainee positions due to hiring difficulties in this specialized, licensed work area.
 - Other labor contract obligations such as shift differentials, equipment premium pay, and Labor Union 320 longevity pay.
 - An adjustment in wages to reflect a vacancy factor to account for the time necessary to fill open positions.
 - Eight new positions for 2018, identified earlier, which added approximately \$535,000 to the budget.
 - A full year's impact for positions that were vacant for all or part of 2017 totaling \$707,200. Although a vacancy factor was included, many of the open positions occurred in Police and Information Technology which require a more intensive hiring process, resulting in a lower 2017 estimate. Many of these positions are expected to be filled by the beginning of 2018.

Full Time Equivalent Positions					
2014 Actual	2015 Actual	2016 Actual	2017 Budget	2017 Estimate	2018 Budget
576*	591* **	604.5 * ***	627.5* ^	613	645.5* ^^
* includes 2 trainee positions ** includes 10 new and 9.5 status change positions *** includes 9 additional positions ^ includes 8 additional positions ^^ includes 8 additional positions					

- Overtime – Regular and Double-time are increasing \$378,000 in the 2018 budget from the 2017 estimate. The mild winter conditions in Q1 2017 (due to lower than average snowfall amounts) resulted in costs under budget for 2017. In preparing the 2018 budget, the MAC used historical averages in budgeting for snow removal costs. Also included are wage increases, work call-backs and additional overtime necessary to ensure coverage for vacations, holidays, peak time periods, and for coverage during Super Bowl LII.

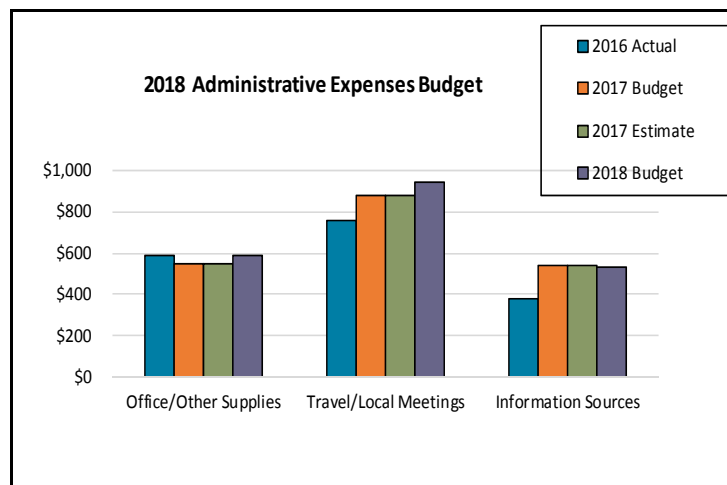
- Temporary employees – The increase of \$537,400 or 15.4% is due to budgeting for temporary cashier positions during the Transportation Networking Company and taxi permitting period and increases in part-time officers for checkpoint security and employees for traffic control.

Benefits – Included in benefits are employee insurance/post-retirement healthcare, Social Security, Medicare, retirement plans, severance, workers compensation, and other miscellaneous items. An increase of \$1.7 million or 6.7% is projected over 2017. The major components of the increase are for employee insurance which is estimated to grow at 6%; increases in retirement plans, Social Security, and Medicare contributions due to a growth in wages and headcount; and an increase in post-retirement medical contributions based on the latest actuarial study.

Administrative Expenses

Administrative Expenses are increasing \$102,724 or 5.2% as identified in the table below. The increases are in the supplies and travel areas.

2018 Administrative Expenses (\$=000)					2018 Budget vs 2017 Estimate	
	2016 Actual	2017 Budget	2017 Estimate	2018 Budget	Dollar Change	% Change
Office/Other Supplies	\$585	\$547	\$547	\$591	\$44	8.0%
Travel/Local Meetings	760	879	879	940	61	6.9%
Information Sources	378	538	537	535	(2)	-0.4%
Total Administrative Expenses	\$1,723	\$1,964	\$1,963	\$2,066	\$103	5.2%



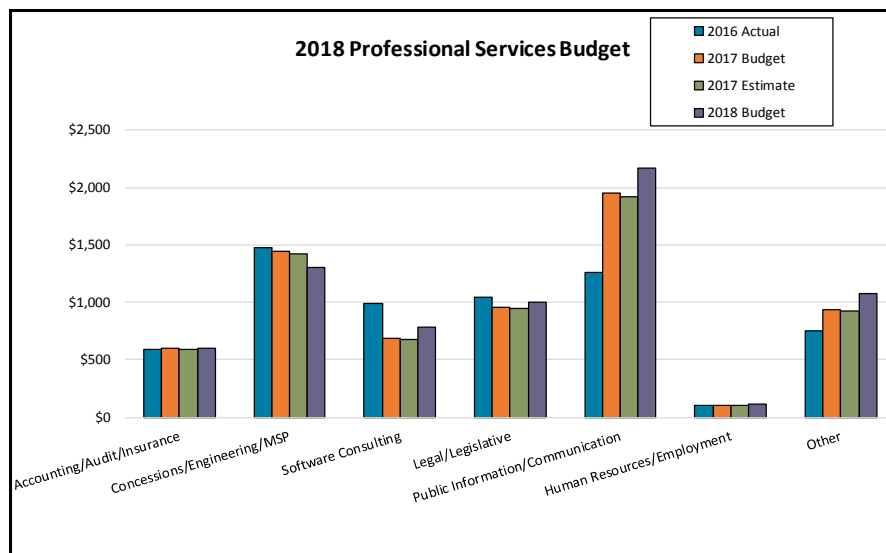
Office/Other Supplies – Chain link fence to improve police canine kennels and various computer and other supplies increased Office/Other Supplies by \$44,000 or 8% in the 2018 budget.

Travel/Local Meetings – The increase in the 2018 budget is based on higher airfares, lodging costs, registration fees, mileage, and meal costs for attending conferences and meetings. A number of staff serve on national committees that typically require out of state travel. In addition, required Aircraft Rescue Fire Fighting (ARFF) training which was previously conducted in state is now performed out of state.

Professional Services

Professional Services increased \$450,000 or 6.8% over 2017 estimates.

2018 Professional Services (\$=000)	2018 Budget vs 2017 Estimate					
	2016 Actual	2017 Budget	2017 Estimate	2018 Budget	Dollar Change	% Change
Accounting/Audit/Insurance	\$588	\$603	\$596	\$607	\$11	1.8%
Concessions/Engineering/MSP	1,477	1,445	1,428	1,306	(122)	-8.5%
Software Consulting	990	685	674	781	107	15.9%
Legal/Legislative	1,041	956	945	1,006	61	6.5%
Public Information/Community	1,258	1,948	1,925	2,166	241	12.5%
Human Resources/Employment	109	110	109	112	3	2.8%
Other	754	934	923	1,072	149	16.1%
Total Professional Services	\$6,217	\$6,681	\$6,600	\$7,050	\$450	6.8%



The following combination of changes in Professional Services explains the larger variances:

Concessions/Engineering/MSP – The 2017 budget included \$125,000 in Request for Proposal (RFP) consultant fees for the new concession rebid. This one-time expense is creating a negative variance of \$122,000 in the 2018 budget.

Software Consulting – The increase of \$107,000 is consulting fees to provide guidance in the Enterprise Architecture process for the MAC and PCI compliance as well as other miscellaneous technology projects.

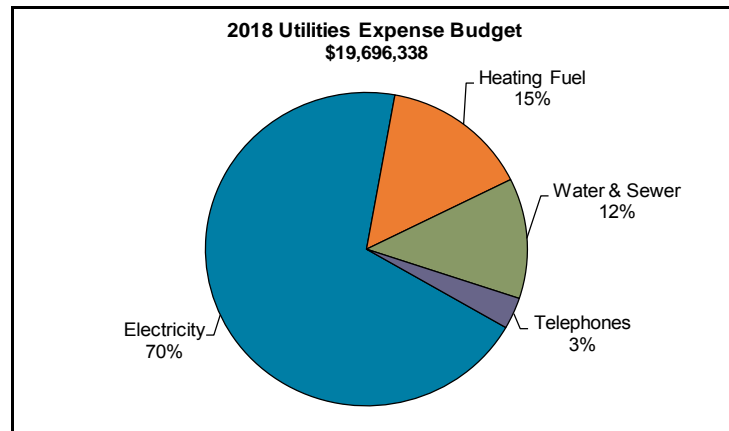
Public Information/Community – A public relations and marketing consultant is budgeted at \$150,000 to research and plan the integration and enhancement of communications with the public. The increase also includes \$150,000 to establish a Community Engagement Plan to promote community awareness to position the MAC as an active, valuable member of the community.

Other – The major factor driving the \$149,000 increase in this category is developing a strategic plan and process for the overall business plan including alignment, performance management, and reporting.

Utilities

Total Utilities are budgeted to increase \$396,000 or 2.1% over 2017 estimates and are explained as follows.

2018 Utilities Expense (\$=000)	2018 Budget vs 2017 Estimate					
	2016	2017	2017	2018	Dollar	%
	Actual	Budget	Estimate	Budget	Change	Change
Utilities						
Electricity	\$13,857	\$14,006	\$13,300	\$13,691	\$391	2.9%
Heating Fuel	2,212	2,999	2,923	2,923	(0)	0.0%
Water & Sewer	2,116	2,211	2,452	2,443	(9)	-0.4%
Telephones	631	636	625	639	14	2.3%
Total Utilities	\$18,816	\$19,852	\$19,300	\$19,696	\$396	2.1%

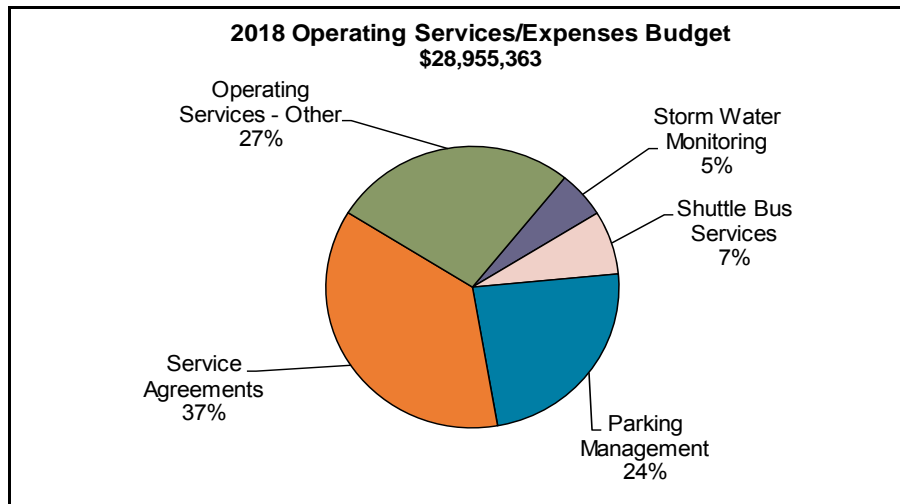


Electricity – The increase in electricity of \$391,000 or 2.9% is based upon the forecast provided by the utility company and an outside consultant.

Operating Services/Expenses

Operating Services expenses are increasing \$2.7 million or 10.4%. The following chart lists the major components in this category.

2018 Operating Services/Expenses (\$=000)	2018 Budget vs 2017 Estimate					
	2016	2017	2017	2018	Dollar	%
	Actual	Budget	Estimate	Budget	Change	Change
Parking Management	\$6,417	\$6,694	\$6,650	\$6,873	\$223	3.3%
Shuttle Bus Services	1,912	2,016	2,010	2,116	106	5.3%
Service Agreements	8,774	10,725	10,045	10,607	562	5.6%
Storm Water Monitoring	1,465	1,554	1,500	1,554	54	3.6%
Other	4,821	5,427	6,020	7,806	1,786	29.7%
Total Operating Services/Expense	\$23,389	\$26,417	\$26,225	\$28,955	\$2,730	10.4%



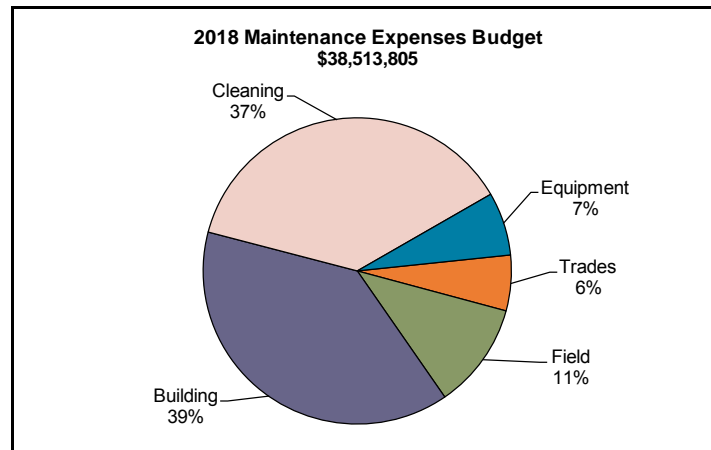
Service Agreements – Service agreements are increasing \$562,000 or 5.6% over 2017 estimates. The main expenditure leading to the increase is additional security staffing at two MSP airfield access gate locations at Terminal 1 and Fire Station 1 as requested by the airlines at \$720,000. Various IT service agreements for new and existing technology are also affecting the variance.

Other – Other expenses are increasing \$1.8 million or 29.7%. The 2018 National Football League (NFL) Super Bowl championship game was held in Minneapolis, Minnesota in February 2018. \$1.6 million was budgeted for the event. Most of the additional cost is for janitorial services. Other Super Bowl expenses include security, carpet replacement, various parking costs, location set-up to accommodate reporters, and additional porter and queue line management services. Furthermore, the Commission's contribution to the Airport Foundation increased \$110,000 for the Percent for Arts program. The increase also includes various other expenses.

Maintenance

The Maintenance category has five components: Trades (Painters, Carpenters, Electricians and Plumbers); Field (Snow Removal, Summer Maintenance and Landscaping); Building (Carrousel/Conveyors, Elevators/Escalators, Moving Walks and Automated People Mover); Equipment (Parts, Shop Supplies and Gas); and Cleaning (Janitorial, Windows, Cleaning Supplies and Rubbish Removal). Total maintenance will increase 1.1% or \$414,000 over 2017 estimates.

2018 Maintenance Expenses (\$=000)				2018 Budget vs 2017 Estimate		
	2016 Actual	2017 Budget	2017 Estimate	2018 Budget	Dollar Change	% Change
Maintenance						
Trades	\$1,782	\$2,290	\$2,100	\$2,261	\$161	7.7%
Field	3,777	4,103	4,950	4,310	(640)	-12.9%
Building	12,724	13,625	13,050	14,901	1,851	14.2%
Equipment	2,693	2,753	2,500	2,573	73	2.9%
Cleaning	15,343	16,007	15,500	14,469	(1,031)	-6.7%
Total Maintenance	\$36,319	\$38,777	\$38,100	\$38,514	\$414	1.1%

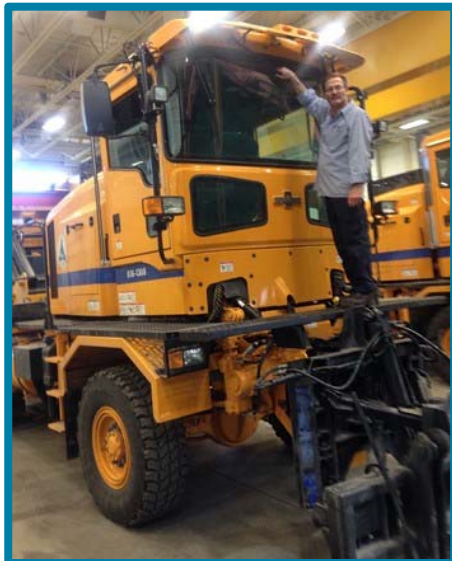


Trades – Trades is increasing \$161,000 or 7.7%. A mild winter at the beginning of 2017 contributed to a lower 2017 estimated amount. The 2018 budget increased \$17,000 for required testing of fire systems and pumps and new sprinkler systems. Other various maintenance and upgrades throughout the MAC will increase this budget category.

Field – Field costs include snow removal, summer maintenance and landscaping. Snow removal costs make up the majority of this \$4.3 million budget. A number of ice events in the first quarter increased the need for additional anti-ice materials which caused a higher estimated amount for 2017. Field maintenance expenses are budgeted in 2018 for snow removal costs associated with an average winter.

Building – Building expenses are increasing \$1.9 million or 14.2% over 2017 estimates. The budget includes \$1.2 for maintenance and support costs for the new inline baggage handling system at Terminal 2-Humphrey which started in 2017. The remainder of the increase is contractual increases in elevators, escalators, moving walkways, tram systems, Terminal 1-Lindbergh baggage screening, and temperature control contracts.

Cleaning – Cleaning expenses are budgeted to decrease \$1.0 million or 6.7%. This is a result of a new cleaning service agreement executed in 2017.



MAC Mechanics Maintain a Wide Variety of Equipment in the MAC Fleet

Other

The Other expense category is projected to decrease \$906,000 or 16.8%. This category includes General Insurance, Minor Assets (less than \$10,000) and miscellaneous items.

The following table identifies the changes in the three major components.

2018 Other Expenses (\$=000)				2018 Budget vs 2017 Estimate		
	2016 Actual	2017 Budget	2017 Estimate	2018 Budget	Dollar Change	% Change
Other						
General Insurance	\$1,948	\$2,086	\$2,050	\$2,147	\$97	4.8%
Minor Equipment	1,646	1,379	1,375	1,383	8	0.6%
Other	816	707	1,975	963	(1,012)	-51.2%
Total Other	\$4,411	\$4,172	\$5,400	\$4,494	(\$906)	-16.8%

General Insurance – General Insurance has increased \$97,000 or 4.8%. The insurance market is based upon factors worldwide (losses under the deductible, litigation costs, history of cost, and inflationary factors). The cost increase in 2018 is primarily for rate increases.

Other expenses – Other is lower in 2018 compared to the 2017 estimate due to the Commission's Air Service Incentive Program. In 2017, two airlines met the criteria for new international air service. One airline provided service from MSP to Tokyo, Japan and the other airline provided service from MSP to Reykjavik, Iceland. The Incentive Program allows for landing and gate fees waivers as long as the air carriers provide continuous air service according to the terms of the Incentive Program.



Planes Awaiting Take-off at Minneapolis-St. Paul International Airport

2018 Budget Expenses by Subledger

	Total	Terminal 1	Terminal 1 FIS	Energy Management Center	Ramp Fees	Field & Runways	Control Tower	Terminal Roads/ Landside	Parking Facilities
Personnel									
Wages	60,783,972	743,200	-	1,820,404	-	1,268,190	-	2,355,774	-
Benefits	27,437,614	518,945	-	918,298	-	133,964	-	873,426	-
Total Personnel	88,221,586	1,262,145	-	2,738,702	-	1,402,154	-	3,229,200	-
Administrative Expenses									
Supplies	591,082	3,300	8,750	3,085	-	12,848	-	10,296	-
Travel	612,127	5,700	-	-	-	40,115	-	21,300	-
Other Administrative Expenses	862,765	1,000	-	928	-	1,700	-	18,852	-
Total Administrative Expenses	2,065,974	10,000	8,750	4,013	-	54,663	-	50,448	-
Professional Services									
Accounting/Audit Fees	211,600	-	-	-	-	-	-	-	-
Appraisals	50,000	-	-	-	-	-	-	-	-
RFP/Leases	50,000	-	-	-	-	-	-	-	-
Concept Develop/Feasible	20,000	-	-	-	-	-	-	-	-
Computer Services	780,600	-	-	-	-	-	-	-	-
Engineering Fees	891,411	125,000	-	47,911	-	508,750	-	-	-
Graphic Design	27,000	-	-	-	-	-	-	-	-
Insurance Consultants	345,000	-	-	-	-	-	-	-	-
Legal Fees	799,000	-	-	-	-	-	-	-	-
Legislative	207,350	-	-	-	-	-	-	-	-
Medical Fees	50,000	-	-	-	-	-	-	-	-
Planning	195,000	-	-	-	-	40,000	-	-	-
Pollution/Environmental Fees	6,100	-	-	-	-	-	-	-	-
Public Information	356,600	-	-	-	-	-	-	-	-
Recruiting Expenses	112,000	-	-	-	-	-	-	-	-
Safety Consultants	40,402	535	-	-	-	-	-	-	-
Communications Consultant	24,000	-	-	-	-	24,000	-	-	-
Miscellaneous Expenses	2,884,376	277,616	-	-	-	71,500	-	20,500	-
Total Professional Services	7,050,439	403,151	-	47,911	-	644,250	-	20,500	-
Utilities									
Electricity	13,691,258	8,616,613	-	-	-	911,341	-	282,393	733,331
Heating Fuel	2,922,656	170,288	-	1,898,684	-	19,720	8,476	66,189	81,214
Sewer	1,174,601	230,487	-	80,169	-	19,691	50	90	12,025
Water	1,268,733	440,374	-	113,375	-	3,000	250	25,442	9,558
Telephone	639,090	7,584	-	7,177	-	6,000	-	10,704	-
Total Utilities	19,696,338	9,465,346	-	2,099,405	-	959,752	8,776	384,818	836,128

2018 Budget Expenses by Subledger

	Cargo Area	Terminal 2	Public Area/ Roads	Hangars & Other Bldgs	Maintenance Employees	Equipment Maintenance	Inventory/ Trades
Personnel							
Wages	-	672,852	-	-	14,632,853	-	-
Benefits		180,108	-	-	7,061,840	-	8,350
Total Personnel		852,960	-	-	21,694,693	-	8,350
Administrative Expenses							
Supplies	-	29,600	-	-	18,500	2,250	9,800
Travel	-	9,650	-	-	3,500	-	3,305
Other Administrative Expenses	-	1,050	-	-	-	500	3,608
Total Administrative Expenses		40,300	-	-	22,000	2,750	16,713
Professional Services							
Accounting/Audit Fees	-	-	-	-	-	-	-
Appraisals	-	-	-	-	-	-	-
RFP/Leases	-	-	-	-	-	-	-
Concept Develop/Feasible	-	-	-	-	-	-	-
Computer Services	-	-	-	-	-	-	-
Engineering Fees	-	15,750	-	-	-	-	-
Graphic Design	-	-	-	-	-	-	-
Insurance Consultants	-	-	-	-	-	-	-
Legal Fees	-	-	-	-	-	-	-
Legislative	-	-	-	-	-	-	-
Medical Fees	-	-	-	-	-	-	-
Planning	-	-	-	-	-	-	-
Pollution/Environmental Fees	-	-	-	-	-	-	-
Public Information	-	-	-	-	-	-	-
Recruiting Expenses	-	-	-	-	-	-	-
Safety Consultants	-	-	-	-	-	-	-
Communications Consultant	-	-	-	-	-	-	-
Miscellaneous Expenses	-	41,084	-	-	75,000	-	305,799
Total Professional Services	-	56,834	-	-	75,000	-	305,799
Utilities							
Electricity	183,429	1,351,349	276,949	329,153	-	120	309,816
Heating Fuel	123,392	286,243	1,684	56,321	-	-	102,935
Sewer	4,008	-	761,609	1,002	-	-	30,063
Water	-	104,081	518,838	19,342	-	-	20,105
Telephone	-	2,900	-	-	16,700	-	42,096
Total Utilities	310,829	1,744,573	1,559,080	405,818	16,700	120	505,015

2018 Budget Expenses by Subledger

	Concourses A-D	Police	Fire	Administration	Building Official	Comm- unication/ Operations	Noise & Environment	Total Reliever Airports
Personnel								
Wages	-	11,850,225	5,238,819	14,141,338	958,556	3,060,523	1,362,623	2,678,615
Benefits	-	5,480,019	2,587,763	6,253,611	289,734	1,225,909	440,152	1,465,494
Total Personnel	-	17,330,244	7,826,582	20,394,949	1,248,291	4,286,432	1,802,775	4,144,109
Administrative Expenses								
Supplies	-	186,488	3,500	252,230	4,550	30,083	9,675	6,127
Travel	-	36,751	51,415	335,152	15,545	38,257	32,237	19,200
Other Administrative Expenses	-	28,164	4,900	721,343	3,245	54,865	14,930	7,680
Total Administrative Expenses	-	251,403	59,815	1,308,725	23,340	123,205	56,842	33,007
Professional Services								
Accounting/Audit Fees	-	-	-	211,600	-	-	-	-
Appraisals	-	-	-	50,000	-	-	-	-
RFP/Leases	-	-	-	30,000	20,000	-	-	-
Concept Dev/Feasible	-	-	-	20,000	-	-	-	-
Computer Services	-	170,000	-	610,600	-	-	-	-
Engineering Fees	-	-	-	13,000	-	-	75,000	106,000
Graphic Design	-	-	-	27,000	-	-	-	-
Insurance Consultants	-	-	-	345,000	-	-	-	-
Legal Fees	-	-	-	692,000	-	-	92,000	15,000
Legislative	-	-	-	207,350	-	-	-	-
Medical Fees	-	-	-	50,000	-	-	-	-
Planning	-	-	-	35,000	-	-	-	120,000
Pollution/Environ Fees	-	-	-	-	-	-	1,600	4,500
Public Information	-	-	-	356,600	-	-	-	-
Recruiting Expenses	-	-	-	112,000	-	-	-	-
Safety Consultants	-	2,867	-	37,000	-	-	-	-
Comm/Consultant	-	-	-	-	-	-	-	-
Miscellaneous Expenses	-	86,924	76,860	627,264	100,000	120,255	934,000	147,574
Total Professional Services	-	259,791	76,860	3,424,414	120,000	120,255	1,102,600	393,074
Utilities								
Electricity	-	-	127,135	267,499	-	-	7,200	294,930
Heating Fuel	-	-	33,746	43,916	-	-	-	29,848
Sewer	-	-	1,303	2,004	-	-	-	32,100
Water	-	-	5,817	5,176	-	-	-	3,375
Telephone	-	66,165	15,360	339,412	5,544	29,131	25,390	64,927
Total Utilities	-	66,165	183,361	658,007	5,544	29,131	32,590	425,180

2018 Budget Expenses by Subledger

	Total	Terminal 1	Terminal 1 FIS	Energy Management Center	Ramp Fees	Field & Runways	Control Tower	Terminal Roads/ Landside	Parking Facilities
<u>Operating Services/Expenses</u>									
Advertising	516,112	-	-	-	-	-	-	-	408,912
Environmental Control	207,900	-	-	-	-	1,200	-	-	-
GISW Management	1,554,000	4,000	-	-	-	1,450,000	-	-	-
Grd Transportation Services	30,000	-	-	-	-	-	-	30,000	-
Shuttle Services	2,115,819	1,007,568	-	-	-	-	-	965,247	-
Parking Lots	6,872,536	-	-	-	-	-	-	-	6,872,536
Met Council Fees	230,000	-	-	-	-	230,000	-	-	-
Employee Programs	169,500	-	-	-	-	-	-	-	-
Conference Center	30,000	-	-	-	-	-	-	-	-
Events & Exercises	1,618,012	1,205,003	-	-	-	40,500	-	74,858	-
Other Charges/Fees	5,004,452	603,000	-	-	-	722,735	-	-	527,004
Service Agreements	10,607,032	3,040,843	503,520	-	-	159,450	-	403,096	800,808
Total Operating Services/Expenses	28,955,363	5,860,414	503,520	-	-	2,603,885	-	1,473,201	8,609,260
<u>Maintenance</u>									
Trades - Painters	299,242	30,197	-	1,513	-	185,076	-	-	9,180
Trades - Carpenters	244,721	136,808	-	-	-	-	-	-	-
Trades - Plumbers	261,800	125,000	-	4,920	-	11,000	-	2,000	-
Trades - Electricians	1,455,081	399,413	-	6,630	-	313,282	-	5,200	281,345
Maintenance - Field	4,310,166	6,374	-	-	47,000	2,228,400	-	118,000	732,000
Maintenance Building	14,901,064	9,120,440	47,589	280,575	-	35,000	-	1,508,147	338,926
Maintenance-Cleaning	14,469,027	10,243,842	217,699	-	-	55,000	-	319,689	418,111
Maintenance-Equipment	2,572,704	146,975	2,000	237,550	-	-	-	14,417	220,085
Total Maintenance	38,513,805	20,209,049	267,288	531,188	47,000	2,827,758	-	1,967,453	1,999,647
<u>Other</u>									
General Insurance	2,147,499	599,457	-	97,830	62,995	106,127	-	36,647	127,680
Safety	120,970	10	-	3,998	-	12,500	-	-	-
Medical Information/Supply	20,878	2,750	-	556	-	3,000	-	-	-
Rentals	56,940	-	-	-	-	-	-	1,440	-
Licenses/Permits	22,176	-	-	1,726	-	4,000	-	-	-
Miscellaneous Expenses	742,474	600	2,000	-	-	10,000	-	-	-
Capital Assets	1,382,611	6,000	-	6,000	-	-	-	-	-
Total Other	4,493,548	608,817	2,000	110,110	62,995	135,627	-	38,087	127,680
Grand Total	188,997,053	37,818,922	781,558	5,531,329	109,995	8,628,089	8,776	7,163,707	11,572,715

2018 Budget Expenses by Subledger

	Cargo Area	Terminal 2	Public Area/ Roads	Hangars & Other Bldgs	Maintenance Employees	Equipment Maintenance	Inventory/ Trades
<u>Operating Services/Expenses</u>							
Advertising	-	-	-	-	-	-	-
Environmental Control	-	-	18,000	-	-	12,000	17,200
GISW Management	-	-	-	-	-	-	-
Grd Transportation Services	-	-	-	-	-	-	-
Shuttle Services	-	143,004	-	-	-	-	-
Parking Lots	-	-	-	-	-	-	-
Met Council Fees	-	-	-	-	-	-	-
Employee Programs	-	-	-	-	-	-	-
Conference Center	-	-	-	-	-	-	-
Events & Exercises	-	-	-	-	3,000	-	5,000
Other Charges/Fees	-	2,175	-	-	-	-	-
Service Agreements	-	616,203	-	-	-	53,000	82,652
Total Operating Services/Expenses	-	761,382	18,000	-	3,000	65,000	104,852
<u>Maintenance</u>							
Trades - Painters	-	3,033	-	-	-	-	59,323
Trades - Carpenters	-	21,482	-	-	-	-	65,555
Trades - Plumbers	-	33,380	2,000	16,000	-	6,000	35,500
Trades - Electricians	-	88,821	52,000	33,275	-	-	62,063
Maintenance - Field	61,000	-	86,750	-	-	916,800	-
Maintenance Building	169,350	1,811,600	-	71,482	-	6,989	126,582
Maintenance-Cleaning	1,790	2,231,202	-	113,729	-	-	13,082
Maintenance-Equipment	-	24,137	-	2,578	-	1,098,209	79,506
Total Maintenance	232,140	4,213,655	140,750	237,064	-	2,027,998	441,611
<u>Other</u>							
General Insurance	-	64,648	36,163	32,978	-	203,720	10,812
Safety	-	-	3,000	-	16,500	-	29,403
Medical Information/Supply	-	-	-	-	-	-	-
Rentals	-	-	-	-	-	-	27,500
Licenses/Permits	-	-	-	-	-	6,850	2,400
Miscellaneous Expenses	-	2,750	-	-	-	44,254	-
Capital Assets	-	15,650	-	-	-	39,600	49,698
Total Other	-	83,048	39,163	32,978	16,500	294,424	119,813
Grand Total	542,969	7,752,752	1,756,993	675,860	21,827,893	2,390,292	1,502,153

2018 Budget Expenses by Subledger

	Concourses A-D	Police	Fire	Administration	Building Official	Comm- unication/ Operations	Noise & Environment	Total Reliever Airports
<u>Operating Services/Expenses</u>								
Advertising	-	-	-	94,400	2,000	-	-	10,800
Environmental Control	-	-	5,000	8,000	-	-	1,000	145,500
GISW Management	-	-	-	100,000	-	-	-	-
Grd Transportation Services	-	-	-	-	-	-	-	-
Shuttle Services	-	-	-	-	-	-	-	-
Parking Lots	-	-	-	-	-	-	-	-
Met Council Fees	-	-	-	-	-	-	-	-
Employee Programs	-	-	-	169,500	-	-	-	-
Conference Center	-	-	-	-	30,000	-	-	-
Events & Exercises	-	-	-	126,000	-	15,151	-	148,500
Other Charges/Fees	-	1,114,373	-	633,110	1,307,190	77,365	4,000	13,500
Service Agreements	-	360,094	43,000	4,013,350	3,800	288,102	225,114	14,000
Total Operating Services/Expenses	-	1,474,467	48,000	5,144,360	1,342,990	380,618	230,114	332,300
<u>Maintenance</u>								
Trades - Painters	-	-	1,000	-	-	-	-	9,920
Trades - Carpenters	-	-	-	1,000	-	-	-	19,876
Trades - Plumbers	-	-	9,500	4,500	-	-	-	12,000
Trades - Electricians	-	16,800	27,036	27,900	-	-	-	141,316
Maintenance - Field	-	-	-	750	-	-	-	113,092
Maintenance Building	-	-	18,411	18,210	1,250,000	-	-	97,763
Maintenance-Cleaning	-	-	69,471	29,707	645,495	18,810	-	91,400
Maintenance-Equipment	-	224,857	103,858	47,196	-	34,487	2,437	334,412
Total Maintenance	-	241,657	229,276	129,263	1,895,495	53,297	2,437	819,779
<u>Other</u>								
General Insurance	-	222,205	165,167	113,461	-	9,647	6,893	251,069
Safety	-	6,903	-	46,000	-	-	-	2,656
Medical Information/Supply	-	9,572	4,500	200	-	-	-	300
Rentals	-	-	-	28,000	-	-	-	-
Licenses/Permits	-	-	-	-	600	-	2,500	4,100
Miscellaneous Expenses	-	229,050	54,000	13,029	350,000	26,000	-	10,791
Capital Assets	-	2,936	66,000	1,184,300	6,000	6,427	-	-
Total Other	-	470,666	289,667	1,384,990	356,600	42,074	9,393	268,916
Grand Total	-	20,094,393	8,713,561	32,444,708	4,992,260	5,035,012	3,236,751	6,416,365

Construction Fund

All capital asset expenditures are within the Construction Fund and are broken down into two categories which are:

- Equipment and Technology Related Expenditures
- Capital Improvement Program Expenditures

Capital asset expenditures relate to the acquisition of assets in which the benefits extend over one or more accounting periods beyond the current period. It is the Commission's policy to amortize the carrying amount of the assets over their estimated useful lives on a straight-line basis by annual depreciation charges to income. Estimated useful lives on depreciable assets are as follows:

Airport improvements and buildings	10 - 40 years
Moveable equipment	3 - 15 years

Costs incurred for major improvements are carried in construction in progress until disposition or completion of the related projects. Costs relating to projects not pursued are expensed, while costs relating to completed projects are capitalized. The capitalization threshold for capital assets is \$10,000.

For Capital Improvement Program expenditures, a monthly report of all final payments, including any change orders, are reviewed and approved by the Commission.

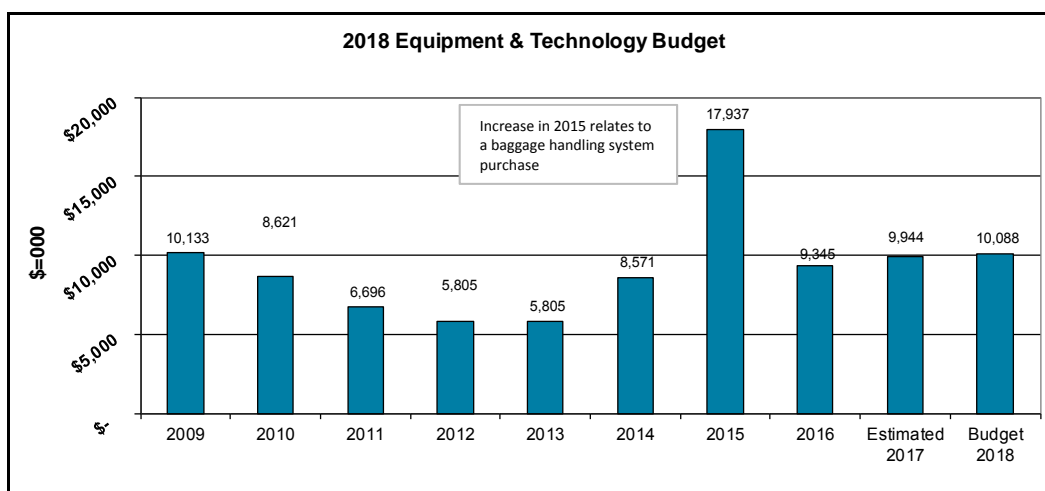
Equipment and Technology-Related Expenditures

Annually, the MAC completes its capital equipment requests for new and replacement equipment. All technology related capital equipment was also reviewed by the Information Technology Department. The capital equipment requests in the 2018 budget increased slightly by approximately \$144,000.

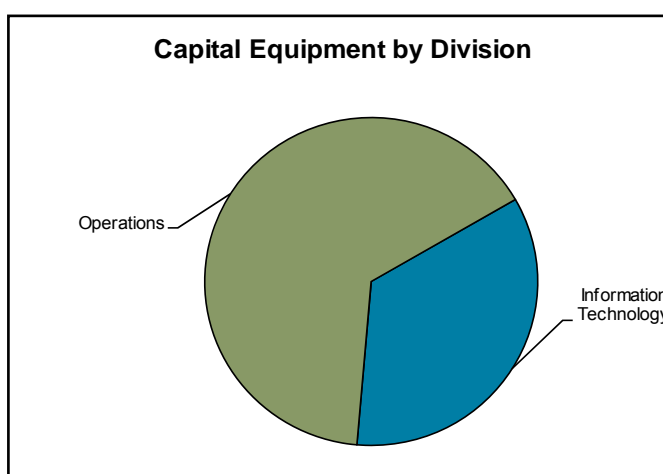
In 2008, the Commission fully incorporated the changes in the Amendment to the Airline Use and Lease Agreement. This change resulted in a significant modification to the way the Commission acquires capital equipment. In the past, internally generated funds were used to purchase all capital equipment and the resulting depreciation associated with that equipment was charged to MSP tenants, in particular, the airlines. In the Amendment, this process changed due to elimination of using depreciation and now incorporating the use of various types of debt as a chargeback to the tenants and airlines. Currently, the \$10.1 million capital equipment budget listed below is funded in two ways. First, those pieces of equipment which are chargeable to the tenants and airlines are now acquired through equipment financing (Notes Payable). The amount of equipment financed for 2018 is approximately \$3.5 million. The term of these financings is 10 years. The principal and interest associated with these equipment financings will be charged back based on the appropriate percentage found in the Airline Use and Lease Agreement resulting in recovery of all or a portion of the total dollars. Lastly, the remaining value of capital equipment (approximately \$6.6 million) will be funded with internally generated funds.

2018 Equipment & Technology Budget				
	2017 Estimate	2018 Budget	\$ Variance	% Variance
Equipment & Technology	\$ 9,943,500	\$ 10,087,980	\$ 144,480	1.5%

The chart on the next page compares equipment and technology purchases for the past 10 years. In 2015, the MAC purchased the outbound baggage handling system from Delta for approximately \$8 million.



This chart on the right displays the 2018 capital equipment requests by Information Technology and Operations.



Field Maintenance Equipment Used to Clean the Runway at MSP

The following pages contain details of the Capital Equipment and Technology requests for 2018.

Capital Equipment Projects**82600 Airside Operations****4x4 SUV**

Acquisition:	Replacement	Airside Operations uses this vehicle for regulatory compliance
Individual Cost:	\$50,000	work, emergency response and to maintain operational efficiency
Trade-in Value:	\$1,000	and reliability for 24/7 operations. Three vehicles in the service
Quantity:	1	center are rotated in the replacement program. Vehicles are
Total:	\$49,000	replaced when repair costs outweigh repair benefits. The vehicle
		will also be available for transfer to other areas as general
		business needs arise.
Airside Operations Total:	\$49,000	

83400 Landside-Administration**Four Door Truck**

Acquisition:	Replacement	The new vehicle will replace a vehicle used by the parking
Individual Cost:	\$29,000	management staff in their daily monitoring duties. It is also used
Trade-in Value:	\$1,000	to assist customers with their lost vehicles. Replacement is
Quantity:	2	based on the MAC's fleet schedule.
Total:	\$57,000	
Landside-Administration Total:	\$57,000	

83600 Fire**Defibrillator/Monitor**

Acquisition:	Replacement	Defibrillator/monitors are used for monitoring and treating
Individual Cost:	\$20,000	patients with various medical conditions, including sudden
Trade-in Value:	\$5,000	cardiac arrest. Current units are 10 years old and have become
Quantity:	3	difficult and costly to maintain. The new units will provide better
Total:	\$55,000	patient care capabilities. Also, they are smaller, making them
		easier to carry and to store on the apparatus.

Firefighting Skid Pump Unit

Acquisition:	New	The new portable skid fire pump unit can be placed in any pick-
Individual Cost:	\$30,000	up bed to allow flexible firefighting capabilities. The ultra high
Quantity:	1	pressure pump system improves efficiency for vehicle fires in
Total:	\$30,000	parking ramps. Purchasing this unit produces significant cost
		savings when compared to an estimated \$200,000 cost for
		replacement of a mini-pumper vehicle.

Thermal Imaging Camera (TIC)

Acquisition:	Replacement	Current thermal imaging camera units need costly repairs; the
Individual Cost:	\$15,000	benefits of the repairs do not outweigh the costs. The
Trade-in Value:	\$1,500	replacement cameras will have more features for safer and more
Quantity:	3	effective fire and rescue operations.
Total:	\$43,500	

Utility Pickup Truck

Acquisition:	Replacement	The new utility pickup truck replaces a 2001 truck. It is needed to pull the airboat and other response trailers. The new truck will also provide transport of personnel for on-airport and off-airport trainings and events.
Individual Cost:	\$55,000	
Trade-in Value:	\$5,000	
Quantity:	1	
Total:	\$50,000	
Fire Total:	\$178,500	

84200 Police**Police Vehicle Replacement**

Acquisition:	Replacement	The new vehicle replaces a unit used for patrol and investigative purposes. The current unit is over 13 years old or has mileage in excess of 100,000 miles. Replacement of the current unit is recommended by the Airport Police Department and the MAC's equipment superintendent.
Individual Cost:	\$49,000	
Trade-in Value:	\$1,500	
Quantity:	2	
Total:	\$96,500	

Police Vehicle Replacement

Acquisition:	New	The Airport Police Department is adding two new marked police squads for the patrol fleet. The unmarked fleet will decrease by one. Currently there is one vehicle for supervisors and officers assigned inside Terminal 2. The increase in the marked vehicle fleet is a result of additional transportation needs to and from Terminal 2 assignments, as well as the ability to respond to other locations on airport property in the event of an incident. Terminal 2 assignments have increased, with one additional supervisor and one additional high visibility officer assigned on a regular basis at Terminal 2. An increase of officer presence is anticipated in 2018. Marked patrol vehicles will also assist with deterrence at Terminal 2.
Individual Cost:	\$49,000	
Quantity:	2	
Total:	\$98,000	

T3 Replacement Unit

Acquisition:	Replacement	The new unit replaces a T3 electric vehicle that has been in the Airport Police Department fleet since 2007. T3 electric vehicles are highly visible and allow for fast office response. The vehicles have incurred increasing maintenance costs as they have aged and parts are becoming difficult to obtain. The replacement unit will be placed into service at Terminal 1.
Individual Cost:	\$15,500	
Trade-in Value:	\$0	
Quantity:	1	
Total:	\$15,500	
Police Total:	\$210,000	

86100 Facilities-Terminal 1**Blast Mitigation Containers**

Acquisition:	Replacement	Current exterior blast mitigation (bomb-proof) trash containers are aging. They require extensive welding maintenance, which diminishes their blast integrity. The new 40 gallon container will replace a container on the exterior of a terminal building.
Individual Cost:	\$90,000	
Trade-in Value:	\$0	
Quantity:	1	
Total:	\$90,000	

Main Loading Dock Compactor

Acquisition:	Replacement	The new compactor is a 30 cubic yard, auger-style compactor, which will replace the Terminal 1 main loading dock compactor.
Individual Cost:	\$45,000	
Trade-in Value:	\$0	
Quantity:	1	
Total:	\$45,000	

T-2 - Humphrey Non-secure Compactor

Acquisition:	New	The new compactor will service all entities and areas on the non-secure side of Terminal 2.
Individual Cost:	\$40,000	
Quantity:	1	
Total:	\$40,000	

Facilities-Terminal 1 Total: \$175,000

86300 Facilities-Energy Management Center**4x4 Crew Cab 1-Ton Truck**

Acquisition:	Replacement	The current vehicle is a 1996 single cab flatbed. It has areas of significant corrosion and rust, making repair costs outweigh the repair benefits. The replacement vehicle will provide the ability to carry more personnel safely without adding another vehicle to the fleet.
Individual Cost:	\$50,000	
Trade-in Value:	\$0	
Quantity:	1	
Total:	\$50,000	

Facilities-Energy Management Center Total: \$50,000

88000 Trades - Electricians**Genie GS-2632 Scissor Lift**

Acquisition:	New	The new lift will allow personnel to reach the folded plate areas at Terminal 1 in both the secure and non-secure areas.
Individual Cost:	\$28,000	
Quantity:	1	
Total:	\$28,000	

JLG X600AJ Lift

Acquisition:	New	The new lift has a smaller footprint and weight than other MAC equipment. These features will allow Trades personnel to perform maintenance in difficult to reach areas of Terminal 1 and Terminal 2.
Individual Cost:	\$160,000	
Quantity:	1	
Total:	\$160,000	

Trades - Electricians Total: \$188,000

88100 Trades - Painters**4X4 Crew Cab Long Box Pickup with Tailgate Lift**

Acquisition:	Replacement	The current vehicle is a 1999 half-ton truck with substantial areas of exterior corrosion, rust and interior damage. Vehicles are replaced when repair costs outweigh repair benefits. The replacement truck will be a one-ton truck with a tailgate lift. This will provide fleet standardization within MAC service centers. The standardization decreases parts inventory required by the MAC.
Individual Cost:	\$50,000	
Trade-in Value:	\$1,000	
Quantity:	1	
Total:	\$49,000	

Attached Mill

Acquisition:	New	The attached mill will remove the painted chevrons on the
Individual Cost:	\$50,000	MSP Runways, a process that was flagged during the
Quantity:	1	2016 FAA Inspection. The MAC does not currently have
Total:	\$50,000	equipment to perform this work.

Trades - Painters Total: \$99,000

88200 Trades - Carpenters**4X4 Crew Cab Long Box Pickup with Lift Gate**

Acquisition:	Replacement	The new vehicle will improve job performance efficiency for the
Individual Cost:	\$50,000	carpenters by accommodating additional employee passengers
Trade-in Value:	\$1,000	and secure storage of tools and materials, features the current
Quantity:	1	vehicle does not have. The replacement truck will be a one-ton
Total:	\$49,000	truck with a tailgate lift. This will provide fleet standardization
		within MAC service centers. This standardization decreases parts
		inventory required by the MAC.

Trades - Carpenters Total: \$49,000

88300 Trades - Plumbers**4X4 Crew Cab Long Box with Tailgate Lift**

Acquisition:	Replacement	The current vehicle is a 2000 van. It has substantial areas of
Individual Cost:	\$50,000	exterior corrosion, rust and interior damage. Vehicles are
Trade-in Value:	\$1,000	replaced when repair costs outweigh repair benefits. The
Quantity:	1	change from a van to a one-ton truck with a tailgate lift provides
Total:	\$49,000	fleet standardization across MAC service centers.
		Standardization decreases fleet parts inventory required by the
		MAC.

Trades - Plumbers Total: \$49,000

89000 Field Maintenance**Crew-Cab Pickup**

Acquisition:	Replacement	The replacement vehicle will be used by all shifts of field
Individual Cost:	\$45,000	maintenance for regulatory compliance work, tool and equipment
Trade-in Value:	\$24,000	transportation and to maintain efficiency and reliability
Quantity:	2	requirements for 24/7 operations. The six vehicles in the service
Total:	\$66,000	center are rotated in the replacement program. Vehicles are
		replaced when repair costs outweigh repair benefits. The
		replacement vehicle will be available for transfer to other areas
		for other business needs.

Field Maintenance Airfield Manager Vehicle

Acquisition:	Replacement	The Field Maintenance airfield managers require vehicles for
Individual Cost:	\$60,000	regulatory compliance work, emergency response and to
Trade-in Value:	\$3,000	maintain efficiency and reliability requirements for 24/7
Quantity:	2	operations. The six vehicles in the service center are rotated in
Total:	\$117,000	the replacement program. Vehicles are replaced when repair
		costs outweigh repair benefits. The replacement vehicle will be
		available for transfer to other areas for other business needs.

Grounds Mowers

Acquisition:	Replacement	Grounds mowers are used daily on all shifts during mowing
Individual Cost:	\$20,000	season. The MAC's use is higher than the average
Trade-in Value:	\$15,000	manufacturer's suggested use. This request takes into account
Quantity:	3	benchmarking of current commercial mower usage with other
Total:	\$45,000	grounds departments in Minneapolis.

High-Speed Snow Blower

Acquisition:	Replacement	The replacement vehicle has ergonomically designed cab
Individual Cost:	\$875,000	controls to help decrease operator fatigue. It also provides
Trade-in Value:	\$40,000	upgraded efficiency in design. The replacement vehicle is
Quantity:	2	needed for operational efficiency and reliability during snow
Total:	\$1,710,000	events. Another outcome is fleet standardization with all
		high-speed snow blower vehicles in this class.

Multi-Function Snow Removal Vehicle

Acquisition:	Replacement	The replacement vehicle has ergonomically designed cab
Individual Cost:	\$950,000	controls to help decrease operator fatigue. It also provides
Trade-in Value:	\$0	upgraded efficiency in design. The replacement vehicle is
Quantity:	1	needed for operational efficiency and reliability during snow
Total:	\$950,000	events and provides fleet standardization with all multi-function
		vehicles in this class.

Off-Road Snow Blower Attachment

Acquisition:	Replacement	The current attachment's planned maintenance and repair
Individual Cost:	\$200,000	schedule costs are greater than the repair benefit. This
Trade-in Value:	\$15,000	attachment is needed for operational efficiency and reliability
Quantity:	1	during snow events, as it provides off-road snow removal
Total:	\$185,000	capabilities in airfield areas that are regulated by snow height
		requirements.

Parking Ramp Cleaning Vehicle

Acquisition:	Replacement	Realignment of parking ramps have created an increased annual
Individual Cost:	\$225,000	cleaning area. The current vehicle lacks technology for efficiency
Trade-in Value:	\$5,000	in employee time and cleaning capabilities. MAC personnel have
Quantity:	1	worked with the vendor to redesign the equipment to improve
Total:	\$220,000	efficiency. Realignment of parking ramps have created an
		increased annual cleaning area. The replacement vehicle will
		provide necessary operational efficiency.

Road Truck with Plow and Sander Wing

Acquisition:	Replacement	The current 2006 vehicle has substantial areas of exterior
Individual Cost:	\$275,000	corrosion, rust and electrical damage. Repair costs are greater
Trade-in Value:	\$20,000	than the repair benefits. The vehicle is needed for operational
Quantity:	1	efficiency and reliability of landside maintenance during snow
Total:	\$255,000	events. The replacement vehicle provides fleet standardization
		with all road truck vehicles in this class.

Runway Rotary Broom

Acquisition:	Replacement	The replacement equipment has ergonomically designed cab controls to help decrease operator fatigue. It also provides
Individual Cost:	\$814,000	upgraded efficiency in design. The replacement vehicle is
Trade-in Value:	\$9,000	needed for operational efficiency and reliability during snow
Quantity:	1	events. New technology in the replacement vehicle provides
Total:	\$805,000	extended broom core life due to an auto function adjustment
		feature. This provides fleet standardization with all runway rotary
		broom vehicles in this class. The replacement vehicle may also
		be utilized by MAC Reliever Airports.

Tractor with Plow Attachment-6000 Series

Acquisition:	Replacement	Current two-wheel drive equipment lacks the functionality and
Individual Cost:	\$220,000	efficiency the replacement four-wheel drive equipment will
Trade-in Value:	\$40,000	provide. The replacement plows will also conform to fleet
Quantity:	2	standardization. Current equipment can be assigned to
Total:	\$400,000	Reliever Airports.

Tractor with Plow Attachment-8000 Series

Acquisition:	Replacement	The current equipment has higher than average repair costs. The
Individual Cost:	\$250,000	new model is more environmentally friendly and has higher
Trade-in Value:	\$40,000	horsepower for efficiency with both snow removal and mowing.
Quantity:	1	
Total:	\$210,000	

Field Maintenance Total: \$4,963,000

90200 Relievers - St. Paul**10-Foot Plow for 1-Ton Truck**

Acquisition:	Replacement	The new plow will replace a bent and rusted older plow. It will
Individual Cost:	\$10,000	allow for universal flexibility to sand the gate areas, the
Trade-in Value:	\$0	Administration Building and air traffic control parking lots.
Quantity:	1	
Total:	\$10,000	

15-Yard Sanding Truck

Acquisition:	Replacement	A high-volume sanding truck is a critical piece of equipment in
Individual Cost:	\$150,000	snow and ice control management. The replacement truck will
Trade-in Value:	\$2,000	allow for a consistent application of sand, including blending of
Quantity:	1	various materials. The large volume sander allows an operator to
Total:	\$148,000	treat the airfield environs quickly to maintain or raise condition
		reporting.

Mechanic Service Vehicle

Acquisition:	Replacement	The replacement service truck will maintain and repair the
Individual Cost:	\$135,000	capital equipment fleet in the eastern MAC Reliever Airports.
Trade-in Value:	\$2,000	
Quantity:	1	
Total:	\$133,000	

Metal Shelving

Acquisition:	New	Metal shelving will allow for organization of premium storage space. The shelves will be configured to provide horizontal and vertical space. Unused vertical space will be converted into heavy materials storage.
Individual Cost:	\$30,000	
Quantity:	1	
Total:	\$30,000	

V-Box 3-Yard Sander for 1-Ton Truck

Acquisition:	Replacement	The replacement unit is a V-box stainless steel electronic insert for sanding operations using the one-ton truck. The new equipment will increase the safety and efficiency of treating the public roadways, gate entrances and parking lots with a consistent flow rate and coverage area.
Individual Cost:	\$11,000	
Trade-in Value:	\$0	
Quantity:	1	
Total:	\$11,000	

Relievers - St. Paul Total: \$332,000

90400 Relievers - Airlake**Skidsteer**

Acquisition:	New	The new skidsteer will remove snow around buildings, clear property lines during the summer and do dirt work around the airport.
Individual Cost:	\$46,000	
Quantity:	1	
Total:	\$46,000	

Relievers - Airlake Total: \$46,000

90600 Relievers - Crystal**15-Foot Pull Behind Mower**

Acquisition:	Replacement	The new unit replaces a 15' pull behind mower which is 20 years old and has outlived its useful life. The replacement unit will be used heavily to mow the airfield.
Individual Cost:	\$30,000	
Trade-in Value:	\$2,000	
Quantity:	1	
Total:	\$28,000	

15-Foot Self Propelled Mower

Acquisition:	Replacement	The new mower will replace a unit that is inadequate for the required task.
Individual Cost:	\$85,000	
Trade-in Value:	\$5,000	
Quantity:	1	
Total:	\$80,000	

SUV

Acquisition:	Replacement	The unit to be replaced is currently the backup management vehicle. It has 202,000 miles on it and is due for replacement. The new vehicle will become the primary vehicle, and the currently owned 2008 Durango will become the backup vehicle.
Individual Cost:	\$35,000	
Trade-in Value:	\$2,000	
Quantity:	1	
Total:	\$33,000	

Relievers - Crystal Total: \$141,000

CAPITAL EQUIPMENT TOTAL: \$6,586,500

Technology Projects**79000 Information Technology****Assist Team System**

Acquisition:	New	Implement an Emergency Response system in order to more efficiently document and communicate the status of team members, volunteers, survivors, family contacts and other groups involved in the case of an emergency situation. Having a database system will allow for a more accurate and efficient way of recording and transmitting information, reducing errors and resulting in a more comprehensive response effort by the Assist Team.
Individual Cost:	\$50,000	
Quantity:	1	
Total:	\$50,000	

Enterprise Cyber Security

Acquisition:	New	The MAC received a Cybersecurity Framework scorecard from the U.S. Department of Commerce's National Institute of Standards and Technology. The scorecard highlighted a major gap or lack of a cyber security program. Enterprise Cyber Security funds will reduce the MAC's cyber security risk as currently assessed in the roadmap provided by the MAC consultant Aeritae. These funds would be used to protect the MAC's most critical Information Technology assets, which impact the life, reputation and ability to operate as an airport. The MAC must develop a security program and processes to secure data and assets, provide governance and respond to incidents. This work requires staffing resources, including program managers, business analysts and subject matter experts to be able to deliver and mitigate these risks.
Individual Cost:	\$10,000	
Quantity:	1	
Total:	\$10,000	

Enterprise Fleet Strategy

Acquisition:	New	This effort will establish the MAC's enterprise fleet management strategy, as well as business and technology changes to create a "centralized" data repository, including MSP and Reliever fleet. This repository will serve as management's primary platform for enterprise fleet management, including the benefit of improved analytics, tracking, monitoring and reporting to aid critical fleet decisions.
Individual Cost:	\$110,000	
Quantity:	1	
Total:	\$110,000	

Enterprise GIS

Acquisition:	New	Geographic Information System (GIS) capabilities are key to the MAC's ability to provide mapping and location services for any software application. Nearly all MAC systems have a need for GIS. MAC currently has fragmented and disjointed capabilities. The need for GIS is a common theme from all departments and impacts the entire organization at all levels. It is imperative that the IT service center staffs, builds and supports a GIS foundation that all MAC can use. These funds are for program management, vendor staffing, technical support, data management, GIS application development and data acquisition. These funds are part of a three-year plan to grow GIS capabilities.
Individual Cost:	\$10,000	
Quantity:	1	
Total:	\$10,000	

Enterprise Hosting

Acquisition:	New	Enterprise hosting will provide additional storage area network (SAN) storage. The MAC will continue the retiring of end of life storage and migrating the data to an enterprise storage solution.
Individual Cost:	\$950,000	
Quantity:	1	These funds include an expansion for the MAC's secondary data center of VMware, Inc., with licensing with VMware, Inc. to support the secondary Data Center. Microsoft Server OS Licensing for the secondary data center will include support for the data center and server hardware. Finally, these funds include blade servers for the secondary data center.
Total:	\$950,000	

Enterprise Networking

Acquisition:	New	Enterprise Networking includes funds for Cisco edge and aggregation switches. These switches will be purchased at a bulk discount and will allow the MAC to have a supply on-hand for projects.
Individual Cost:	\$10,000	
Quantity:	1	
Total:	\$10,000	

Enterprise Web and Mobile

Acquisition:	New	The Enterprise Web and Mobile capital project will fund operational updates to current or future interior design directories (IDD) at Terminal 1 and Terminal 2. Additional features or support of IDD at MSP may be required outside of this project scope or following completion of the project. Additionally, the MAC has a new web presence on a completely responsive platform. This project would bring the remaining domains onto this new platform.
Individual Cost:	\$170,000	
Quantity:	1	
Total:	\$170,000	

NCAR Runway Friction and Closure Prediction P2

Acquisition:	New	The National Center for Atmospheric Research created a customized version of the Federal Highway Administration's program that provides objective guidance for winter road maintenance decision makers and applied this to the airline industry to better predict the surface friction and runway closure times. Phase 1 of this project included the implementation of this system. This request is for Phase 2, which will include data verification, analysis and enhancements to improve predictions. Phase 3 will be a future request to further analyze data and improve the predictions. The major benefit is to automate and leverage these prediction times to provide safer and more accurate analysis of when to close runways due to reduced runway friction and poor weather.
Individual Cost:	\$125,000	
Quantity:	1	
Total:	\$125,000	

Parking System Enhancements

Acquisition:	New	Parking System Enhancements will give parking customers the option of reserving their parking space at the same time they reserve their airline tickets. This has become a feature that many of our customers expect. It will also allow Landside Operations to utilize variable rate pricing to incentivize parkers to self-divert unless they require the convenience of parking in close proximity to the terminal. These enhancements will include a parking guidance system, including installing red and green lights to guide customers into open parking spaces.
Individual Cost:	\$50,000	
Quantity:	1	
Total:	\$50,000	

Public Safety Radios

Acquisition:	New	Public Safety funds will complete the radio replacement project
Individual Cost:	\$655,000	began in 2016. New equipment will replace radios that have
Quantity:	1	reached the end of their useful life and bring the entire radio fleet
Total:	\$655,000	within the Airport Police Department (APD) to the same form
		factor. This high priority project will complete the project by
		replacing 15 at their end-of-life in one class and 113 in a second
		class. Public Safety funds will also be used to purchase 150
		body cams for the APD and 20-25 terabytes of storage for body
		cam video. Finally, 20 in-vehicle routers will replace equipment
		used for perimeter intrusion detection that is approaching the
		end of its warranty.

Revenue Control System Enhancements

Acquisition:	New	The MAC Automatic Vehicle Information System (MAVIS)
Individual Cost:	\$458,480	database will be upgraded to the latest version of the database. It
Quantity:	1	will then be migrated to the Data Center. Funds will also
Total:	\$458,480	purchase an upgraded Crystal Reports server, five access
		licenses and installation services to enhance MAVIS front end
		reporting. Also, a six-year-old storage area network (SAN) for the
		ePark Elite and MAVIS parking systems will be replaced. It is at
		its end of life, and the replacement will comply with PCI security
		requirements. Finally, Microsoft software and developer labor will
		be funded for a refresh of the MAVIS database.

Runway Sensor System Upgrade

Acquisition:	New	The current runway sensor Road Weather Information System is
Individual Cost:	\$408,000	obsolete and is being phased out by the vendor. The upgrade
Quantity:	1	includes hardware, installation and commissioning of the new
Total:	\$408,000	system.

System enhancements

Acquisition:	New	System enhancements will enable improvements to software
Individual Cost:	\$395,000	that already is being used by the MAC. Re-evaluating, updating
Quantity:	1	and enhancing existing software enables the business to adapt
Total:	\$395,000	best practices associated with their current tools. Areas of focus
		will be fleet management, airport safety management regulations
		compliance, runway friction and closure prediction and
		transportation network company (TNC) systems.

Taxi Virtual Dispatching

Acquisition:	New	An improved version of eDispatch will be implemented. MSP taxi
Individual Cost:	\$100,000	drivers will be dispatched using a system to which they can login
Quantity:	1	on their phones.
Total:	\$100,000	

Information Technology Total: \$3,501,480

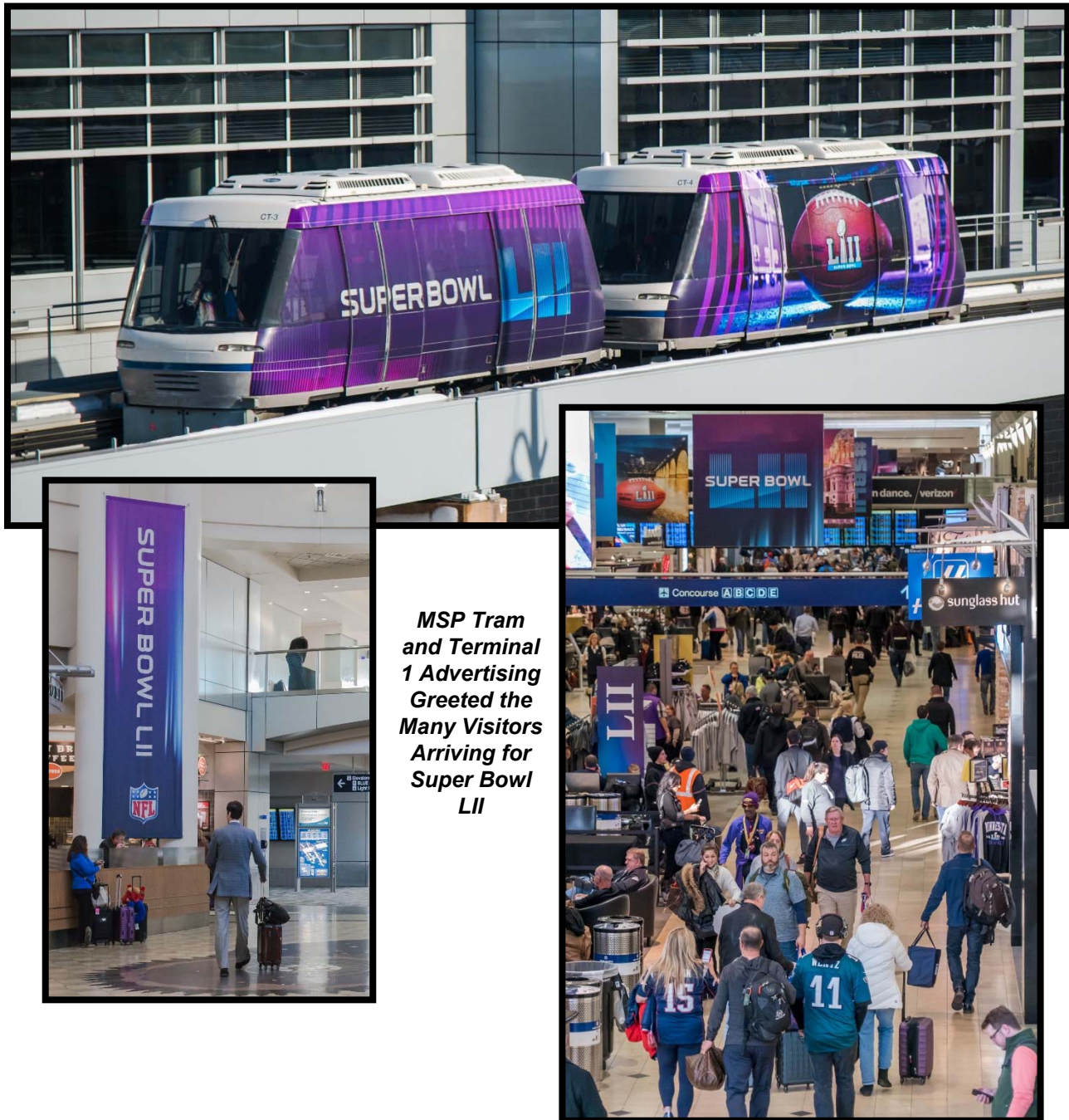
GRAND TOTAL CAPITAL**EQUIPMENT AND**

TECHNOLOGY: \$10,087,980

Capital Improvement Program Expenditures

On December 18, 2017, the Commission adopted the 2018-2024 Capital Improvement Program (CIP). The 7-year CIP relating to construction projects on the Commission's airport system consists of the following elements:

1. **2018 Capital Improvement Projects** – These are projects that have been reasonably defined for implementation in the upcoming calendar year - in this case 2018.
2. **2019 Capital Improvement Program** – These are projects that have been identified in the second year of the program which have a need or potential need but require further study in order to properly determine the scope, feasibility, and cost of the project.
3. **2020-2024 Capital Improvement Plan** – This encompasses the last five years of the total program and consists of projects that appear to be needed during the period. This portion of the program assists in financial planning and meets the requirements of the Metropolitan Council's Investment Framework.



The projects identified for the Capital Improvement Programs are summarized by year and totaled as follows:

Capital Improvement Projects	Year			Total
Projects	2018	2019	2020-2024	
MSP End of Life/Replacement Projects				
10 - Terminal 1 Lindbergh				
Passenger Boarding Bridge Replacements	\$ 4,000,000	\$ 4,000,000	\$ 21,000,000	\$ 29,000,000
Tram Systems Retrofit and Equipment	\$ 1,500,000	\$ 1,500,000		\$ 3,000,000
Mezzanine HVAC/AHU Replacements & Penthouses	\$ 17,000,000			\$ 17,000,000
Recarpeting Program			\$ 14,000,000	\$ 14,000,000
Replace Terminal 1 Tug Doors		\$ 600,000		\$ 600,000
13 - Energy Management Center				
VAV Box Replacement			\$ 3,000,000	\$ 3,000,000
21 - Field and Runways				
Taxiway S Reconstruction	\$ 10,000,000			\$ 10,000,000
Taxiway D Reconstruction			\$ 10,000,000	\$ 10,000,000
Sanitary Sewer Replacement 34th Avenue			\$ 2,150,000	\$ 2,150,000
Snow Melter Upgrades/Modifications	\$ 250,000	\$ 750,000		\$ 1,000,000
Sanitary Sewer Replacement Taxiway R			\$ 3,250,000	\$ 3,250,000
26 - Terminal Roads/Landside				
Lower Level Roadway Rehabilitation			\$ 1,100,000	\$ 1,100,000
Upper Level Roadway Rehabilitation			\$ 2,000,000	\$ 2,000,000
Upper Level Roadway Electrical System Rehabilitation			\$ 750,000	\$ 750,000
Variable Message Signs Replacements - Phase 3			\$ 1,600,000	\$ 1,600,000
28th Avenue Water main Replacement		\$ 1,250,000		\$ 1,250,000
34th Avenue Traffic Control	\$ 250,000			\$ 250,000
36 - Terminal 2 Humphrey				
Public Walk Aisle Terrazzo Floor Installation		\$ 1,700,000		\$ 1,700,000
Recarpeting Program			\$ 2,000,000	\$ 2,000,000
66 - Fire				
MSP Campus Fire Alarm System Upgrade/Transition	\$ 2,500,000	\$ 1,000,000	\$ 1,000,000	\$ 4,500,000
ARFF #2	\$ 250,000		\$ 10,500,000	\$ 10,750,000
MSP End of Life/Replacement Subtotal	\$ 35,750,000	\$ 10,800,000	\$ 72,350,000	\$ 118,900,000
MSP IT Projects				
10 - Terminal 1 Lindbergh				
IT Miscellaneous Modifications	\$ 4,600,000	\$ 8,400,000	\$ 45,000,000	\$ 58,000,000
Telecom Room Equipment Continuity (TREC)	\$ 1,000,000	\$ 1,500,000	\$ 4,500,000	\$ 7,000,000
Intelligent Monitoring and Control Systems (IMACS)	\$ 1,500,000	\$ 1,500,000	\$ 3,000,000	\$ 6,000,000
EVIDS/MUFIDs Digital Signs	\$ 800,000			\$ 800,000
63 - Police				
iVISN Program	\$ 3,700,000			\$ 3,700,000
Card Access Modifications		\$ 2,000,000	\$ 3,500,000	\$ 5,500,000
MSP IT Subtotal	\$ 11,600,000	\$ 13,400,000	\$ 56,000,000	\$ 81,000,000



34th Avenue Light Rail Transit Station



Aircraft Rescue & Fire Fighting Station #2

Capital Improvement Projects	Year			Total
Projects	2018	2019	2020-2024	
MSP Long Term Comprehensive Plan Projects				
10 - Terminal 1 Lindbergh				
D-Pod Outbound Baggage System			\$ 5,000,000	\$ 5,000,000
FIS Recheck Operational Improvements			\$ 8,400,000	\$ 8,400,000
MSP Long Term Comp Plan		\$ 1,500,000		\$ 1,500,000
Baggage Claim/Ticket Lobby Operational Improvements		\$ 81,000,000	\$ 84,400,000	\$ 165,400,000
Baggage Handling System	\$ 37,900,000		\$ 22,100,000	\$ 60,000,000
South Security Exit and Façade Expansion	\$ 46,300,000			\$ 46,300,000
East Curbside Check in	\$ 4,900,000			\$ 4,900,000
Checkpoint Expansion			\$ 16,400,000	\$ 16,400,000
Lower Level Curbside Expansion			\$ 12,000,000	\$ 12,000,000
Armed Forces Service Center Relocation		\$ 1,100,000		\$ 1,100,000
Valet Parking Lobby and Restroom Upgrade		\$ 5,000,000		\$ 5,000,000
Automated Security Lanes	\$ 3,000,000	\$ 3,000,000	\$ 3,000,000	\$ 9,000,000
Unstaffed Exit Lanes-North Exit			\$ 2,500,000	\$ 2,500,000
21 - Field and Runways				
Taxiway C1 Construction		\$ 6,000,000		\$ 6,000,000
31 - Parking				
T1 Parking Ramp - Parking Ramp Modifications		\$ 17,000,000		\$ 17,000,000
Orange Ramp Additional Elevators			\$ 2,000,000	\$ 2,000,000
36 - Terminal 2 Humphrey				
FIS Baggage Claim Improvements			\$ 1,000,000	\$ 1,000,000
Automated Security Lanes		\$ 3,000,000	\$ 3,000,000	\$ 6,000,000
North Gate Expansion Design Fees			\$ 5,000,000	\$ 5,000,000
MSP Long Term Comprehensive Plan Subtotal	\$ 92,100,000	\$ 117,600,000	\$ 164,800,000	\$ 374,500,000
MSP Maintenance/Facility Upgrade Projects				
10 - Terminal 1 Lindbergh				
Restroom Upgrade Program	\$ 8,600,000	\$ 500,000	\$ 8,000,000	\$ 17,100,000
Way-Finding Sign Backlighting Replacement	\$ 1,600,000	\$ 1,600,000	\$ 1,600,000	\$ 4,800,000
Folded Plate Repairs			\$ 35,600,000	\$ 35,600,000
G Concourse Moving Walks	\$ 5,000,000		\$ 5,000,000	\$ 10,000,000
Lighting Infrastructure Technology and Equipment (LITE)		\$ 1,500,000	\$ 7,750,000	\$ 9,250,000
T1 Public Walk Aisle Terrazzo Floor Installation			\$ 13,300,000	\$ 13,300,000
Art Display Areas	\$ 250,000	\$ 500,000	\$ 750,000	\$ 1,500,000
Art Master Plan	\$ 305,000	\$ 870,000	\$ 2,162,500	\$ 3,337,500
Observation Deck Improvements			\$ 1,600,000	\$ 1,600,000
Airside Operations Center			\$ 1,250,000	\$ 1,250,000
Employee Breakroom	\$ 250,000	\$ 250,000		\$ 500,000
13 - Energy Management Center				
Energy Savings Program	\$ 2,000,000		\$ 6,000,000	\$ 8,000,000
Air Handling Unit Safety Upgrades			\$ 550,000	\$ 550,000
Indoor Air Quality Monitoring			\$ 660,000	\$ 660,000
Victaulic Piping Replacement			\$ 5,000,000	\$ 5,000,000
Concourse G Energy Efficiency Projects			\$ 2,000,000	\$ 2,000,000
LED Lighting Conversion in Valet Parking			\$ 500,000	\$ 500,000
21 - Field and Runways				
AOA Gate Improvements			\$ 3,000,000	\$ 3,000,000
Taxiway J		\$ 150,000		\$ 150,000
Runway LED Lighting Upgrade			\$ 6,850,000	\$ 6,850,000
Runway 4-22 In-Pavement Guard Lights		\$ 500,000		\$ 500,000
Taxiway Bravo & Quebec Centerline Lights		\$ 6,400,000		\$ 6,400,000
Perimeter Gate Security Improvements			\$ 7,000,000	\$ 7,000,000

Capital Improvement Projects	Year			Total
Projects	2018	2019	2020-2024	
MSP Maintenance/Facility Upgrade Projects-Continued				
31 - Parking				
Parking Ramp Railing Refinishing			\$ 2,000,000	\$ 2,000,000
36 - Terminal 2 Humphrey				
Skyway to LRT Flooring Installation			\$ 800,000	\$ 800,000
Employee Breakroom			\$ 200,000	\$ 200,000
T2 Shuttle Waiting Area Expansion			\$ 200,000	\$ 200,000
46 - Hangars & Other Buildings				
MAC Storage Facility		\$ 9,000,000		\$ 9,000,000
56 - Trades/Maintenance Buildings				
South Field Maintenance Building Wash Bay			\$ 1,300,000	\$ 1,300,000
63 - Police				
Safety & Operations Center	\$ 250,000		\$ 35,000,000	\$ 35,250,000
Perimeter Fence Intrusion Detection System			\$ 3,000,000	\$ 3,000,000
66 - Fire				
Campus Fire Protection	\$ 500,000	\$ 500,000	\$ 1,500,000	\$ 2,500,000
70 - General Office/Administration				
GO Building Improvements	\$ 500,000		\$ 500,000	\$ 1,000,000
76 - Environment				
Runway 12R-30L Glycol Force Main Environmental Improvements			\$ 1,400,000	\$ 1,400,000
Storm Sewer Rehabilitation	\$ 1,500,000	\$ 1,800,000		\$ 3,300,000
T2 Remote Ramp Lot/Drainage Improvements			\$ 2,000,000	\$ 2,000,000
Ground Service Equipment Electrical Charging Stations			\$ 5,700,000	\$ 5,700,000
Lift Stations at Pond 1 and 2			\$ 800,000	\$ 800,000
MSP Maintenance/Facility Upgrades Subtotal	\$ 20,755,000	\$ 23,570,000	\$ 162,972,500	\$ 207,297,500
MSP Ongoing Maintenance Programs				
10 - Terminal 1 Lindbergh				
Electrical Infrastructure Program	\$ 1,500,000	\$ 1,500,000	\$ 9,000,000	\$ 12,000,000
Emergency Power Upgrades	\$ 1,000,000	\$ 1,500,000	\$ 9,000,000	\$ 11,500,000
Electrical Substation Replacement			\$ 5,600,000	\$ 5,600,000
Terminal Miscellaneous Modifications	\$ 2,400,000	\$ 2,400,000	\$ 12,300,000	\$ 17,100,000
Air Handling Unit Replacement		\$ 2,500,000	\$ 14,500,000	\$ 17,000,000
Conveyance System Upgrades		\$ 3,000,000	\$ 6,000,000	\$ 9,000,000
Plumbing Infrastructure Upgrade Program	\$ 500,000	\$ 500,000	\$ 3,000,000	\$ 4,000,000
Terminal Building Remediation Program	\$ 2,000,000	\$ 2,000,000	\$ 13,000,000	\$ 17,000,000
Concourse G Rehabilitation	\$ 4,000,000	\$ 4,000,000	\$ 23,000,000	\$ 31,000,000
Baggage System Upgrades	\$ 500,000	\$ 500,000	\$ 2,500,000	\$ 3,500,000
13 - Energy Management Center				
EMC Plant Upgrades (T1 & T2)	\$ 500,000	\$ 1,500,000	\$ 4,300,000	\$ 6,300,000
21 - Field and Runways				
Airsides Bituminous Rehabilitation/Electrical Construction			\$ 9,900,000	\$ 9,900,000
Pavement Joint Sealing/Repair	\$ 650,000	\$ 650,000	\$ 3,250,000	\$ 4,550,000
Miscellaneous Airfield Construction		\$ 800,000	\$ 1,900,000	\$ 2,700,000
26 - Terminal Roads/Landside				
Tunnel/Bridge Rehabilitation	\$ 100,000	\$ 100,000	\$ 500,000	\$ 700,000
31 - Parking				
T1/T2 Parking Structure Rehabilitation	\$ 2,500,000	\$ 2,500,000	\$ 14,500,000	\$ 19,500,000
39 - Public Areas/Roads				
Landside Pavement Rehabilitation	\$ 400,000	\$ 400,000	\$ 2,400,000	\$ 3,200,000
Roadway Fixture Refurbishment	\$ 150,000		\$ 600,000	\$ 750,000
46 - Hangars & Other Buildings				
MSP Campus Building Roof Replacements	\$ 500,000	\$ 500,000	\$ 5,000,000	\$ 6,000,000
Campus Building Rehab Program			\$ 6,500,000	\$ 6,500,000
Campus Parking Lot Reconstructions			\$ 1,300,000	\$ 1,300,000
Campus Building Demolition		\$ 200,000	\$ 575,000	\$ 775,000
MSP Ongoing Maintenance Subtotal	\$ 16,700,000	\$ 24,550,000	\$ 148,625,000	\$ 189,875,000

Capital Improvement Projects	Year			Total
Projects	2018	2019	2020-2024	
MSP Noise Mitigation Projects				
76 - Environment				
Noise Mitigation Consent Decree Amendment	\$ 6,500,000	\$ 11,500,000	\$ 17,100,000	\$ 35,100,000
MSP Noise Mitigation Subtotal	\$ 6,500,000	\$ 11,500,000	\$ 17,100,000	\$ 35,100,000
MSP Tenant Projects				
10 - Terminal 1 Lindbergh				
Concession Rebids	\$ 4,500,000	\$ 3,200,000		\$ 7,700,000
Main Mall Food Court Expansion	\$ 14,500,000			\$ 14,500,000
Post Office Parking Ramp Upgrades	\$ 500,000			\$ 500,000
Concession Upgrades/Revenue Development	\$ 200,000	\$ 200,000	\$ 1,000,000	\$ 1,400,000
Delta Gatehold Seating	\$ 3,000,000	\$ 3,000,000	\$ 3,000,000	\$ 9,000,000
46 - Hangars & Other Buildings				
Freight Building for DHL	\$ 7,000,000			\$ 7,000,000
Consolidated Loading Dock Facility	\$ 10,000,000			\$ 10,000,000
MSP Tenant Subtotal	\$ 39,700,000	\$ 6,400,000	\$ 4,000,000	\$ 50,100,000
Reliever Airports Long Term Comprehensive Plan Projects				
81 - St. Paul				
Long Term Comp Plan	\$ 100,000			\$ 100,000
82 - Lake Elmo				
Long Term Comp Plan			\$ 100,000	\$ 100,000
Runway 14-32 Replacement		\$ 3,000,000	\$ 4,000,000	\$ 7,000,000
Airfield Modifications			\$ 3,000,000	\$ 3,000,000
83 - Airlake				
Long Term Comp Plan			\$ 100,000	\$ 100,000
Runway 20-30 Improvements			\$ 3,500,000	\$ 3,500,000
South Building Area Development - Phase 1		\$ 1,500,000		\$ 1,500,000
84 - Flying Cloud				
Long Term Comp Plan	\$ 100,000			\$ 100,000
85 - Crystal				
Long Term Comp Plan			\$ 100,000	\$ 100,000
Runway 14R-32L & Taxiway E Modifications		\$ 3,800,000		\$ 3,800,000
86 - Anoka County - Blaine				
Long Term Comp Plan	\$ 100,000			\$ 100,000
Building Area Development - Xylite Street Relocation			\$ 1,000,000	\$ 1,000,000
Reliever Airports Long Term Comprehensive Plan Subtotal	\$ 300,000	\$ 8,300,000	\$ 11,800,000	\$ 20,400,000
Reliever Airports Maintenance/Facility Upgrade Projects				
81 - St. Paul				
Joint and Crack Repairs	\$ 100,000		\$ 300,000	\$ 400,000
MAC Building Improvements		\$ 2,100,000	\$ 1,400,000	\$ 3,500,000
Runway 13-31 Pavement Reconstruction			\$ 5,000,000	\$ 5,000,000
Storm Sewer Improvements - Phase 2		\$ 1,500,000		\$ 1,500,000
Maintenance Building Improvements	\$ 200,000			\$ 200,000
Cold Equipment Storage Building			\$ 750,000	\$ 750,000
LED Edge Lighting Upgrades			\$ 2,500,000	\$ 2,500,000
Runway 14-32 Reconstruction			\$ 5,000,000	\$ 5,000,000
Airport Perimeter Roads	\$ 400,000		\$ 900,000	\$ 1,300,000
Obstructions Removal	\$ 250,000			\$ 250,000
Taxiway B Rehabilitation			\$ 800,000	\$ 800,000

Capital Improvement Projects	Year			Total
Projects	2018	2019	2020-2024	
Reliever Airports Maintenance/Facility Upgrade Projects-Continued				
82 - Lake Elmo				
Parallel Taxiways Reconstruction		\$ 600,000	\$ 600,000	\$ 1,200,000
Runway 4-22 Pavement Rehabilitation			\$ 4,000,000	\$ 4,000,000
Alleyways - South Building Area Pavement Rehab		\$ 900,000		\$ 900,000
MAC Building Improvements		\$ 400,000		\$ 400,000
Materials Storage Building	\$ 200,000			\$ 200,000
North Building Area Pavement Rehabilitation			\$ 900,000	\$ 900,000
83 - Airlake				
Runway 12-30 Reconstruction			\$ 3,500,000	\$ 3,500,000
Joint and Crack Repairs			\$ 150,000	\$ 150,000
MAC Building Improvements		\$ 400,000		\$ 400,000
Public Restroom Facility		\$ 300,000		\$ 300,000
Plane Wash Pad		\$ 150,000		\$ 150,000
Materials Storage Building	\$ 200,000			\$ 200,000
LED Edge Lighting			\$ 700,000	\$ 700,000
84 - Flying Cloud				
Taxiway D Pavement Rehabilitation		\$ 600,000		\$ 600,000
Taxiway E Pavement Rehabilitation		\$ 600,000		\$ 600,000
Taxiways A1, A3, F Pavement Rehabilitation			\$ 300,000	\$ 300,000
MAC Building Improvements			\$ 520,000	\$ 520,000
Roof Repairs/Replacements	\$ 100,000			\$ 100,000
Runway 10R-28L Modifications	\$ 2,000,000			\$ 2,000,000
85 - Crystal				
Alleyway Pavement Rehabilitation	\$ 550,000		\$ 550,000	\$ 1,100,000
Taxiway Pavement Rehabilitation		\$ 700,000		\$ 700,000
MAC Building Improvements			\$ 1,000,000	\$ 1,000,000
LED Edge Lighting Upgrades			\$ 800,000	\$ 800,000
86 - Anoka County - Blaine				
Taxiway Pavement Rehabilitation	\$ 600,000			\$ 600,000
Alleyway Pavement Rehabilitation		\$ 750,000	\$ 1,500,000	\$ 2,250,000
South Service Road & East Landside Road Pavement Reconstruction		\$ 1,000,000		\$ 1,000,000
Obstruction Removal		\$ 100,000		\$ 100,000
Air Traffic Control Tower Equipment Upgrades			\$ 100,000	\$ 100,000
MAC Building Improvements	\$ 700,000		\$ 700,000	\$ 1,400,000
LED Edge Lighting Upgrades			\$ 2,500,000	\$ 2,500,000
West Perimeter Road			\$ 700,000	\$ 700,000
Electrical Vault Improvements			\$ 750,000	\$ 750,000
Reliever Airports Maintenance/Facility Upgrade Subtotal	\$ 5,300,000	\$ 10,100,000	\$ 35,920,000	\$ 51,320,000
MSP Subtotal	\$ 223,105,000	\$ 207,820,000	\$ 625,847,500	\$ 1,056,772,500
Reliever Subtotal	\$ 5,600,000	\$ 18,400,000	\$ 47,720,000	\$ 71,720,000
Total	\$ 228,705,000	\$ 226,220,000	\$ 673,567,500	\$ 1,128,492,500

2018 Capital Improvement Projects

As stated above, these are projects that have been reasonably defined for implementation in the upcoming calendar year, in this case 2018. **The vast majority of capital projects in the CIP are considered routine projects for a major airport and do not affect the annual operating budget. Any project with a 2018 operating budget impact will be disclosed in the 2018 narratives section. The operating expenses affected by these improvements include labor, operating services, maintenance, utilities, janitorial services, and debt service costs.** A description of 2018 capital improvement projects, along with a table with their funding sources, is shown on the following pages.

2018 Capital Improvement Program Narratives**MSP End of Life/Replacement Projects****10 – Terminal 1- Lindbergh****Passenger Boarding Bridge Replacements****\$4,000,000**

This project provides for the replacement of jet bridges at Terminal 1-Lindbergh. Bridges to be replaced have been determined based on a condition assessment and input from the airlines. Aircraft parking positions will be optimized at the impacted gates and fuel pits adjusted as necessary. Podiums and door openings may also be adjusted to optimize the gate hold area. It is assumed fixed walkways may need to be replaced or added to meet ADA slope requirements. All gate hold areas will be upgraded with security doors, card readers, and cameras.

T1 Tram Systems Retrofit and Equipment**\$1,500,000**

The MAC Hub and Concourse Tram systems were originally placed into public service in 2001 and 2004, respectively. As part of the installation, the automatic train control system utilized multiple components provided by GE Intelligent Platforms. In late 2011, GE indicated it would discontinue support of selected components prior to the year 2020. This program will replace and upgrade the radio communication system and GE components to Tram Control Systems on both the Hub and Concourse Trams over the course of a five-year program from 2015 to 2019.

Mezzanine HVAC/AHU Replacements & Penthouses**\$17,000,000**

The existing Heating/Ventilation/Air Conditioning (HVAC) and Air Handling Unit (AHU) equipment in the East and Center Mezzanine mechanical rooms have reached end of life and are overdue for replacement. In order to provide new equipment, increase energy efficiency, and meet the goals of the Operational Improvements program, this project will replace the equipment in relocated penthouses to be constructed on the north end of the Terminal 1-Lindbergh center mezzanine. Energy cost savings are expected.

21 – Field and Runway**Taxiway S Reconstruction****\$10,000,000**

This project provides for reconstruction of a 2,600-foot length of Taxiway S between Taxiway D and the Delta Airlines Building C. The existing concrete pavement was constructed in 1967. Major items of work include pavement removals, excavation and backfill, concrete taxiway pavement, bituminous shoulder pavement, airfield lighting, and signage.

***Taxiway Reconstruction*****Snow Melter Upgrades/Modifications****\$250,000**

This project is the first of a two-year program that provides for the evaluation, maintenance, miscellaneous modifications, and replacement of existing airfield snow melters located around the MSP campus.

26 – Terminal Roads/Landside**34th Avenue Traffic Control****\$250,000**

The MAC is responsible for the maintenance on 34th Avenue north of Interstate 494. This project will replace the end-of-life traffic signals along the roadway. The City of Bloomington will complete the work with the MAC reimbursing for the cost related to MAC-owned traffic signals.

66 – Fire**MSP Campus Fire Alarm System Upgrade/Transition****\$2,500,000**

In an effort to improve monitoring reliability and eliminate the existing single point of failure configuration, this multi-year Fire Alarm System Transition (FAST) project will include database redundant systems, device controller upgrades, and the decentralization of the fire alarm master control equipment.

ARFF #2**\$250,000**

This project covers fees for conceptual design of a building to replace Aircraft Rescue and Fire Fighting station number two. Many systems within the building cannot be upgraded and, structurally, the building needs to be replaced.

MSP IT Projects**10 – Terminal 1- Lindbergh****IT Miscellaneous Modifications****\$4,600,000**

Each year, there are a number of IT projects that are beyond the resources of the MAC's staff and operating budget to accomplish. These projects are prioritized and completed either as a series of contracts or as purchase orders. Work during 2018 may include MACNet maintenance and upgrades, wireless system enhancements, and MAC public address system maintenance and upgrades. The list of potential projects will be compiled and prioritized in early 2018.

Telecommunications Room Equipment Continuity (TREC)**\$1,000,000**

The MAC network (MACNet) carries, along with other information, credit card data collected from the landside parking revenue control system. Merchants like the MAC are required to meet credit card security standards created to protect card holder data. Among these requirements are security standards for the physical locations where MACNet equipment is located. Additionally, the network equipment itself must have added security features to prevent unauthorized network access. This multi-year program addresses these standards by providing security equipment and relevant network hardware for the 150 telecommunications rooms on the MAC campus. Estimated 2018 impact on expenses are \$20,000 for debt service costs.

***Telecommunications Equipment*****Intelligent Monitoring and Control Systems (IMACS)****\$1,500,000**

This is a continuation of a multi-year program to upgrade all MAC building automation systems to an open architecture protocol so that the MAC can bid maintenance and construction contracts more competitively. This project will replace sole-source controllers such as Siemens and Legacy Honeywell with controllers from Honeywell, Circon, Distech, and TAC systems that are LonMark certified products.

EVIDSs/MUFIDs Digital Signs**\$800,000**

This project is a continuation of the 2017 project for Electronic Visual Information Display systems (EVIDs) and Multi-User Flight Information Display systems (MUFIDs). It will include enhancements to new wait time digital signs, new and replacement digital toppers, and digital food courts signs, directories, and brochure holders.

63 – Police**iViSN Program****\$3,700,000**

This project is the continuation of the program to systematically replace and integrate existing cameras into the Integrated Video and Information System Network (iViSN) system and to expand the camera coverage within the terminals.

MSP Long Term Comprehensive Plan Projects**10 – Terminal 1- Lindbergh*****Baggage Handling System*****Baggage Handling System****\$37,900,000**

This project includes Baggage Handling System (BHS) work associated with the south half of Terminal 1-Lindbergh related to several phases of operational improvements between the baggage claim and ticket lobby levels. Improvements to the inbound BHS include new baggage claim devices and conveyors. The outbound BHS improvements include self-service bag drop devices, related conveyors, oversize bag screening, and tub returns. Impact on future operating expenses is yet to be determined.

South Security Exit and Façade Expansion**\$46,300,000**

This project, which is part of the Operational Improvements Program, will replace the existing curtain wall system with a new system to match the north end of the building, including additional queue area for the South Security Checkpoint. It includes a relocation of the existing security exit at the south end of the main mall to a new location on Concourse G. The project also includes unstaffed exit technologies, elevators, and escalators associated with the new exit location. Impact on future operating expenses is yet to be determined.

East Curbside Check-in**\$4,900,000**

This project will provide additional baggage handling conveyors and bag drop devices for check-complete during Operational Improvements construction. Impact on future operating expenses is yet to be determined.

***Automated Security Lanes*****Automated Security Lanes (ASLs)****\$3,000,000**

This second phase of a four-year program will provide funding for procurement and installation of TSA-approved Automated Security Lanes at the North Security Checkpoint to enhance throughput by 20-40% per lane. The replacement conveyor equipment provides bin returns to the divestiture area managed by TSA staff, suspect bin isolation for searches, analytics for improved reporting and training, and improved x-ray image display, storage, and monitoring. Additional work required to support the installation will include power and data additions for new and replacement equipment and for equipment network requirements.

MSP Maintenance/Facility Upgrade Projects**10 – Terminal 1- Lindbergh****Restroom Upgrade Program****\$8,600,000**

A study of all restrooms in Terminal 1-Lindbergh was completed in 2010 and a program developed to upgrade/modernize the restrooms at Terminal 1-Lindbergh. From this study, each restroom was prioritized based on its condition. This program will provide for the phased modernization of the T1-Lindbergh restrooms to include upgraded finishes, lighting, air quality, energy saving upgrades, and ADA compliance. This year's project will construct the second of two new restrooms on Concourse F, which was delayed to better coincide with the Concessions Rebid Program. Costs include an addition to the building to provide adequate space for the required number of fixtures and associated leasable space below. Estimated 2018 impact on expenses is \$85,000 for additional utility and maintenance costs and labor.

Way-Finding Sign Backlighting Replacement**\$1,600,000**

LED lighting will replace the existing cold-cathode lamps in the lighted sign boxes at both terminals. Many lamps from the 2008 retrofit have failed and the long-term energy costs recovery from the LEDs fits into the MAC's energy reduction model.

Concourse G Moving Walks**\$5,000,000**

This is the first project of a multi-year program to replace the near end-of-life moving walks on the G Concourse. This year's project will replace the western moving walk, nearest the main mall. The walk will also be shortened to accommodate the South Security Exit project as part of the Operational Improvements Program. Estimated 2018 expense impact is \$28,000 for maintenance and janitorial services.

Art Display Areas**\$250,000**

This program is a continuation of the existing program, in partnership with the Airport Foundation MSP. It provides opportunities and space build out for the display of permanent and temporary/rotating art exhibits. This year's project will provide music cabinets, IT upgrades to concourse art cases, and additional art exhibit space at Terminal 2-Humphrey near Gates H1-H5.

Arts Master Plan**\$305,000**

This program supports procurement of commissioned art and rotating exhibits as part of the Percent for Arts Program master plan. Estimated 2018 expense impact is \$305,000 for professional services.

***Mural in New Restroom*****Employee Breakroom****\$250,000**

This project will provide a second MSP employee break room that will have a quiet area for employees who work multiple shifts on the campus to eat, read, etc. By providing this quality work support area, front line and other employees will be able to rest and eat out of view of the public. Estimated 2018 expense impact is \$6,000 for janitorial services.

13 – Energy Management Center**Energy Savings Program****\$2,000,000**

This project will focus on improving the energy efficiency of mechanical and electrical systems in the G Concourse. Energy cost savings are expected.

63 – Police**Safety and Operations Center****\$250,000**

This project covers fees for conceptual design of a new operations center for Airport Police staff. The project will consolidate more than a dozen areas across the campus currently occupied by APD staff and/or storage, and will significantly improve emergency response capabilities by housing critical equipment and staff in a location outside the terminal buildings. The building is scheduled for contract award in 2020.

66 – Fire**Campus Fire Protection****\$500,000**

This project is part of a new multi-year program to upgrade fire protection systems in various MAC-owned buildings on the MSP campus.

70 – General Office/Administration**General Office Building Improvements****\$500,000**

Continual maintenance of MAC buildings is necessary for comfort and safety as well as sustainability of the MAC asset. Age and weather contribute to building deterioration, mold, and other health issues. The General Office Building, built in the 1960s, has recently experienced a number of window and building issues that need to be corrected, including window sealing and replacements, curtain wall sealing, and roof repairs.

76 – Environment**Storm Sewer Rehabilitation****\$1,500,000**

This is the first of a two-year program that supports and complies with the 2017 MAC/MPCA Memorandum of Understanding concerning the MSP Glycol Collection Program. This project provides for cleaning, inspection, and rehabilitation of storm sewers and glycol sewers at various locations where aircraft deicing occurs, which enhances collection and storage of glycol-impacted storm water resulting from deicing operations.

MSP Ongoing Maintenance Projects**10 – Terminal 1- Lindbergh****Electrical Infrastructure Program****\$1,500,000**

There are 53 electrical substations that serve the Terminal 1-Lindbergh complex. It is imperative that these substations be inspected, cleaned, and upgraded in order to ensure their continued performance. This is a continuation of a multi-year program that began in 2009.

Emergency Power Upgrades**\$1,000,000**

A study and survey of Terminal 1-Lindbergh transfer switches and emergency lighting was completed in 2008. The 2018 project is part of a multi-year program that will continue the design and implementation of emergency power and lighting corrective work identified in this study.

Terminal Miscellaneous Modifications**\$2,400,000**

Terminal Miscellaneous Modifications are a list of maintenance projects that are beyond the resources of MAC's maintenance and trades staff to accomplish. These projects are prioritized and completed either as a series of contracts or as purchase orders. Typical work includes door replacements, emergency upgrades to mechanical, electrical, plumbing or HVAC systems, loading dock work, and similar projects. The list of potential projects will be compiled and prioritized in early 2018. Estimated 2018 expense impact is \$48,000 for debt service, maintenance costs and utilities.

**Plumbing Infrastructure Upgrades****\$500,000**

In 2010, MAC staff prepared a preliminary study of the reliability and maintainability of the existing plumbing infrastructure. Portions of the existing plumbing infrastructure serving Terminal 1-Lindbergh are over 40 years old, have systems that are undersized for today's demands, contain isolation valves that are either inaccessible or no longer functional, and utilize aging water meter systems. There are also deteriorated sections of the existing sanitary and storm water systems. This ongoing program was implemented in 2012 to upgrade the plumbing infrastructure system to

meet current code requirements and MAC standards. The focus of the 2018 project is to continue the replacement of aging plumbing systems.

Terminal Building Remediation**\$2,000,000**

Continual maintenance of the terminal buildings is imperative to passenger comfort and safety as well as sustainability of the MAC asset. Age and weather contribute to building deterioration, mold, and other health issues. The remediation will address building and concourse envelope issues, including curtain wall systems, glazing, sealant repair/replacement, louver repair/replacement, metal panel repair/replacement, soffit repair or replacement, and soffit insulation systems. Estimated 2018 expense impact is \$40,000 for debt service costs.

Concourse G Rehabilitation**\$4,000,000**

This multi-year program will provide operational improvements to the existing concourse over time, including replacing elevators and modifying and replacing structural, electrical, and mechanical systems.

Baggage System Upgrades**\$500,000**

This multi-year program will provide necessary upgrades to the Terminal 1-Lindbergh inbound and outbound baggage system. These upgrades are not covered by general system maintenance.

**EMC Equipment****13 – Energy Management Center****EMC Plant Upgrades (Terminal 1 and Terminal 2)****\$500,000**

This six-year program provides upgrades to the MAC's Energy Management Center (EMC) Boiler and Chiller Plants at both Terminal 1-Lindbergh and Terminal 2-Humphrey. The work includes upgrades to the aging Chilled Water and Heating Water systems throughout both terminals. The pumping and piping systems on both the heating and cooling systems are aging and in need of repair work beyond regular maintenance.

21 – Field and Runway**Pavement Joint Sealing/Repair****\$650,000**

This is an ongoing program to provide for the resealing of joints, sealing of cracks, and limited surface repairs on existing concrete pavements. The areas scheduled for sealing will be as defined in the overall joint sealing program or as identified by staff inspection in the early spring of each year.

26 – Terminal Roads/Landside**Tunnel/Bridge Rehabilitation****\$100,000**

The MSP Campus has MAC-owned bridges and tunnels. Bridge and tunnel inspections are conducted each year to identify maintenance and repairs which are then implemented in a timely fashion.

31 – Parking**Terminal 1 and Terminal 2 Parking Structure Rehabilitation****\$2,500,000**

This is an annual program to maintain the integrity of the airport's multi-level parking structures. Projects typically include concrete repair, joint sealant replacement, expansion joint repairs, concrete sealing, and lighting improvements. All information is subject to change.

**Terminal 2 Parking Ramp**

39 – Public Areas/Roads**Landside Pavement Rehabilitation****\$400,000**

This is an ongoing program to construct or reconstruct bituminous pavements outside of the Air Operations Area (AOA). Inspection of pavements and appurtenances determines what areas are to be prioritized for rehabilitation under each year's project.

Roadway Fixture Refurbishment**\$150,000**

Many of the light poles, clearance restriction boards, sign units, fence sections, and canopies on the airport roadways are in need of repainting and maintenance. This project provides for refurbishment of these fixtures.

46 – Hangars and Other Buildings**MSP Campus Building Roof Replacements****\$500,000**

A report has been developed within the MAC that evaluates one-half of the roofs every other year. This on-going program allows these roofs that have been evaluated to be prioritized and programmed for repair. This program will also provide dollars for emergency repairs, which may also be needed on some roofs.

Roof Replacement Work**MSP Noise Mitigation Projects****Noise Mitigation Consent Decree Amendment****\$6,500,000**

This project will provide noise mitigation for those single-family and multi-family homes meeting the eligibility requirements of the program. This is the second year of the First Amendment program. Estimated 2018 expense impact is approximately \$130,000 for debt service costs.

MSP Tenant Projects**10 – Terminal 1- Lindbergh****Concessions Rebids****\$4,500,000**

This program provides support for required infrastructure to be brought to leaselines, shell-space for new build-outs, and for other major changes required to implement the concessions rebid programs at Terminal 1- Lindbergh.

Main Mall Food Court Expansion**\$14,500,000**

This project provides a one-and-a-half story expansion over the existing rooftop space west of the food court, and an expansion north above the existing loading dock. The expansion will provide shell space for an additional concept, two expanded concept spaces, and a remodeled layout of the food court to be implemented through the 2017 Concessions Rebid Program.

Post Office Parking Ramp Upgrades**\$500,000**

This project includes modifications to the existing Post Office parking ramp so that the MSP Intercontinental Hotel can lease it for valet and customer self-park options. Work will include improvements to the existing elevator, doors, stairways, finishes, and signage.

Concessions Upgrades/Revenue Development**\$200,000**

This is an annual program to fund miscellaneous upgrades such as finishes, furniture, signage, and/or modified connections to utilities for the concession programs or other revenue generating programs at MSP.

Delta Gatehold Seating**\$3,000,000**

This project is the first of a three-year program to replace seating in Delta's leased gatehold areas. This first year will focus on Concourse F seating. The MAC will fund the initial purchase of the seats with Delta reimbursing the MAC over time. Estimated 2018 expense impact is \$60,000 for maintenance and debt service costs.

46 – Hangars and Other Buildings**Freight Building Remodel for DHL****\$7,000,000**

This project includes remodel and expansion of the DHL air freight facility located on Cargo Road to accommodate a package processing facility. The air freight facility sits adjacent to the West Cargo Ramp where DHL currently has airside access for their daily aircraft arrivals. The cost of remodel and expansion will be paid through a lease agreement with DHL. Estimated 2018 expense impact is \$140,000 for debt service costs which will be reimbursed through user fees.

through a lease agreement with DHL. Estimated 2018 expense impact is \$140,000 for debt service costs which will be reimbursed through user fees.

Consolidated Loading Dock Facility **\$10,000,000**

As the concessions program and its food choices continue to expand, the existing Concourse C loading dock space is being stressed beyond capacity. This new facility will house centralized receiving operations with security screening capability and distribution to buildings throughout the MSP campus. The existing loading dock will remain as a significant delivery node. Estimated 2018 expense impact is \$200,000 for debt service costs which will be reimbursed through user fees.

Reliever Airports Long Term Comprehensive Plan Projects

81 – St. Paul

Long Term Comp Plan **\$100,000**

This project will focus on an update to the St. Paul LTCP. Estimated 2018 expense impact is \$100,000 for professional services.

84 – Flying Cloud

Long Term Comp Plan **\$100,000**

This project will focus on an update to the Flying Cloud LTCP. Estimated 2018 expense impact is \$100,000 for professional services.

86 – Anoka County - Blaine

Long Term Comp Plan **\$100,000**

This project will focus on an update to the Anoka County-Blaine LTCP. Estimated 2018 expense impact is \$100,000 for professional services.

Reliever Airports Maintenance/Facility Upgrade Projects

81 – St. Paul

Joint and Crack Repairs **\$ 100,000**

Given the extremely poor subgrade materials at this airport, the need for crack repair and joint sealing is critical to maintain pavement strength and pavement life. An inspection of the pavement will be completed to determine the area most in need of repair.

Maintenance Building Improvements **\$200,000**

This project provides for facility maintenance to ensure continued efficient operation of MAC buildings, specifically the main airport maintenance building.

Airport Perimeter Roads **\$400,000**

This project is part of an ongoing effort to rehabilitate airport pavements through bituminous overlays, seal coats, or reconstruction to restore the surfaces to a smooth, even condition and improve overall operating conditions. This project includes the rehabilitation of the airport perimeter road near the intersection of Bayfield Street and Airport Road.

Obstructions Removal **\$250,000**

This project will address identification and removal of obstructions to the runway approach surfaces. Estimated 2018 expense impact is \$250,000 for maintenance.

82 – Lake Elmo

Materials Storage Building **\$200,000**

This project includes the construction of a MAC storage building for the containment of airfield maintenance products such as salt, sand, and topsoil to comply with MPCA requirements.

83 – Airlake

Materials Storage Building **\$200,000**

This project includes the construction of a MAC storage building for the containment of airfield maintenance products such as salt, sand, and topsoil to comply with MPCA requirements.

84 – Flying Cloud**Roof Repairs/Replacement****\$100,000**

This project provides for repair or replacement of the roof structures on MAC-owned buildings. This project accounts for identification of the exact type of roof deficiencies as well as completion of the most cost-effective repairs or replacements.

Runway 10L-28R Modifications**\$2,000,000**

This project has been identified in cooperation with the FAA as a Runway Incursion Mitigation (RIM) project. The scope includes designating Runway 10L-28R as utility runway, which involves relocating the existing hold signs, hold markings, and runway guard lights. This project will also include reconstruction of the runway pavement with the reclaim and overlay of Runway 10L-28R. New Runway End Identifier Lights (REILs) are also included.

85 – Crystal**Alleyways Pavement Rehabilitation****\$550,000**

This is an ongoing program to rehabilitate aircraft operational areas, including runways, taxiways, and aprons, through bituminous overlays, seal coats, or reconstruction to restore the surfaces to a smooth, even condition and improve overall operating conditions. This project includes the full-depth rehabilitation of alleyways in the North Building Area.

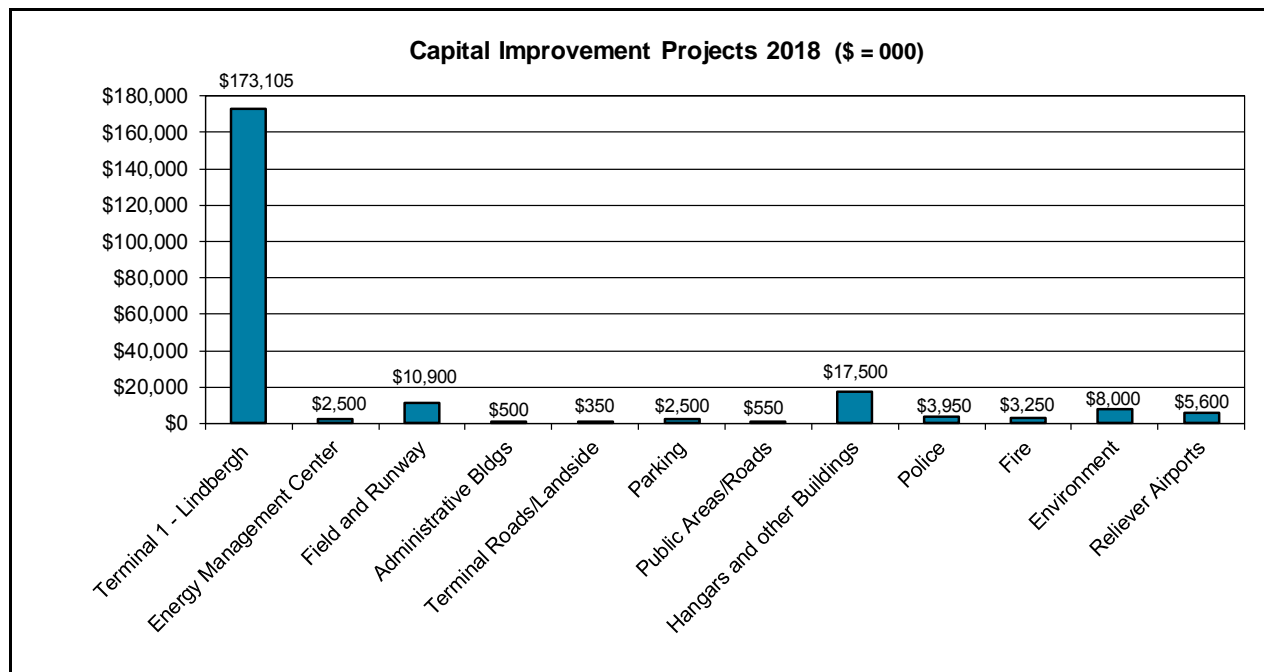
86 – Anoka County - Blaine**Taxiway Pavement Reconstruction****\$600,000**

This is an ongoing program to reconstruct aircraft operational areas, including runways, taxiways, and aprons, through bituminous overlays, seal coats, or reconstruction to restore the surfaces to a smooth, even condition and improve overall operating conditions. This project includes the full-depth rehabilitation of Taxiway Foxtrot.

MAC Building Improvements**\$700,000**

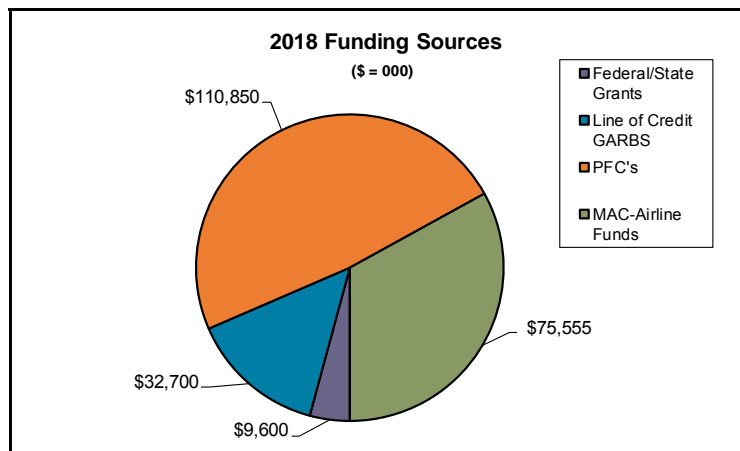
This is an ongoing program to provide for facility modifications to ensure continued efficient operation of MAC buildings. This year's project includes improvements to the MAC Maintenance Building, Air Traffic Control Tower Building, restroom buildings, and other MAC-owned hangars.

The following chart summarizes the 2018 capital improvement projects by various areas of the airport. Terminal 1-Lindbergh will gain the most improvements this year.



2018 Capital Improvement Project Funding Sources

The following pie chart indicates the funding sources for 2018. The largest contributor to the project funding is PFCs received from passengers.



Skyway from Hotel to MSP Terminal 1 Built in 2017 for New Hotel Opening in 2018

The following tables show the funding sources for the 2018 capital improvement projects. A cash flow summary of the CIP will appear later in this section.

2018 Capital Improvement Program Funding						
	2018 Funding	PFC 15	Federal-State Grants	Line of Credit	MAC-Airline Funds	Total Cost
MSP End of Life/Replacement Projects						
10 - Terminal 1 Lindbergh						
Passenger Boarding Bridge Replacements	\$ 4,000,000	\$ 3,000,000	\$ 1,000,000			\$ 4,000,000
Tram Systems Retrofit and Equipment	\$ 1,500,000				\$ 1,500,000	\$ 1,500,000
Mezzanine HVAC/AHU Replacements & Penthouses	\$ 17,000,000				\$ 17,000,000	\$ 17,000,000
21 - Field and Runways						
Taxiway S Reconstruction	\$ 10,000,000	\$ 4,000,000	\$ 6,000,000			\$ 10,000,000
Snow Melter Upgrades/Modifications	\$ 250,000				\$ 250,000	\$ 250,000
26 - Terminal Roads/Landside						
34th Avenue Traffic Control	\$ 250,000				\$ 250,000	\$ 250,000
66 - Fire						
MSP Campus Fire Alarm System Upgrade/Transition	\$ 2,500,000				\$ 2,500,000	\$ 2,500,000
ARFF #2	\$ 250,000				\$ 250,000	\$ 250,000
MSP End of Life/Replacement Subtotal	\$ 35,750,000	\$ 7,000,000	\$ 7,000,000	\$ -	\$ 21,750,000	\$ 35,750,000
MSP IT Projects						
10 - Terminal 1 Lindbergh						
Telecom Room Equipment Continuity (TREC)	\$ 1,000,000			\$ 1,000,000		\$ 1,000,000
Intelligent Monitoring and Control Systems (IMACS)	\$ 1,500,000				\$ 1,500,000	\$ 1,500,000
IT Miscellaneous Modifications	\$ 4,600,000				\$ 4,600,000	\$ 4,600,000
EVIDS/MUFIDs Digital Signs	\$ 800,000				\$ 800,000	\$ 800,000
63 - Police						
iVISON Program	\$ 3,700,000	\$ 1,850,000			\$ 1,850,000	\$ 3,700,000
MSP IT Subtotal	\$ 11,600,000	\$ 1,850,000	\$ -	\$ 1,000,000	\$ 8,750,000	\$ 11,600,000
MSP Long Term Comprehensive Plan Projects						
10 - Terminal 1 Lindbergh						
Baggage Handling System	\$ 37,900,000	\$ 37,900,000				\$ 37,900,000
South Security Exit and Façade Expansion	\$ 46,300,000	\$ 46,300,000				\$ 46,300,000
East Curbside Check in	\$ 4,900,000	\$ 4,900,000				\$ 4,900,000
Automated Security Lanes	\$ 3,000,000	\$ 3,000,000				\$ 3,000,000
MSP Long Term Comprehensive Plan Subtotal	\$ 92,100,000	\$ 92,100,000	\$ -	\$ -	\$ -	\$ 92,100,000
MSP Maintenance/Facility Upgrade Projects						
10 - Terminal 1 Lindbergh						
Restroom Upgrade Program	\$ 8,600,000	\$ 8,600,000				\$ 8,600,000
Way-Finding Sign Backlighting Replacement	\$ 1,600,000				\$ 1,600,000	\$ 1,600,000
G Concourse Moving Walks	\$ 5,000,000	\$ 1,300,000		\$ 1,400,000	\$ 2,300,000	\$ 5,000,000
Art Display Areas	\$ 250,000				\$ 250,000	\$ 250,000
Art Master Plan	\$ 305,000				\$ 305,000	\$ 305,000
Employee Breakroom	\$ 250,000				\$ 250,000	\$ 250,000
13 - Energy Management Center						
Energy Savings Program	\$ 2,000,000				\$ 2,000,000	\$ 2,000,000
63 - Police						
Safety & Operations Center	\$ 250,000				\$ 250,000	\$ 250,000
66 - Fire						
Campus Fire Protection	\$ 500,000				\$ 500,000	\$ 500,000
70 - General Office/Administration						
GO Building Improvements	\$ 500,000				\$ 500,000	\$ 500,000
76 - Environment						
Storm Sewer Rehabilitation	\$ 1,500,000				\$ 1,500,000	\$ 1,500,000
MSP Maintenance/Facility Upgrades Subtotal	\$ 20,755,000	\$ 9,900,000	\$ -	\$ 1,400,000	\$ 9,455,000	\$ 20,755,000



Multi-User Flight Information Display (MUFID)

2018 Capital Improvement Program Funding						
	2018 Funding	PFC 15	Federal-State Grants	Line of Credit	MAC-Airline Funds	Total Cost
MSP Ongoing Maintenance Programs						
10 - Terminal 1 Lindbergh						
Electrical Infrastructure Program	\$ 1,500,000				\$ 1,500,000	\$ 1,500,000
Terminal Miscellaneous Modifications	\$ 2,400,000			\$ 1,800,000	\$ 600,000	\$ 2,400,000
Emergency Power Upgrades	\$ 1,000,000				\$ 1,000,000	\$ 1,000,000
Plumbing Infrastructure Upgrade Program	\$ 500,000				\$ 500,000	\$ 500,000
Terminal Building Remediation Program	\$ 2,000,000				\$ 2,000,000	\$ 2,000,000
Concourse G Rehabilitation	\$ 4,000,000			\$ 2,000,000	\$ 2,000,000	\$ 4,000,000
Baggage System Upgrades	\$ 500,000				\$ 500,000	\$ 500,000
13 - Energy Management Center						
EMC Plant Upgrades (T1 & T2)	\$ 500,000				\$ 500,000	\$ 500,000
21 - Field and Runways						
Pavement Joint Sealing/Repair	\$ 650,000				\$ 650,000	\$ 650,000
26 - Terminal Roads/Landside						
Tunnel/Bridge Rehabilitation	\$ 100,000				\$ 100,000	\$ 100,000
31 - Parking						
T1/T2 Parking Structure Rehabilitation	\$ 2,500,000				\$ 2,500,000	\$ 2,500,000
39 - Public Areas/Roads						
Landside Pavement Rehabilitation	\$ 400,000				\$ 400,000	\$ 400,000
Roadway Fixture Refurbishment	\$ 150,000				\$ 150,000	\$ 150,000
46 - Hangars and Other Buildings						
MSP Campus Building Roof Replacements	\$ 500,000				\$ 500,000	\$ 500,000
MSP Ongoing Maintenance Subtotal	\$ 16,700,000	\$ -	\$ -	\$ 3,800,000	\$ 12,900,000	\$ 16,700,000
MSP Noise Mitigation Projects						
76 - Environment						
Noise Mitigation Consent Decree Amendment	\$ 6,500,000			\$ 6,500,000		\$ 6,500,000
MSP Noise Mitigation Subtotal	\$ 6,500,000	\$ -	\$ -	\$ 6,500,000	\$ -	\$ 6,500,000
MSP Tenant Projects						
10 - Terminal 1 Lindbergh						
Concession Rebids	\$ 4,500,000				\$ 4,500,000	\$ 4,500,000
Main Mall Food Court Expansion	\$ 14,500,000				\$ 14,500,000	\$ 14,500,000
Post Office Parking Ramp Upgrades	\$ 500,000				\$ 500,000	\$ 500,000
Concession Upgrades/Revenue Development	\$ 200,000				\$ 200,000	\$ 200,000
Delta Gatehold Seating	\$ 3,000,000			\$ 3,000,000		\$ 3,000,000
46 - Hangars & Other Buildings						
Freight Building for DHL	\$ 7,000,000			\$ 7,000,000		\$ 7,000,000
Consolidated Loading Dock Facility	\$ 10,000,000			\$ 10,000,000		\$ 10,000,000
MSP Tenant Subtotal	\$ 39,700,000	\$ -	\$ -	\$ 20,000,000	\$ 19,700,000	\$ 39,700,000
Reliever Airports Long Term Comprehensive Plan Projects						
81 - St. Paul						
Long Term Comp Plan	\$ 100,000				\$ 100,000	\$ 100,000
84 - Flying Cloud						
Long Term Comp Plan	\$ 100,000				\$ 100,000	\$ 100,000
86 - Anoka County - Blaine						
Long Term Comp Plan	\$ 100,000				\$ 100,000	\$ 100,000
Reliever Airports Long Term Comprehensive Plan Subtotal	\$ 300,000	\$ -	\$ -	\$ -	\$ 300,000	\$ 300,000



MSP Terminal 1-Lindbergh Exterior



Landside Pavement to be Rehabilitated

2018 Capital Improvement Program Funding						
	2018 Funding	PFC 15	Federal-State Grants	Line of Credit	MAC-Airline Funds	Total Cost
Reliever Airports Maintenance/Facility Upgrade Projects						
81 - St. Paul						
Joint and Crack Repairs	\$ 100,000				\$ 100,000	\$ 100,000
Obstruction Removal	\$ 250,000				\$ 250,000	\$ 250,000
Maintenance Building Improvements	\$ 200,000				\$ 200,000	\$ 200,000
Airport Perimeter Roads	\$ 400,000		\$ 275,000		\$ 125,000	\$ 400,000
82 - Lake Elmo						
Materials Storage Building	\$ 200,000		\$ 125,000		\$ 75,000	\$ 200,000
83 - Airlake						
Materials Storage Building	\$ 200,000				\$ 200,000	\$ 200,000
84 - Flying Cloud						
Roof Repairs/Replacements	\$ 100,000				\$ 100,000	\$ 100,000
Runway 10L/28R Modifications	\$ 2,000,000		\$ 1,400,000		\$ 600,000	\$ 2,000,000
85 - Crystal						
Alleyway Pavement Rehabilitation	\$ 550,000		\$ 375,000		\$ 175,000	\$ 550,000
86 - Anoka County - Blaine						
Taxiway Pavement Rehabilitation	\$ 600,000		\$ 425,000		\$ 175,000	\$ 600,000
MAC Building Improvements	\$ 700,000				\$ 700,000	\$ 700,000
Reliever Airports Maintenance/Facility Upgrade Subtotal	\$ 5,300,000	\$ -	\$ 2,600,000	\$ -	\$ 2,700,000	\$ 5,300,000
MSP Subtotal	\$ 223,105,000	\$ 110,850,000	\$ 7,000,000	\$ 32,700,000	\$ 72,555,000	\$ 223,105,000
Reliever Subtotal	\$ 5,600,000	\$ -	\$ 2,600,000	\$ -	\$ 3,000,000	\$ 5,600,000
Total	\$ 228,705,000	\$ 110,850,000	\$ 9,600,000	\$ 32,700,000	\$ 75,555,000	\$ 228,705,000



St. Paul-Downtown Airport



Flying Cloud Airport

2019 Capital Improvement Program Narratives**MSP End of Life/Replacement Projects****10 – Terminal 1- Lindbergh*****Passenger Boarding Bridge*****Passenger Boarding Bridge Replacements****\$4,000,000**

This project provides for the replacement of jet bridges at Terminal 1. Bridges to be replaced will be determined based on a condition assessment and input from the airlines. Aircraft parking positions will be optimized at the impacted gates and fuel pits adjusted as necessary. Podiums and door openings may also be adjusted to optimize gate hold area. It is assumed fixed walkways may need to be replaced or added to meet ADA slope requirements and all gate hold areas will be upgraded with security doors, card readers, and cameras.

T1 Tram Systems Retrofit and Equipment**\$1,500,000**

The MAC Hub and Concourse Tram systems were originally placed into public service in 2001 and 2004, respectively. As part of the installation, the automatic train control system utilized multiple components provided by GE Intelligent Platforms. In late 2011, GE indicated it would discontinue support of selected components prior to the year 2020. This program will replace and upgrade the radio communication system and GE components to Tram Control Systems on both the Hub and Concourse Trams over the course of a five-year program from 2015 to 2019.

Terminal 1 Tug Doors Replacement**\$600,000**

This project will replace the 15-year-old tug doors at Terminal 1-Lindbergh as they have reached the end of their useful life.

21 – Field and Runway**Snow Melter Upgrades/Modifications****\$750,000**

This project is the second of a two-year program that provides for the evaluation, maintenance, miscellaneous modifications, and replacement of existing airfield snow melters located around the MSP campus.

***Snow Melter*****26 – Terminal Roads/Landside****28th Avenue Watermain Replacement****\$1,250,000**

This project provides for reconstruction of approximately 2,600 linear feet of 18-inch watermain along 28th Avenue. Major items of work include miscellaneous removals, removal and reconstruction of ductile iron watermain, valves, hydrants, aggregate base, bituminous pavement, curb, concrete walk, fencing, and restoration of turf and landscaping.

36 – Terminal 2-Humphrey**Public Walk Aisle Terrazzo Floor Installation****\$1,700,000**

This project will remove carpet and install terrazzo in the baggage claim area and the walk aisle at Gates H1-H7 to match the terrazzo installed in the Gate Expansion that opened in 2016 as well as install terrazzo between the ticket lobby and Checkpoint 1.

66 – Fire***Fire Alarm System*****MSP Campus Fire Alarm System Upgrade/Transition****\$1,000,000**

In an effort to improve monitoring reliability and eliminate the existing single point of failure configuration, this multi-year project will include database redundant systems, device controller upgrades and the decentralization of the fire alarm master control equipment.

MSP IT Projects**10 – Terminal 1- Lindbergh****Sample DAS Antenna****IT Miscellaneous Modifications****\$8,400,000**

Each year, there are a number of IT projects that are beyond the resources of the MAC's staff and operating budget to accomplish. These projects are prioritized and completed either as a series of contracts or as purchase orders. Work may include MACNet maintenance and upgrades, EVIDs/MUFIDs digital signs, Wireless System enhancements, and MAC Public Address System maintenance and upgrades. The list of potential projects will be compiled and prioritized in early 2019.

Telecommunications Room Equipment Continuity (TREC)**\$1,500,000**

The MAC network (MACNet) carries, along with other information, credit card data collected from the landside parking revenue control system. Merchants like the MAC are required to meet credit card security standards created to protect card holder data. Among these requirements are security standards for the physical locations where MACNet equipment is located. Additionally, the network equipment itself must have added security features to prevent unauthorized network access. This multi-year program addresses these standards by providing security equipment and relevant network hardware for the 150 telecommunications rooms on the MAC campus.

Intelligent Monitoring and Control Systems (IMACS)**\$1,500,000**

This is a continuation of a multi-year program to upgrade all MAC building automation systems to an open architecture protocol so that the MAC can bid maintenance and construction contracts more competitively. This project will replace sole-source controllers such as Siemens and Legacy Honeywell with controllers from Honeywell, Circon, Distech, and TAC systems that are LonMark certified products.

Card Access Modifications**\$2,000,000**

This program will add card access controls at passenger boarding bridge doors for improved security at a pace faster than only adding the controls as bridges are replaced.

MSP Long Term Comprehensive Plan Projects**10 – Terminal 1- Lindbergh****MSP Long Term Comp Plan****\$1,500,000**

The MSP 2030 Long Term Comprehensive Plan (LTCP), previously completed in April 2010, is scheduled to be updated in 2020. While some efforts have already started with checkpoint modeling and parking analyses, the work in 2018 will continue the forecasting efforts and include preparation of the LTCP document for public review and Commission approval.

Baggage Claim/Ticket Lobby Operational Improvements**\$74,400,000**

This is the first of three projects in a program that will provide the level of service requirements for short- and medium-term growth of the O&D passengers, including walkways that meet required codes, public seating areas, centralized meet and greet space, unclaimed baggage storage, baggage service offices, concessions (food & beverage and retail), improved lighting, fire protection throughout the space, structural enhancements, improved sight lines, curbside lighting and access, and other operational improvements in the Arrivals Hall. In the Departures Hall, this program addresses, with the Vertical Circulation Improvements Program, issues of congestion and functionality in the Terminal 1-Lindbergh Ticket Lobby. It will provide walkways that meet required codes, ticket counter consolidations, airline ticket offices, centralized meet and greet areas, improved vestibules and access, east mezzanine removal/reduction, structural enhancements, curtain wall replacement, and other operational improvements. On both levels, the 2019 project constructs new restrooms in order to allow future phases to demolish the existing old and outdated restrooms.

Armed Forces Service Center Relocation**\$1,100,000**

The AFSC location is being displaced by the Operational Improvements program. This project will relocate the center to a desired location behind the security line in the terminal.

Automated Security Lanes (ASLs)**\$3,000,000**

This third phase of a four-year project will provide funding for procurement and installation of additional TSA-approved Automated Security Lanes to enhance throughput by 20-40% per lane, without the loss of the existing quantity of lanes. The replacement conveyor equipment provides bin returns to the divestiture area managed by TSA staff, suspect bin isolation for searches, analytics for improved reporting and training, and improved x-ray image display, storage, and monitoring. Additional work required to support the installation will include power and data additions for new and replacement equipment and for equipment network requirements.

21 – Field and Runway**Taxiway C1 Construction****\$6,000,000**

Project provides for the construction of Taxiway C1 located abeam to Gates H5/H6 between Taxiway D and Taxiway M. Major items of work include excavation and backfill, concrete taxiway pavement, bituminous shoulder pavement, pavement markings, and airfield lighting and signing.

31 – Parking**T1 Parking Ramp – Parking Ramp Modifications****\$5,000,000**

This project will modify the red/blue parking levels vacated by rental car agencies when they move to the new parking ramp. This project will prepare the areas to accommodate public parking.

36 – Terminal 2- Humphrey**T2 Automated Security Lanes (ASLs)****\$3,000,000**

This first phase of a two-year project will provide funding for procurement and installation of TSA-approved Automated Security Lanes at the Terminal 2-Humphrey's Security Checkpoint No. 1 to enhance throughput by 20-40% per lane, without the loss of the existing quantity of lanes. The replacement conveyor equipment provides bin returns to the divestiture area managed by TSA staff, suspect bin isolation for searches, analytics for improved reporting and training, and improved x-ray image display, storage, and monitoring. Additional work required to support the installation will include power and data additions for new and replacement equipment and for equipment network requirements.

MSP Maintenance/Facility Upgrade Projects**10 – Terminal 1- Lindbergh****Restroom Upgrade Program****\$2,000,000**

A study of all restrooms in Terminal 1-Lindbergh was completed in 2010 and a program developed to upgrade/modernize the restrooms at Terminal 1-Lindbergh. From this study, each restroom was prioritized based on its condition. This program will provide for the phased modernization of the T1-Lindbergh restrooms to include upgraded finishes, lighting, air quality, energy saving upgrades, and ADA compliance. The 2020 project is anticipated to upgrade restrooms in the valet parking lobby, install water bottle fillers in a number of locations, and provide civilized waiting areas at some of the new restrooms blocks.

Way-Finding Sign Backlighting Replacement**\$1,600,000**

LED lighting will replace the existing cold-cathode lamps in the lighted sign boxes at both terminals. Many lamps from the 2008 retrofit have failed and the long-term energy costs recovery from the LEDs fits into the MAC's energy reduction model.

Lighting Infrastructure Technology and Equipment (LITE)**\$1,500,000**

This is a multi-year program that will analyze, assemble, and organize lighting system upgrade recommendations for the MSP campus. Annual investment in lighting infrastructure is necessary to ensure its safe operation, reduce energy and maintenance costs, and to implement technology upgrades to improve lighting quality. Light fixtures age and degrade due to time, heat, or exterior elements. Lighting technologies also change and upgrades will provide for more energy efficient lighting systems.

Art Display Areas**\$500,000**

This program is a continuation of the existing program, in partnership with the Airport Foundation MSP, to provide opportunities and space build out for the display of permanent and temporary/rotating art exhibits. This

year's project will support an outdoor Art Park adjacent to the Hotel for permanent and rotating exhibits with public access for travelers and hotel guests.

Arts Master Plan**\$870,000**

This program supports procurement of commissioned art and rotating exhibits as part of the Percent for Arts program.

Employee Breakroom**\$250,000**

This project will provide a third MSP employee break room that will have a quiet area for employees who work multiple shifts on the campus to eat, read, etc. By providing this quality work support area, front line and other employees will be able to rest and eat out of view of the public.

21 – Field and Runway**Establish Taxiway J****\$150,000**

This project provides for installing pavement marking, taxiway edge lights, and taxiway signs on existing pavement between Taxiway M and Taxiway Q, adjacent to Fire Station No. 2 in order to utilize as a restricted taxiway.

Runway 4-22 In-Pavement Guard Lights**\$500,000**

This project provides for the installation of in-pavement runway guard lights on Runway 4-22 at the intersections with both Runway 12R-30L and Runway 12L-30R.

Taxiways Bravo & Quebec Centerline Lights**\$6,400,000**

This project provides for the construction of taxiway centerline lighting systems for taxiways Bravo and Quebec, located adjacent to the Terminal 1-Lindbergh aprons through the intersections with taxiway Delta. Work includes removal of existing taxiway centerline reflectors, installation of taxiway centerline lights and conductors, and modifications at the airfield lighting control building.

46 – Hangars and Other Buildings**MAC Storage Facility****\$9,000,000**

This project will construct a new building to provide storage and associated workspace to replace storage spread around the campus in buildings that can no longer provide adequate protection from the elements and pests.

66 – Fire**Campus Fire Protection****\$500,000**

This project is part of a new multi-year program to upgrade fire protection systems in various MAC-owned buildings on the MSP campus.

76 – Environment**Storm Sewer Rehabilitation****\$1,800,000**

This is the second of a two-year program that supports and complies with the 2017 MAC/MPCA Memorandum of Understanding concerning the MSP Glycol Collection Program. This project provides for cleaning, inspection, and rehabilitation of storm sewers and glycol sewers at various locations where aircraft deicing occurs, to enhance collection and storage of glycol-impacted stormwater resulting from deicing operations.

MSP Ongoing Maintenance Projects**10 – Terminal 1- Lindbergh****Electrical Infrastructure Program****\$1,500,000**

There are 53 electrical substations that serve the Terminal 1-Lindbergh complex. It is imperative that these substations be inspected, cleaned, and upgraded in order to ensure their continued performance. This is a continuation of a multi-year program that began in 2009.

Electrical Substation

Emergency Power Upgrades **\$1,500,000**

A study and survey of Terminal 1-Lindbergh transfer switches and emergency lighting was completed in 2008. This year's project is part of a multi-year program that will continue the design and implementation of emergency power and lighting corrective work identified in this study.

Terminal Miscellaneous Modifications **\$2,400,000**

Each year, there is a list of maintenance projects that are beyond the resources of the MAC's maintenance and trades staff to accomplish. These projects are prioritized and completed either as a series of contracts or as purchase orders. Typical work includes door replacements, emergency upgrades to mechanical, electrical, plumbing or HVAC systems, loading dock work, etc. The list of potential projects will be compiled and prioritized in early 2019.

Air Handling Unit Replacement **\$2,500,000**

There are existing air handling units serving Terminal 1-Lindbergh that were installed with the original terminal construction in 1958-60 and are over 50 years old. A study of these units has been completed that evaluated each unit's age, condition, and its ability to adequately heat or cool the spaces it serves. A multi-year program has been implemented to provide for the replacement of the units that have been identified as needing replacement. The project costs include modifications to building walls to facilitate the removal of existing equipment and installation of the new units, upgraded electrical and temperature controls, and asbestos abatement.

Conveyance System Upgrades **\$3,000,000**

A study of the MSP campus conveyance systems including elevators, escalators, moving walks, dumbwaiters, and material lifts was completed by the Facilities Department's conveyance consultant. The study evaluated the useful life of each system including the availability of replacement parts and technical support of the equipment. Many of the systems are being operated by outdated technology that is generally less efficient than modern control equipment. Some of the systems do not include safety devices or features that are commonly installed on modern equipment. This multi-year program modernizes and replaces elements of the conveyance systems and installs new conveyance systems if needed.

Plumbing Infrastructure Upgrades **\$500,000**

In 2010, MAC staff prepared a preliminary study of the reliability and maintainability of the existing plumbing infrastructure. Portions of the existing plumbing infrastructure serving Terminal 1-Lindbergh are over 40 years old, have systems that are undersized for today's demands, contain isolation valves that are either inaccessible or no longer functional, and utilize aging water meter systems. There are also deteriorated sections of the existing sanitary and storm water systems. This ongoing program was implemented in 2012 to upgrade the plumbing infrastructure system to meet current code requirements and MAC standards. The focus of the 2019 project is to continue the replacement of aging plumbing systems.

Terminal Building Remediation **\$2,000,000**

Continual maintenance of the terminal buildings is imperative to passenger comfort and safety as well as sustainability of the MAC asset. Age and weather contribute to building deterioration, mold, and other health issues. Building and concourse envelope issues include curtain wall systems, glazing, sealant repair/replacement, louver repair/replacement, metal panel repair/replacement, and soffit repair/replacement and insulation systems.

Concourse G Rehabilitation **\$4,000,000**

This multi-year program will provide operational improvements to the existing concourse over time, including replacing elevators, modifying and replacing structural, electrical, and mechanical systems.

Baggage System Upgrades **\$500,000**

This multi-year program will provide necessary upgrades to the inbound and outbound baggage system not covered by general system maintenance.

13 – Energy Management Center**EMC Plant Upgrades (T1 & T2)** **\$1,500,000**

This multi-year program provides upgrades to the MAC's Energy Management Center (EMC) Boiler and Chiller Plants at both Terminal 1-Lindbergh and Terminal 2-Humphrey. The work includes upgrades to the aging Chilled Water and Heating Water systems throughout both terminals. The pumping and piping systems on both the heating and cooling systems are aging and in need of repair work beyond regular maintenance.

21 – Field and Runway**Pavement Joint Sealing/Repair****\$650,000**

This is an ongoing program to provide for the resealing of joints, sealing of cracks, and limited surface repairs on existing concrete pavements. The areas scheduled for sealing will be as defined in the overall joint sealing program or as identified by staff inspection in the early spring of each year.

Miscellaneous Airfield Construction**\$800,000**

This is an ongoing program to consolidate various items beyond the capabilities of the maintenance personnel, projects too small to be accomplished independently, or to handle airside problems requiring repair which come up unexpectedly.

26 – Terminal Roads/Landside**MAC Tunnel at MSP****Tunnel/Bridge Rehabilitation****\$100,000**

The MSP Campus has MAC-owned bridges and tunnels. Bridge and tunnel inspections are conducted each year to identify maintenance and repairs which are then implemented in a timely fashion.

31 – Parking**T1/T2 Parking Structure Rehabilitation****\$2,500,000**

This is an annual program to maintain the integrity of the airport's multi-level parking structures. Projects typically include concrete repair, joint sealant replacement, expansion joint repairs, concrete sealing and lighting improvements.

39 – Public Areas/Roads**Landside Pavement Rehabilitation****\$400,000**

This is an ongoing program to construct or reconstruct bituminous pavements outside of the Air Operations Area (AOA). Inspection of pavements and appurtenances determines what areas are to be prioritized for rehabilitation under each year's project.

Roadway Fixture Refurbishment**\$150,000**

Many of the light poles, clearance restriction boards, sign units, fence sections, and canopies on the airport roadways are in need of repainting and maintenance. This project provides for refurbishment of these fixtures.

46 – Hangars and Other Buildings**MSP Campus Building Roof Replacements****\$500,000**

A report has been developed within the MAC that evaluates one-half of the roofs every other year. This ongoing program allows these roofs that have been evaluated to be prioritized and programmed for repair. Emergency repairs may also be needed on some roofs; this program will provide dollars for such instances.

End of Life Campus Building Demolition**\$200,000**

This is the first of multiple years of demolition of buildings to be replaced by the MAC Storage Facility described above.

MSP Noise Mitigation Projects**Noise Mitigation Consent Decree Amendment****\$9,600,000**

The Consent Decree First Amendment Program is a residential noise mitigation program that began in March 2014 under the terms of an amended legal agreement (Consent Decree) between the Metropolitan Airports Commission (MAC) and the cities of Richfield, Minneapolis, and Eagan, and approved by the Hennepin County District Court (effective until December 31, 2024). Under this program, eligibility of single-family and multi-family homes will be determined annually, based upon actual noise contours that are developed for the preceding calendar year, beginning in March 2014. This project will provide noise mitigation for those single-family and multi-family homes meeting the eligibility requirements of the program.

MSP Tenant Projects**10 – Terminal 1- Lindbergh****Concessions Rebids****\$3,200,000**

This program provides support for required infrastructure to be brought to lease-lines, shell-space for new build-outs, and for other major changes required to implement the concessions rebid programs at Terminal 1- Lindbergh.

Concessions Upgrades/Revenue Development**\$200,000**

This is an annual program to fund miscellaneous upgrades such as finishes, furniture, signage, and/or modified connections to utilities for the concession programs or other revenue generating programs at MSP.

Delta Gatehold Seating**\$3,000,000**

This project is the second of a three-year program to replace seating in Delta's leased gatehold areas.

Reliever Airports Long Term Comprehensive Plan Projects**82 – Lake Elmo****Runway 14-32 Replacement****\$3,000,000**

The updated Long Term Comprehensive Plan for this airport proposes relocating and extending the primary runway northeast of its current alignment. This year's scope includes the first phase of construction for this project, which primarily focuses on roadway realignment to make way for runway construction.

83 - Airlake**South Building Area Development – Phase 1****\$ 1,500,000**

This project includes phase 1 construction of sanitary sewer mains, water mains, and lot services to the south building area. Phase 1 also includes construction of associated taxilanes and the south entrance road.

85 – Crystal**Runway 14R-32L & Taxiway E Modifications****\$3,800,000**

The updated Long Term Comprehensive Plan for this airport proposes "right-sizing" the airport infrastructure, including decommissioning Runway 14R-32L. This project includes converting Runway 14R-32L into a parallel taxiway and rehabilitating portions of Taxiway Echo. The project also includes electrical vault improvements triggered by associated runway lighting modifications. The project budget also includes the required environmental review studies.

Reliever Airports Maintenance/Facility Upgrade Projects**81 – St. Paul****MAC Building Improvements****\$2,300,000**

This is an ongoing program to provide for facility modifications to ensure continued efficient operation of MAC buildings or modifications necessary to meet the requirements of the tenants. This year's project will include improvements to the Administration Building, Equipment Storage Building, Maintenance Building, and both Cold Storage Buildings.

Storm Sewer Improvements Phase 2**\$1,500,000**

This project includes improvements to the existing storm sewer systems in the West Building Area and infield area between Taxiways Delta and Lima, to improve storm water removal, and to address soil and pavement distress in the vicinity of deficient storm sewer structures. The project will also evaluate the potential for improvements to the flood pump stations to maximize efficient removal of storm water from the airfield during flood events.

82 – Lake Elmo**Parallel Taxiways Reconstruction****\$600,000**

This project is part of an ongoing effort to rehabilitate aircraft operational areas (runways, taxiways, aprons) through bituminous overlays, seal coats, or reconstruction to restore the surfaces to a smooth, even condition and improve overall operating conditions. The Lake Elmo Airport suffers from poor subgrade materials, which contribute to the overall deterioration of pavements. This project includes the full-depth reconstruction of the oldest portions of Taxiway Alpha and Bravo not included in previous projects.

Alleyways – South Building Area Pavement Rehab **\$900,000**

This project is part of an ongoing effort to rehabilitate aircraft operational areas (runways, taxiways, aprons) through bituminous overlays, seal coats, or reconstruction to restore the surfaces to a smooth, even condition and improve overall operating conditions. This project includes rehabilitation of alleyways in the South Building Area.

MAC Building Improvements **\$400,000**

This is an ongoing program to provide for facility modifications to ensure continued efficient operation of MAC buildings. This year's project will include improvements to the MAC Maintenance Building.

83 – Airlake**MAC Building Improvements** **\$400,000**

This is an ongoing program to provide for facility modifications to ensure continued efficient operation of MAC buildings. This year's project will include improvements to the MAC Maintenance Building.

Public Restroom Facility **\$300,000**

This project includes the construction of a public restroom facility on the north side of the airport.

Plane Wash Pad **\$150,000**

This project includes the construction of a designated airplane wash pad.

84 – Flying Cloud**Taxiway D Pavement Rehabilitation** **\$600,000**

This project is part of an ongoing effort to rehabilitate aircraft operational areas (runways, taxiways, aprons) through bituminous overlays, seal coats, or reconstruction to restore the surfaces to a smooth, even condition and improve overall operating conditions. This project includes rehabilitation of Taxiway Delta.

Taxiway E Pavement Rehabilitation **\$600,000**

This project is part of an ongoing effort to rehabilitate aircraft operational areas (runways, taxiways, aprons) through bituminous overlays, seal coats, or reconstruction to restore the surfaces to a smooth, even condition and improve overall operating conditions. This project includes rehabilitation of Taxiway Echo.

85 – Crystal**Taxiways Pavement Rehabilitation** **\$700,000**

This is an ongoing program to rehabilitate aircraft operational areas (runways, taxiways, aprons) through bituminous overlays, seal coats, or reconstruction to restore the surfaces to a smooth, even condition and improve overall operating conditions. This project includes the rehabilitation of the taxiway or portions of taxiways in most need of repair. The pavement condition index report, as well as an inspection of the pavement, will be completed to determine the area most in need of repair.

86 – Anoka County - Blaine**Alleyways Pavement Reconstruction** **\$750,000**

This is an ongoing program to reconstruct aircraft operational areas (runways, taxiways, aprons) through bituminous overlays, seal coats, reconstruction to restore the surfaces to a smooth, even condition and improve overall operating conditions. This project includes rehabilitation of alleyways in the West Building Area.

South Service Road & East Landside Road Pavement Reconstruction **\$1,000,000**

This is an ongoing effort to rehabilitate airport pavements through bituminous overlays, seal coats, reconstruction to restore the surfaces to a smooth, even condition and improve overall operating conditions. This project includes the rehabilitation of the airport service road connecting the east and west building areas.

Obstructions Removal **\$100,000**

This project will address identification and removal of obstructions to the runway approach surfaces.

2019 Capital Improvement Program Funding Sources

The following table shows the funding sources for the 2018 Capital Improvement Program projects. A cash flow summary appears later in the section.

2019 Capital Improvement Program Funding							
	2019	PFC 16	Federal-State Grants	GARBS	Line of Credit	MAC-Airline Funds	Total
MSP End of Life/Replacement Projects							
10 - Terminal 1 Lindbergh							
Passenger Boarding Bridge Replacements	\$ 4,000,000	\$ 4,000,000					\$ 4,000,000
Tram Systems Retrofit and Equipment	\$ 1,500,000					\$ 1,500,000	\$ 1,500,000
Replace Terminal 1 Tug Doors	\$ 600,000					\$ 600,000	\$ 600,000
21 - Field and Runways							
Snow Melter Upgrades/Modifications	\$ 750,000					\$ 750,000	\$ 750,000
26 - Terminal Roads/Landside							
28th Avenue Water main Replacement	\$ 1,250,000					\$ 1,250,000	\$ 1,250,000
36 - Terminal 2 Humphrey							
Public Walk Aisle Terrazzo Floor Installation	\$ 1,700,000					\$ 1,700,000	\$ 1,700,000
66 - Fire							
MSP Campus Fire Alarm System Upgrade/Transition	\$ 1,000,000					\$ 1,000,000	\$ 1,000,000
MSP End of Life/Replacement Subtotal	\$ 10,800,000	\$ 4,000,000	\$ -	\$ -	\$ -	\$ 6,800,000	\$ 10,800,000
MSP IT Projects							
10 - Terminal 1 Lindbergh							
Intelligent Monitoring and Control Systems (IMACS)	\$ 1,500,000					\$ 1,500,000	\$ 1,500,000
Telecom Room Equipment Continuity (TREC)	\$ 1,500,000					\$ 1,500,000	\$ 1,500,000
IT Miscellaneous Modifications	\$ 8,400,000					\$ 8,400,000	\$ 8,400,000
63 - Police							
Card Access Modifications	\$ 2,000,000	\$ 2,000,000					\$ 2,000,000
MSP IT Subtotal	\$ 13,400,000	\$ 2,000,000	\$ -	\$ -	\$ -	\$ 11,400,000	\$ 13,400,000
MSP Long Term Comprehensive Plan Projects							
10 - Terminal 1 Lindbergh							
MSP Long Term Comp Plan	\$ 1,500,000					\$ 1,500,000	\$ 1,500,000
Baggage Claim/Ticket Lobby Operational Improvements	\$ 81,000,000	\$ 68,000,000		\$ 11,800,000		\$ 1,200,000	\$ 81,000,000
Armed Forces Service Center Relocation	\$ 1,100,000	\$ 200,000	\$ 500,000			\$ 400,000	\$ 1,100,000
Valet Parking Lobby & Restroom Upgrade	\$ 5,000,000	\$ 2,000,000				\$ 3,000,000	\$ 5,000,000
Automated Security Lanes	\$ 3,000,000	\$ 3,000,000					\$ 3,000,000
21 - Field and Runways							
Taxiway C1 Construction	\$ 6,000,000	\$ 2,400,000	\$ 3,600,000				\$ 6,000,000
31 - Parking							
T1 Parking Ramp - Parking Ramp Modifications	\$ 17,000,000			\$ 17,000,000			\$ 17,000,000
36 - Terminal 2 Humphrey							
Automated Security Lanes	\$ 3,000,000	\$ 3,000,000				\$ -	\$ 3,000,000
MSP Long Term Comprehensive Plan Subtotal	\$ 117,600,000	\$ 78,600,000	\$ 4,100,000	\$ 28,800,000	\$ -	\$ 6,100,000	\$ 117,600,000
MSP Maintenance/Facility Upgrade Projects							
10 - Terminal 1 Lindbergh							
Restroom Upgrade Program	\$ 500,000					\$ 500,000	\$ 500,000
Way-Finding Sign Backlighting Replacement	\$ 1,600,000					\$ 1,600,000	\$ 1,600,000
Lighting Infrastructure Technology and Equipment (LITE)	\$ 1,500,000					\$ 1,500,000	\$ 1,500,000
Art Display Areas	\$ 500,000					\$ 500,000	\$ 500,000
Art Master Plan	\$ 870,000					\$ 870,000	\$ 870,000
Employee Breakroom	\$ 250,000					\$ 250,000	\$ 250,000
21 - Field and Runways							
Taxiway J	\$ 150,000					\$ 150,000	\$ 150,000
Runway 4-22 In-Pavement Guard Lights	\$ 500,000	\$ 500,000					\$ 500,000
Taxiway Bravo & Quebec Centerline Lights	\$ 6,400,000	\$ 2,600,000	\$ 3,800,000				\$ 6,400,000
46 - Hangars & Other Buildings							
MAC Storage Facility	\$ 9,000,000					\$ 9,000,000	\$ 9,000,000
66 - Fire							
Campus Fire Protection	\$ 500,000					\$ 500,000	\$ 500,000
76 - Environment							
Storm Sewer Rehabilitation	\$ 1,800,000			\$ 1,800,000			\$ 1,800,000
MSP Maintenance/Facility Upgrades Subtotal	\$ 23,570,000	\$ 3,100,000	\$ 3,800,000	\$ 1,800,000	\$ -	\$ 14,870,000	\$ 23,570,000

2019 Capital Improvement Program Funding							
	2019	PFC 16	Federal-State Grants	GARBS	Line of Credit	MAC-Airline Funds	Total
MSP Ongoing Maintenance Programs							
10 - Terminal 1 Lindbergh							
Electrical Infrastructure Program	\$ 1,500,000					\$ 1,500,000	\$ 1,500,000
Terminal Miscellaneous Modifications	\$ 2,400,000					\$ 2,400,000	\$ 2,400,000
Emergency Power Upgrades	\$ 1,500,000					\$ 1,500,000	\$ 1,500,000
Air Handling Unit Replacement	\$ 2,500,000			\$ 2,500,000			\$ 2,500,000
Conveyance System Upgrades	\$ 3,000,000			\$ 3,000,000			\$ 3,000,000
Plumbing Infrastructure Upgrade Program	\$ 500,000					\$ 500,000	\$ 500,000
Terminal Building Remediation Program	\$ 2,000,000					\$ 2,000,000	\$ 2,000,000
Concourse G Rehabilitation	\$ 4,000,000			\$ 4,000,000			\$ 4,000,000
Baggage System Upgrades	\$ 500,000					\$ 500,000	\$ 500,000
13 - Energy Management Center							
EMC Plant Upgrades (T1 & T2)	\$ 1,500,000					\$ 1,500,000	\$ 1,500,000
21 - Field and Runways							
Pavement Joint Sealing/Repair	\$ 650,000					\$ 650,000	\$ 650,000
Miscellaneous Airfield Construction	\$ 800,000					\$ 800,000	\$ 800,000
26 - Terminal Roads/Landside							
Tunnel/Bridge Rehabilitation	\$ 100,000					\$ 100,000	\$ 100,000
31 - Parking							
T1/T2 Parking Structure Rehabilitation	\$ 2,500,000					\$ 2,500,000	\$ 2,500,000
39 - Public Areas/Roads							
Landside Pavement Rehabilitation	\$ 400,000					\$ 400,000	\$ 400,000
46 - Hangars & Other Buildings							
MSP Campus Building Roof Replacements	\$ 500,000					\$ 500,000	\$ 500,000
Campus Building Demolition	\$ 200,000					\$ 200,000	\$ 200,000
MSP Ongoing Maintenance Subtotal	\$ 24,550,000	\$ -	\$ -	\$ 9,500,000	\$ -	\$ 15,050,000	\$ 24,550,000
MSP Noise Mitigation Projects							
76 - Environment							
Noise Mitigation Consent Decree Amendment	\$ 11,500,000				\$ 11,500,000		\$ 11,500,000
MSP Noise Mitigation Subtotal	\$ 11,500,000	\$ -	\$ -	\$ -	\$ 11,500,000	\$ -	\$ 11,500,000
MSP Tenant Projects							
10 - Terminal 1 Lindbergh							
Concession Rebids	\$ 3,200,000			\$ 3,200,000			\$ 3,200,000
Concession Upgrades/Revenue Development	\$ 200,000					\$ 200,000	\$ 200,000
Delta Gatehold Seating	\$ 3,000,000			\$ 3,000,000			\$ 3,000,000
MSP Tenant Subtotal	\$ 6,400,000	\$ -	\$ -	\$ 6,200,000	\$ -	\$ 200,000	\$ 6,400,000
Reliever Airports Long Term Comprehensive Plan Projects							
82 - Lake Elmo							
Runway 14-32 Replacement	\$ 3,000,000		\$ 2,150,000			\$ 850,000	\$ 3,000,000
83 - Airlake							
South Building Area Development - Phase 1	\$ 1,500,000					\$ 1,500,000	\$ 1,500,000
85 - Crystal							
Runway 14R-32L & Taxiway E Modifications	\$ 3,800,000					\$ 3,800,000	\$ 3,800,000
Reliever Airports Long Term Comprehensive Plan Subtotal	\$ 8,300,000	\$ -	\$ 2,150,000	\$ -	\$ -	\$ 6,150,000	\$ 8,300,000
Reliever Airports Maintenance/Facility Upgrade Projects							
81 - St. Paul							
MAC Building Improvements	\$ 2,100,000					\$ 2,100,000	\$ 2,100,000
Storm Sewer Improvements - Phase 2	\$ 1,500,000		\$ 1,000,000			\$ 500,000	\$ 1,500,000
82 - Lake Elmo							
Parallel Taxiways Reconstruction	\$ 600,000		\$ 425,000			\$ 175,000	\$ 600,000
Alleyways - South Building Area Pavement Rehab	\$ 900,000		\$ 50,000			\$ 850,000	\$ 900,000
MAC Building Improvements	\$ 400,000					\$ 400,000	\$ 400,000
83 - Airlake							
MAC Building Improvements	\$ 400,000					\$ 400,000	\$ 400,000
Public Restroom Facility	\$ 300,000					\$ 300,000	\$ 300,000
Plane Wash Pad	\$ 150,000					\$ 150,000	\$ 150,000
84 - Flying Cloud							
Taxiway D Pavement Rehabilitation	\$ 600,000		\$ 425,000			\$ 175,000	\$ 600,000
Taxiway E Pavement Rehabilitation	\$ 600,000		\$ 425,000			\$ 175,000	\$ 600,000
85 - Crystal							
Taxiway Pavement Rehabilitation	\$ 700,000		\$ 500,000			\$ 200,000	\$ 700,000
86 - Anoka County - Blaine							
Alleyway Pavement Rehabilitation	\$ 750,000		\$ 525,000			\$ 225,000	\$ 750,000
South Service Road & East Landside Road Pavement Reconstruction	\$ 1,000,000		\$ 700,000			\$ 300,000	\$ 1,000,000
Obstruction Removal	\$ 100,000					\$ 100,000	\$ 100,000
Reliever Airports Maintenance/Facility Upgrade Subtotal	\$ 10,100,000	\$ -	\$ 4,050,000	\$ -	\$ -	\$ 6,050,000	\$ 10,100,000
MSP Subtotal	\$ 207,820,000	\$ 87,700,000	\$ 7,900,000	\$ 46,300,000	\$ 11,500,000	\$ 54,420,000	\$ 207,820,000
Reliever Subtotal	\$ 18,400,000	\$ -	\$ 6,200,000	\$ -	\$ -	\$ 12,200,000	\$ 18,400,000
Total	\$ 226,220,000	\$ 87,700,000	\$ 14,100,000	\$ 46,300,000	\$ 11,500,000	\$ 66,620,000	\$ 226,220,000

2020-2024 Capital Improvement Plan

This encompasses the last five years of the total program and consists of projects that appear likely to be needed during the period.

2020-2024 Capital Improvement Program Funding						
	2020-2024	PFC 16	Federal-State Grants	GARBS	Line of Credit	MAC-Airline Funds
MSP End of Life/Replacement Projects						
10 - Terminal 1 Lindbergh						
Passenger Boarding Bridge Replacements	\$ 21,000,000	\$ 15,500,000	\$ 5,500,000			
Recarpeting Program	\$ 14,000,000					\$ 14,000,000
13 - Energy Management Center						
VAV Box Replacement	\$ 3,000,000					\$ 3,000,000
21 - Field and Runways						
Taxiway D Reconstruction	\$ 10,000,000	\$ 4,000,000	\$ 6,000,000			
Sanitary Sewer Replacement 34th Avenue	\$ 2,150,000		\$ 1,500,000			\$ 650,000
Sanitary Sewer Replacement Taxiway R	\$ 3,250,000				\$ 1,500,000	\$ 1,750,000
26 - Terminal Roads/Landside						
Lower Level Roadway Rehabilitation	\$ 1,100,000					\$ 1,100,000
Upper Level Roadway Rehabilitation	\$ 2,000,000					\$ 2,000,000
Upper Level Roadway Electrical System Rehabilitation	\$ 750,000					\$ 750,000
Variable Message Signs Replacements - Phase 3	\$ 1,600,000					\$ 1,600,000
36 - Terminal 2 Humphrey						
Recarpeting Program	\$ 2,000,000					\$ 2,000,000
66 - Fire						
MSP Campus Fire Alarm System Upgrade/Transition	\$ 1,000,000					\$ 1,000,000
ARFF #2	\$ 10,500,000	\$ 7,500,000		\$ 3,000,000		
MSP End of Life/Replacement Subtotal	\$ 72,350,000	\$ 27,000,000	\$ 13,000,000	\$ 3,000,000	\$ 1,500,000	\$ 27,850,000
MSP IT Projects						
10 - Terminal 1 Lindbergh						
IT Miscellaneous Modifications	\$ 45,000,000					\$ 45,000,000
Telecom Room Equipment Continuity (TREC)	\$ 4,500,000					\$ 4,500,000
Intelligent Monitoring and Control Systems (IMACS)	\$ 3,000,000					\$ 3,000,000
63 - Police						
Card Access Modifications	\$ 3,500,000	\$ 3,500,000				
MSP IT Subtotal	\$ 56,000,000	\$ 3,500,000	\$ -	\$ -	\$ -	\$ 52,500,000
MSP Long Term Comprehensive Plan Projects						
10 - Terminal 1 Lindbergh						
D-Pod Outbound Baggage System	\$ 5,000,000	\$ 5,000,000				
FIS Recheck Operational Improvements	\$ 8,400,000			\$ 8,400,000		
Baggage Claim/Ticket Lobby Operational Improvements	\$ 84,400,000	\$ 71,090,000		\$ 8,310,000	\$ 5,000,000	\$ -
Baggage Handling System	\$ 22,100,000	\$ 22,100,000				
Checkpoint Expansion	\$ 16,400,000	\$ 16,400,000				
Lower Level Curbside Expansion	\$ 12,000,000	\$ 9,000,000				\$ 3,000,000
Automated Security Lanes	\$ 3,000,000	\$ 3,000,000				
Unstaffed Exit Lanes-North Exit	\$ 2,500,000					\$ 2,500,000
31 - Parking						
Orange Ramp Additional Elevators	\$ 2,000,000					\$ 2,000,000
36 - Terminal 2 Humphrey						
FIS Baggage Claim Improvements	\$ 1,000,000					\$ 1,000,000
Automated Security Lanes	\$ 3,000,000	\$ 3,000,000				
North Gate Expansion Design Fees	\$ 5,000,000					\$ 5,000,000
MSP Long Term Comprehensive Plan Subtotal	\$ 164,800,000	\$ 129,590,000	\$ -	\$ 16,710,000	\$ 5,000,000	\$ 13,500,000

2020-2024 Capital Improvement Program Funding						
	2020-2024	PFC 16	Federal-State Grants	GARBS	Line of Credit	MAC-Airline Funds
MSP Maintenance/Facility Upgrade Projects						
10 - Terminal 1 Lindbergh						
Restroom Upgrade Program	\$ 8,000,000	\$ 8,000,000				
Way-Finding Sign Backlighting Replacement	\$ 1,600,000					\$ 1,600,000
Folded Plate Repairs	\$ 35,600,000	\$ 24,800,000			\$ 5,400,000	\$ 5,400,000
G Concourse Moving Walks	\$ 5,000,000	\$ 5,000,000				
Lighting Infrastructure Technology and Equipment (LITE)	\$ 7,750,000					\$ 7,750,000
T1 Public Walk Aisle Terrazzo Floor Installation	\$ 13,300,000				\$ 7,400,000	\$ 5,900,000
Art Display Areas	\$ 750,000					\$ 750,000
Art Master Plan	\$ 2,162,500					\$ 2,162,500
Observation Deck Improvements	\$ 1,600,000					\$ 1,600,000
Airside Operations Center	\$ 1,250,000					\$ 1,250,000
13 - Energy Management Center						
Energy Savings Program	\$ 6,000,000					\$ 6,000,000
Air Handling Unit Safety Upgrades	\$ 550,000					\$ 550,000
Indoor Air Quality Monitoring	\$ 660,000					\$ 660,000
Victaulic Piping Replacement	\$ 5,000,000					\$ 5,000,000
Concourse G Energy Efficiency Projects	\$ 2,000,000					\$ 2,000,000
LED Lighting Conversion in Valet Parking	\$ 500,000					\$ 500,000
21 - Field and Runways						
AOA Gate Improvements	\$ 3,000,000	\$ 3,000,000				
Runway LED Lighting Upgrade	\$ 6,850,000	\$ 2,500,000	\$ 2,500,000			\$ 1,850,000
Perimeter Gate Security Improvements	\$ 7,000,000	\$ 3,700,000	\$ 3,300,000			
31 - Parking						
Parking Ramp Railing Refinishing	\$ 2,000,000					\$ 2,000,000
36 - Terminal 2 Humphrey						
Skyway to LRT Flooring Installation	\$ 800,000					\$ 800,000
Employee Breakroom	\$ 200,000					\$ 200,000
T2 Shuttle Waiting Area Expansion	\$ 200,000					\$ 200,000
56 - Trades/Maintenance Buildings						
South Field Maintenance Building Wash Bay	\$ 1,300,000					\$ 1,300,000
63 - Police						
Safety & Operations Center	\$ 35,000,000			\$ 35,000,000		
Perimeter Fence Intrusion Detection System	\$ 3,000,000	\$ 2,400,000	\$ 600,000			
66 - Fire						
Campus Fire Protection	\$ 1,500,000					\$ 1,500,000
70 - General Office/Administration						
GO Building Improvements	\$ 500,000					\$ 500,000
76 - Environment						
Runway 12R-30L Glycol Force main Environmental Improvements	\$ 1,400,000		\$ 700,000			\$ 700,000
T2 Remote Ramp Lot/Drainage Improvements	\$ 2,000,000		\$ 1,200,000			\$ 800,000
Ground Service Equipment Electrical Charging Stations	\$ 5,700,000					\$ 5,700,000
Lift Stations at Pond 1 and 2	\$ 800,000					\$ 800,000
MSP Maintenance/Facility Upgrades Subtotal	\$ 162,972,500	\$ 49,400,000	\$ 8,300,000	\$ 35,000,000	\$ 12,800,000	\$ 57,472,500
MSP Ongoing Maintenance Programs						
10 - Terminal 1 Lindbergh						
Electrical Infrastructure Program	\$ 9,000,000					\$ 9,000,000
Emergency Power Upgrades	\$ 9,000,000					\$ 9,000,000
Electrical Substation Replacement	\$ 5,600,000					\$ 5,600,000
Terminal Miscellaneous Modifications	\$ 12,300,000					\$ 12,300,000
Air Handling Unit Replacement	\$ 14,500,000					\$ 14,500,000
Conveyance System Upgrades	\$ 6,000,000					\$ 6,000,000
Plumbing Infrastructure Upgrade Program	\$ 3,000,000					\$ 3,000,000
Terminal Building Remediation Program	\$ 13,000,000					\$ 13,000,000
Concourse G Rehabilitation	\$ 23,000,000				\$ 3,000,000	\$ 20,000,000
Baggage System Upgrades	\$ 2,500,000					\$ 2,500,000
13 - Energy Management Center						
EMC Plant Upgrades (T1 & T2)	\$ 4,300,000					\$ 4,300,000
21 - Field and Runways						
Airside Bituminous Rehabilitation/Electrical Construction	\$ 9,900,000				\$ 2,500,000	\$ 7,400,000
Pavement Joint Sealing/Repair	\$ 3,250,000					\$ 3,250,000
Miscellaneous Airfield Construction	\$ 1,900,000					\$ 1,900,000
26 - Terminal Roads/Landside						
Tunnel/Bridge Rehabilitation	\$ 500,000					\$ 500,000
31 - Parking						
T1/T2 Parking Structure Rehabilitation	\$ 14,500,000					\$ 14,500,000

2020-2024 Capital Improvement Program Funding						
	2020-2024	PFC 16	Federal-State Grants	GARBS	Line of Credit	MAC-Airline Funds
MSP Ongoing Maintenance Programs-Continued						
39 - Public Areas/Roads						
Landside Pavement Rehabilitation	\$ 2,400,000					\$ 2,400,000
Roadway Fixture Refurbishment	\$ 600,000					\$ 600,000
46 - Hangars & Other Buildings						
MSP Campus Building Roof Replacements	\$ 5,000,000					\$ 5,000,000
Campus Building Rehab Program	\$ 6,500,000					\$ 6,500,000
Campus Parking Lot Reconstructions	\$ 1,300,000					\$ 1,300,000
Campus Building Demolition	\$ 575,000					\$ 575,000
MSP Ongoing Maintenance Subtotal	\$ 148,625,000	\$ -	\$ -	\$ -	\$ 5,500,000	\$ 143,125,000
MSP Noise Mitigation Projects						
76 - Environment						
Noise Mitigation Consent Decree Amendment	\$ 17,100,000				\$ 15,100,000	\$ 2,000,000
MSP Noise Mitigation Subtotal	\$ 17,100,000	\$ -	\$ -	\$ -	\$ 15,100,000	\$ 2,000,000
MSP Tenant Projects						
10 - Terminal 1 Lindbergh						
Concession Upgrades/Revenue Development	\$ 1,000,000					\$ 1,000,000
Delta Gatehold Seating	\$ 3,000,000				\$ 3,000,000	
MSP Tenant Subtotal	\$ 4,000,000	\$ -	\$ -	\$ -	\$ 3,000,000	\$ 1,000,000
Reliever Airports Long Term Comprehensive Plan Projects						
82 - Lake Elmo						
Long Term Comp Plan	\$ 100,000					\$ 100,000
Runway 14-32 Replacement	\$ 4,000,000		\$ 1,400,000			\$ 2,600,000
Airfield Modifications	\$ 3,000,000		\$ 2,150,000			\$ 850,000
83 - Airlake						
Long Term Comp Plan	\$ 100,000					\$ 100,000
Runway 20-30 Improvements	\$ 3,500,000		\$ 2,450,000			\$ 1,050,000
85 - Crystal						
Long Term Comp Plan	\$ 100,000					\$ 100,000
86 - Anoka County - Blaine						
Building Area Development - Xylite Street Relocation	\$ 1,000,000					\$ 1,000,000
Reliever Airports Long Term Comprehensive Plan Subtotal	\$ 11,800,000	\$ -	\$ 6,000,000	\$ -	\$ -	\$ 5,800,000
Reliever Airports Maintenance/Facility Upgrade Projects						
81 - St. Paul						
Joint and Crack Repairs	\$ 300,000					\$ 300,000
MAC Building Improvements	\$ 1,400,000					\$ 1,400,000
Runway 13-31 Pavement Reconstruction	\$ 5,000,000		\$ 3,000,000			\$ 2,000,000
Cold Equipment Storage Building	\$ 750,000					\$ 750,000
LED Edge Lighting Upgrades	\$ 2,500,000		\$ 300,000			\$ 2,200,000
Runway 14-32 Reconstruction	\$ 5,000,000		\$ 3,600,000			\$ 1,400,000
Airport Perimeter Roads	\$ 900,000					\$ 900,000
Taxiway B Rehabilitation	\$ 800,000		\$ 500,000			\$ 300,000
82 - Lake Elmo						
Parallel Taxiways Reconstruction	\$ 600,000					\$ 600,000
Runway 4-22 Pavement Rehabilitation	\$ 4,000,000		\$ 2,800,000			\$ 1,200,000
North Building Area Pavement Rehabilitation	\$ 900,000					\$ 900,000
83 - Airlake						
Runway 12-30 Reconstruction	\$ 3,500,000		\$ 1,500,000			\$ 2,000,000
Joint and Crack Repairs	\$ 150,000					\$ 150,000
LED Edge Lighting	\$ 700,000					\$ 700,000
84 - Flying Cloud						
Taxiways A1, A3, F Pavement Rehabilitation	\$ 300,000					\$ 300,000
MAC Building Improvements	\$ 520,000					\$ 520,000
85 - Crystal						
Alleyway Pavement Rehabilitation	\$ 550,000		\$ 150,000			\$ 400,000
MAC Building Improvements	\$ 1,000,000					\$ 1,000,000
LED Edge Lighting Upgrades	\$ 800,000		\$ 275,000			\$ 525,000
86 - Anoka County - Blaine						
Alleyway Pavement Rehabilitation	\$ 1,500,000		\$ 300,000			\$ 1,200,000
Air Traffic Control Tower Equipment Upgrades	\$ 100,000					\$ 100,000
MAC Building Improvements	\$ 700,000					\$ 700,000
LED Edge Lighting Upgrades	\$ 2,500,000		\$ 300,000			\$ 2,200,000
West Perimeter Road	\$ 700,000		\$ 400,000			\$ 300,000
Electrical Vault Improvements	\$ 750,000					\$ 750,000
Reliever Airports Maintenance/Facility Upgrade Subtotal	\$ 35,920,000	\$ -	\$ 13,125,000	\$ -	\$ -	\$ 22,795,000
MSP Subtotal	\$ 625,847,500	\$ 209,490,000	\$ 21,300,000	\$ 54,710,000	\$ 42,900,000	\$ 297,447,500
Reliever Subtotal	\$ 47,720,000	\$ -	\$ 19,125,000	\$ -	\$ -	\$ 28,595,000
Total	\$ 673,567,500	\$ 209,490,000	\$ 40,425,000	\$ 54,710,000	\$ 42,900,000	\$ 326,042,500

Sources and Uses of Funds

From December 31, 2015 through 2020, the MAC has identified eight funding sources totaling \$1,344,193,000 including a beginning balance of \$368,365,000. During this period, the MAC will expend \$1,310,548,000 leaving a net balance of \$420,010,000 at the end of 2020. This balance represents a portion of the 2018, 2019 and 2020 CIP projects that were started but not completed by December 31, 2020 and Passenger Facility Charges (PFCs) to pay future debt service.

The Construction Fund Budget below represents anticipated sources and uses of funds during the years 2016-2020. The information for 2017 indicates expected transactions during the fourth quarter.

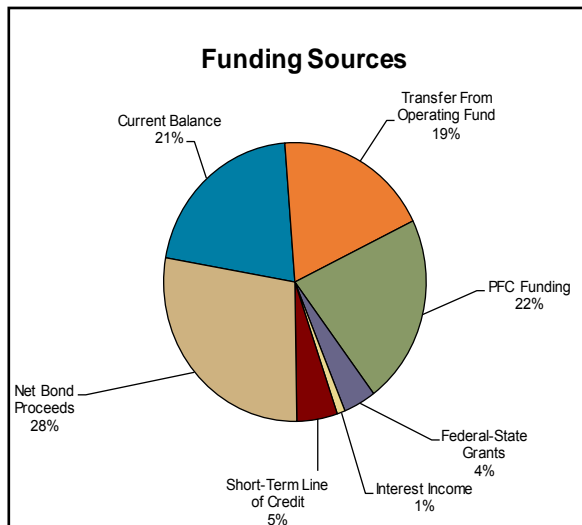
CONSTRUCTION FUND BUDGET 2018 (\$ = 000)							
	2016 Actual	2017 Estimated	2017 Budget	2018 Budget	2019 Projected	2020 Projected	Total Projected
Sources of Funds							
Balance 12/31/15	\$ 368,365						\$ 368,365
Balance Carried Forward		\$ 680,530	\$ 688,408	\$ 633,381	\$ 512,255	\$ 513,993	
Transfer From Operating Fund	52,124	65,669	67,331	75,592	66,561	60,715	320,661
PFC Funding	72,207	72,345	73,276	74,155	75,045	75,946	369,698
Federal/State Grants	17,473	11,431	3,025	9,600	14,100	12,050	64,654
Interest Income (1)	5,581	5,349	5,692	4,600	3,600	4,500	23,630
Short-term line of credit	-	28,000	27,800	32,700	11,500	17,600	89,800
Principal Amount of Bonds/Notes	388,232	-	-	-	84,010	-	472,242
Other Receipts	3,508	-	-	-	-	-	3,508
Total Sources of Funds	\$ 539,125	\$ 182,794	\$ 177,124	\$ 196,647	\$ 254,816	\$ 170,811	\$ 1,344,193
Uses of Funds							
CIP Project Costs	\$ (197,172)	\$ (202,489)	(326,918)	(291,529)	(226,841)	(256,555)	\$ (1,174,586)
Debt Service Reserve Transfer	(29,788)	(27,454)	(27,532)	(26,244)	(26,237)	(26,239)	(135,962)
Total Use of Funds	\$ (226,960)	\$ (229,943)	\$ (354,450)	\$ (317,773)	\$ (253,078)	\$ (282,794)	\$ (1,310,548)
Balance Carried Forward	\$ 680,530	\$ 633,381	\$ 511,083	\$ 512,255	\$ 513,993	\$ 402,010	\$ 402,010
1 Interest Rate Assumed 1.0% for the period 2016 through 2018.							

Excluding the current balance, the accompanying chart shows that transfers from the Operating Fund, bond proceeds and funds from PFCs are the main funding sources for construction projects.

Sources of Funds

Each source of funding is discussed below.

The Transfer from the Operating Fund is made at the end of each year after the debt service requirements and working capital balance have been funded. For 2018, a transfer of \$75.6 million is anticipated based on 2017 estimated net revenues. The transfer for 2018 increased slightly due to higher concession revenues, while 2019 decreases due to the increased debt service payments associated with the 2016 bond issue. The balance to be transferred for the period is estimated at \$320.7 million or 19%.



Passenger Facility Charge (PFC) funding is one of the largest funding sources at \$369.7 million or 22% of the total. PFCs were authorized by Congress to allow proprietors of commercial service airports, such as the MAC, to impose a charge on enplaning passengers at those airports. The charge was originally set at \$1, \$2 or \$3. The maximum allowed was changed from \$3.00 to \$4.50 in 2001. Essential Air Service Flights and Frequent Flyers are exempted from this charge. The basis for the PFC is to provide needed supplemental revenues to expedite

the improvement of airport facilities used by passengers to mitigate noise impacts and to expand airport system capacity. The Commission's first application began collecting PFCs on June 1, 1992.

Including this first application, the Commission has received approval from the Federal Aviation Administration (FAA) for 11 separate applications. The Commission expects to file one new PFC application in the 2018 timeframe. The table below shows the status of all applications.

<u>PFC Summary Table</u>			
Application	Amended	Collections as	
Number	Approval	Of 12/31/17 est	
	Amount (\$=000)	(\$=000)	Status
1	\$ 92,714	\$ 92,714	Closed
2	140,717	140,717	Closed
3	36,377	36,377	Closed
4	47,801	47,801	Closed
5	112,533	112,533	Closed
6	759,735	480,353	Open
7	14,479	14,479	Open
8	147,986	96,913	Open
9	8,659	8,659	Closed
10	101,472	71,451	Open
11	52,827	52,056	Open
12	40,796	37,407	Open
13	65,212	9,298	Open
14	126,557	95,233	Open
	<u>\$ 1,747,865</u>	<u>\$ 1,295,991</u>	

In conjunction with filing these applications/amendments, the Commission was required to file a Competition Plan. Before any approval/consideration could be given to these applications/amendments, the FAA needed to approve this Plan. Approval from the FAA regarding the original Competition Plan was received on November 21, 2000. In addition, Congress, earlier in 2000, authorized proprietors of commercial service airports to increase the level of PFC up to a maximum of \$4.50. This level of collection required the completion and approval of a Competition Plan for the airport. The Commission received approval to increase the PFC level to \$4.50 in January, 2001. An updated Competition Plan was submitted in September 2016. Approval of the updated Plan was granted in 2017.

Federal and State Grants

Federal Grants are funds which are used for FAA approved projects including Field and Runway and certain terminal building security projects at the various Commission airports. Certain criteria must be met when an application for a project is submitted to the FAA. If the criteria are met, the grant money may be issued. State Grants are similar to Federal Grants. The dollars are on a much smaller scale, but each application must meet the required criteria in order to receive the grant. Total grants are \$64.7 million or 4% of total funding.

Interest Income is based on the balance in the fund. As noted earlier, a 1.0% rate is assumed for 2018 through 2020. This figure can vary significantly depending upon approval of projects and their starting dates. Interest Income of \$23.6 million or 1% of sources is projected.

Short-Term Line of Credit

In 2017, the Commission increased its short-term line of credit from \$75 million to \$150 million. Short-term funding allows the Commission to interim fund certain projects until the receipt of grants or PFCs. The Commission also uses short-term funding to interim fund a project until the time it can be replaced with a future long-term debt issue. The Commission expects to issue 88.8 million from its line of credit from 2017-2020.

Long-Term Debt

In 2015, the Commission issued approximately \$11.7 million worth of Municipal Receivable Trust Certificates in connection with the construction of solar panels on top of the Commission's parking deck at Terminal 2 parking structures as well as parking lighting improvements at that terminal. In 2016, the Commission issued General Airport Revenue Bonds which netted approximately \$388 million in construction proceeds. The bond proceeds are expected to be used in the expansion of three gates at Terminal 2 and construction of additional parking/rental car facilities at Terminal 1. In 2019, the Commission expects to issue General Airport Revenue Bonds which is expected to net approximately \$84 million in construction proceeds. The bond proceeds are expected to fund various projects around the airport with the majority of the work to be done in Terminal 1.

Uses of Funds

There are two general categories of uses listed. The first CIP project costs (\$1,175.0 million) represent 90% of the total. The Debt Service Transfer of \$136.0 million, or 10% of this total, represents the transfer of PFC funding to pay a portion of PFC projects funded by long-term debt.

CIP project costs include both actual construction costs and any fees (i.e. architectural/engineering) which may be associated with the project. Also included in this figure are projects in process. Significant project costs include those associated with parking facilities, Reliever Airports and other field and terminal projects.

The balance carried forward can be attributed to a number of projects scheduled to begin the next year. It is quite possible that this balance could be significantly different as the timing of projects historically has been delayed for any number of reasons.

The table below indicates the amount of projects currently in process with project costs in excess of \$3 million. The vast majority of capital projects in the Commission's Capital Improvement Program are considered routine projects for a major airport and do not affect the annual operating budget.

Projects in Process (As of November 30, 2017)
(\$ = 000)

<u>Project Description</u>	<u>Estimated Payments</u>		<u>Percent Completion</u>
	<u>Project Cost</u>	<u>To Date</u>	
Fiber Optic Infrastructure Upgrade Expansion	\$4,400	\$3,551	80.7%
T1 - Restroom Upgrades Program	\$16,000	\$5,930	37.1%
2017 Baggage Claim Expansion	\$33,400	\$3,582	10.7%
Vertical Circulation Improvements	\$74,900	\$24,240	32.4%
2017 Ticket Lobby Operational Improvement	\$15,700	\$1,688	10.8%
iVISON Projects (CCTV) Improvements	\$8,500	\$3,798	44.7%
T1-Trams System Retrofit & Equipment	\$6,200	\$3,102	50.0%
Telecom Relocation & Decommissioning Program	\$4,500	\$1,883	41.8%
T1 - Concourse G Rehabilitations	\$12,500	\$5,570	44.6%
2016 Concourse A-G Connector Bridge	\$23,400	\$14,273	61.0%
2016 Mezzanine HVAC/AHU Replacements & Penthouses	\$16,700	\$10,374	62.1%
Passenger Boarding Bridge Program	\$17,100	\$9,559	55.9%
Concourse A/B Pre-Conditioned Air Upgrades	\$6,300	\$4,031	64.0%
T1 - Parking Ramp Projects	\$427,500	\$119,000	27.8%
Distributed Antenna System Program	\$7,500	\$1,527	20.4%
Noise Mitigation Consent Decree Amendment	\$9,200	\$1,525	16.6%
Delta Baggage Handling System Acquisition	\$12,000	\$2,435	20.3%
All Other Projects in Process	\$313,484	\$41,495	13.2%
Total:	\$1,009,284	\$257,563	

Debt Service Fund

The Debt Service Fund discussion covers four areas: Debt Service Requirement, Long Term Debt, Bond Ratings, and Sources and Uses of Funds.

Debt Service Requirement

The Metropolitan Airports Commission (MAC), in the recent past, has issued two forms of long-term indebtedness: General Airport Revenue Bonds (GARBs) and General Obligation Revenue Bonds (GORBs). Since 1976, GORBs have been issued which are backed by Commission revenues and the authority to levy any required taxes on the assessed valuation of the seven-county metropolitan area. In 1998, the Commission began to issue GARBs which are not backed by the Commission's ad valorem taxing power. Additionally, the Commission has agreed (pursuant to the terms of the Master Trust Indenture entered into by the Commission in connection with its issuance of GARBs) to collect rates, tolls, fees, rentals, and charges so that during each fiscal year the Net Revenues, together with any permitted transfer, will be equal to at least 125% of aggregate annual debt service on the outstanding Senior Lien GARBs and 110% for outstanding Subordinate Lien GARBs. (See Long Term Debt Section below.)

With regard to GORBs, the MAC is required by law to maintain Debt Service funds sufficient to bring the balance on hand in the Debt Service Account on October 10th of each year to an amount equal to all principal and interest to become due and payable from there to the end of the second following year. The Commission currently has no outstanding GORBs debt.

The following is the annual actual debt service funding requirements for the next five years for the GARB issues (does not include future bond issues):

January 1, 2018	\$ 122,900
January 1, 2019	\$ 134,083
January 1, 2020	\$ 133,960
January 1, 2021	\$ 127,790
January 1, 2022	\$ 127,695

Long-Term Debt

General Obligation Revenue Bonds and General Airport Revenue Bonds

The acquisition and construction of facilities at the airports operated by the Commission have been substantially financed by the issuance of Airport Improvement Bonds and GORBs (all of which have been defeased), Notes Payable, a revolving line of credit, and GARBs.

GORBs are general obligations of the Commission, payments of which are secured by the pledge of all operating revenues of the Commission. The Commission has the power to levy property taxes upon all taxable property in the seven county Metropolitan Area in order to pay debt service outstanding on GORBs. (These taxes, if levied, must be re-paid.)

The Commission has not levied taxes for the payment of debt service since 1969. Since then, Commission revenues have been sufficient to pay principal and interest due to Airport Improvement Bonds and GORBs. The Commission currently has available for issuance under the existing legislative authorization approximately \$55 million of GORBs.

The 1996 Minnesota State Legislature authorized the Commission to issue GARBs. These bonds may be secured by the pledge of all operating revenues of the Commission. The Commission's authority to issue additional GARBs is subject to an additional bonds test for future issuance of either its Senior Lien or Subordinate Lien GARBs. The additional bonds test is designed to demonstrate that the Commission will have the current and future ability to repay its debt. For Senior Lien GARBs, the additional bonds test requires the Commission to either show that historical revenues are at least equal to 1.1 times total expected Senior Lien debt service or that projected net revenues are expected to exceed 1.25 times total expected Senior Lien debt service. For Subordinate Lien GARBs, the additional bonds test requires the Commission to either show that historical revenues are at least equal to 1.1 times total expected debt service or that projected net revenues are expected to exceed 1.1 times total expected debt service. These coverage ratios include debt service on the GORBs.

The projected coverage ratio for 2018 on Senior Debt Obligations is 4.19x. With the optional coverage transfer, this figure is 4.44x. The overall projected coverage ratio is expected to be 1.92x and 2.04x with the optional coverage transfer.

Notes Payable

The Commission, from time to time, has financed certain pieces of equipment and certain capital improvement projects through the issuance of notes payable. The Commission utilizes this type of financing in order to recover a portion of the debt service via airline rates and charges. As of December 31, 2017, the Commission has \$47,191,000 notes payable outstanding.

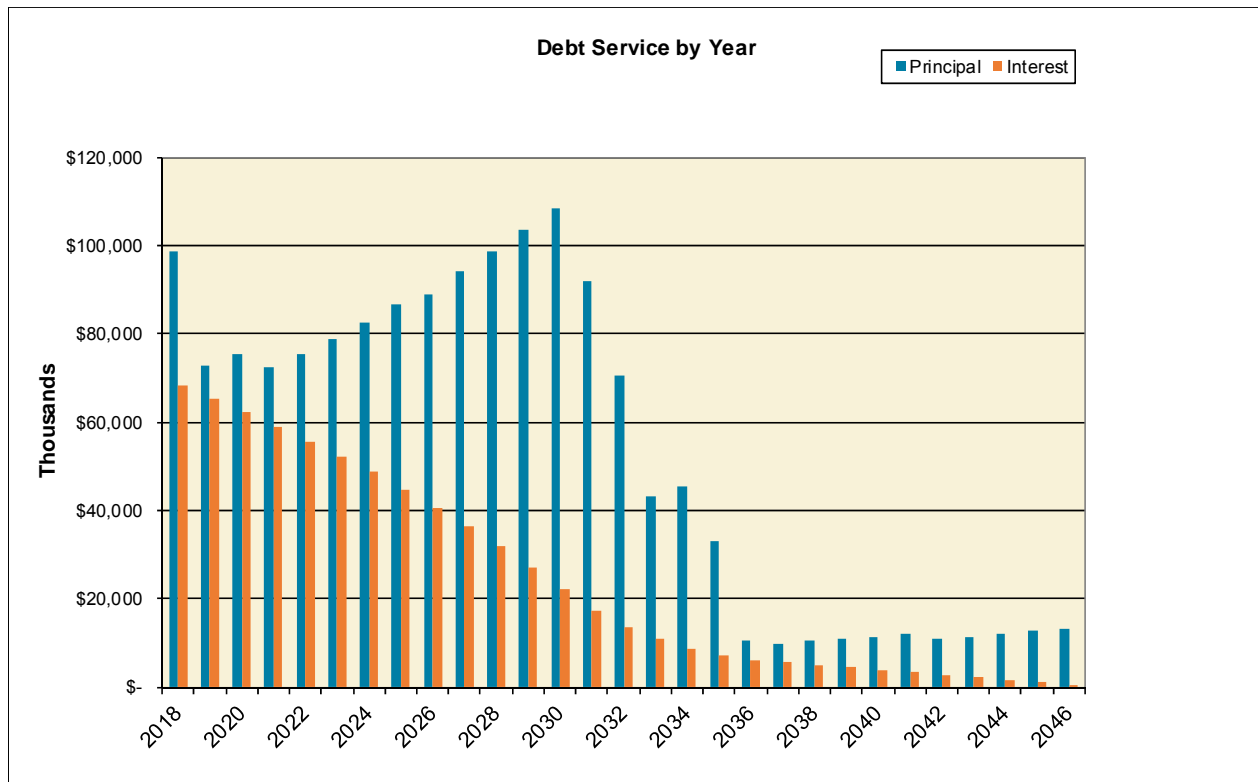
Revolving Line of Credit

The Commission previously utilized a Commercial Paper program to interim fund certain capital improvement projects. In May 2010, the direct pay letters of credit expired and the renewal cost was very expensive. In 2017, the Commission entered into a \$150 million Revolving Line of Credit to interim fund certain capital improvement projects. As of December 31, 2017, the Commission has utilized \$38,020,000 of the line of credit.

The table below shows future debt requirements for existing debt on an annual calendar year basis after December 31, 2017 for the remaining terms. The following chart does not take into consideration any future bond issues or notes payable issued after 2017. The dollars shown are in thousands.

General Airport					
(\$ = 000)	Notes/Line of	Revenue	Total	Total All	Total
Year(s)	Credit	Bonds	Outstanding	Interest	Principal
	Principal	Principal	Principal		& Interest
2018	41,379	55,390	\$ 96,769	68,088	164,857
2019	3,382	69,325	\$ 72,707	65,270	137,977
2020	3,210	72,275	\$ 75,485	62,133	137,618
2021	3,056	69,260	\$ 72,316	58,925	131,241
2022	3,032	72,420	\$ 75,452	55,623	131,075
2023	2,618	76,140	\$ 78,758	52,144	130,902
2024	2,736	79,645	\$ 82,381	48,567	130,948
2025	2,352	84,375	\$ 86,727	44,719	131,446
2026	2,073	86,985	\$ 89,058	40,637	129,695
2027	1,645	92,320	\$ 93,965	36,376	130,341
2028	1,837	96,725	\$ 98,562	31,841	130,403
2029	1,996	101,485	\$ 103,481	27,059	130,540
2030	2,125	106,380	\$ 108,505	22,027	130,532
2031	2,258	89,500	\$ 91,758	17,262	109,020
2032	2,400	68,170	\$ 70,570	13,419	83,989
2033	2,547	40,765	\$ 43,312	10,787	54,099
2034	2,702	42,695	\$ 45,397	8,785	54,182
2035	2,866	30,270	\$ 33,136	6,989	40,125
2036	997	9,395	\$ 10,392	5,975	16,367
2037	-	9,860	\$ 9,860	5,486	15,346
2038	-	10,350	\$ 10,350	4,981	15,331
2039	-	10,870	\$ 10,870	4,450	15,320
2040	-	11,415	\$ 11,415	3,893	15,308
2041	-	11,990	\$ 11,990	3,308	15,298
2042	-	10,890	\$ 10,890	2,736	13,626
2043	-	11,430	\$ 11,430	2,178	13,608
2044	-	12,005	\$ 12,005	1,592	13,597
2045	-	12,605	\$ 12,605	977	13,582
2046	-	13,235	\$ 13,235	331	13,566
	\$ 85,211	\$ 1,458,170	\$ 1,543,381	\$ 706,558	\$ 2,249,939

The following chart shows expected future debt principal and interest:



The following table provides summary information for all current long-term debt.

Bonds Payable, due serially (\$ = 000)	Issue Date	Original Amount	Final Payment In	Outstanding as of Year End	
				2018	2017
General Airport Revenue Bonds:					
2009 Series A - 2.0-5.0%	11/10/09	23,075	2022	9,660	11,795
2009 Series B - 4.0-5.0%	11/10/09	128,835	2022	57,495	69,365
2010 Series A - 4.00-5.00%	08/10/10	62,210	2035	62,210	62,210
2010 Series B - 3.00-5.00%	08/10/10	73,475	2028	55,840	59,895
2010 Series C - 3.00-5.00%	11/10/10	21,600	2024	4,450	5,085
2010 Series D - 4.00-5.00%	11/10/10	68,790	2024	31,350	35,605
2011 Series A - 3.50-5.00%	11/02/11	52,015	2025	43,520	47,870
2012 Series A - 0.46-2.755%	11/20/12	39,770	2020	17,660	23,310
2012 Series B - 5.00%	11/20/12	42,015	2031	42,015	42,015
2014 Series A - 2.00-5.00%	10/08/14	217,790	2035	209,900	214,520
2014 Series B - 2.00-5.00%	10/08/14	46,590	2026	38,840	42,740
2016 Series A - 3.00-5.00%	10/04/16	330,690	2032	330,690	330,690
2016 Series B - 3.00-5.00%	10/04/16	152,190	2024	152,190	152,190
2016 Series C - 2.00-5.00%	12/20/16	207,250	2046	207,250	207,250
2016 Series D - 2.00-5.00%	12/20/16	23,410	2041	23,410	23,410
2016 Series E - 2.00-5.00%	12/20/16	171,690	2034	171,690	171,690
Total General Airport Revenue Bonds				\$ 1,458,170	\$ 1,499,640
TOTAL BONDS OUTSTANDING				\$ 1,458,170	\$ 1,499,640
NOTES PAYABLE & REVOLVING LINE OF CREDIT				\$ 106,044	\$ 85,211
TOTAL LONG TERM BONDS AND NOTES PAYABLE				\$ 1,564,214	\$ 1,584,851

Bond Refundings

On October 4, 2016, the Commission issued \$482,880,000 of General Airport Revenue Bonds Series 2016A and 2016B to refund the General Airport Revenue Bonds Series 2007A and 2007B and were called on January 1, 2017.

As a result of the October 4, 2016 refunding, the Commission reduced its total debt service requirements by \$164,340,453, which resulted in an economic gain (the difference between the present values of the debt service payments on the old and new debt) in the amount of \$124,290,794.

The Commission, along with its financial advisors, regularly reviews the Commission debt structure to look for refunding candidates provided that they meet the 3% net present value savings.

The Commission has no Derivative/Swap debt nor has there ever been any instrument of this type in the Debt Portfolio.

New Issues

The most recent new money bond issue the Commission issued was on December 20, 2016. The MAC issued \$207,250,000 General Airport Revenue Bonds Series 2016C, \$23,410,000 General Airport Revenue Bonds Series 2016D and \$171,690,000 General Airport Revenue Bonds Series 2016E.

The \$23,410,000 General Airport Revenue Bonds Series 2016D proceeds were used to repay a portion of the revolving line of credit used in connection with the new 4 Gate Expansion at Terminal 2-Humphrey.

A portion of the proceeds of the General Airport Revenue Bonds Series 2016C Bonds and the General Airport Revenue Bonds Series 2016E Bonds will be used to finance the design, construction, improvement and equipping of the following projects at the Airport:

New Parking Garage. The Commission will construct a new, 11-level, parking structure adjacent to the existing parking facilities at Terminal 1-Lindbergh (the "New Parking Garage"). The garage will provide public parking on levels 6-11 (approximately 3,300 parking spaces), with rental car parking facilities on levels 2-5. A new rental car customer service building and a new transit center will be constructed on the ground level of the parking structure. This project also includes extending the underground tram corridor (although not the tram), vertical circulation building, entrance helix, exit helix, associated utilities, lighting, landscaping, signage, roadways, and security features, and relocating the rental car ready/return areas from the existing parking garages at Terminal 1-Lindbergh. The estimated cost of the New Parking Garage is \$293 million.

Roadway & Plaza Relocation. In connection with the construction of the New Parking Garage, the Commission relocated a major portion of the outbound roadway and associated utilities at Terminal 1-Lindbergh, modified the entrance to the existing public facilities at Terminal 1-Lindbergh and constructed a new exit plaza to accommodate the New Parking Garage. The cost of this portion of the Series 2016C/E Project is \$100 million.

Parking Management Building and Revenue Control System. The new exit plaza includes a new parking management building, revenue control system, exit booths with associated canopy, electrical and mechanical systems, fiber optic cabling, and landscaping. It will be constructed in connection with the construction of the New Parking Garage. The estimated cost of this portion of the Series 2016C/E Project is \$24 million.

Other Components of Series 2016C/E Projects. Certain other projects will be undertaken in connection with the construction of the New Parking Garage, including certain grade separation projects and a new cargo and storage building to be leased by Delta Airlines. The estimated cost of this portion of the Series 2016C/E Project is \$26 million.

The Series 2016C/E Projects are expected to be completed by the summer of 2020.

The Capital Improvement Program approved by the Commission in December 2017 for the period 2018-2024 does include funding of projects with a new long-term debt issue. The Commission anticipates a new long-term debt issue in the \$100 million range primarily for Terminal 1-Lindbergh, Public Safety Facility and Parking Facility improvements.

Bond Ratings

The Commission has maintained excellent ratings for many years. The Commission is one of the few airport authorities with an AA- rating. Most airports are in the A rating category. The Commission's bond ratings as

of December 31, 2017 are as follows:

	<u>Moody's</u>	<u>Standard & Poors</u>	<u>Fitch Ratings</u>
General Obligation Bonds	Aaa	AAA	AAA
General Airport Revenue Bonds	N/A	AA	AA-

Standard & Poors bond ratings range from AAA (highest quality) to C (lowest quality) for long-term obligations. Ratings from 'AA' to 'CCC' may be modified by the addition of a plus (+) or minus (-) sign to show relative standing within the major rating categories. The ratings for the Commission's long-term debt are defined below:

- 'AAA' - Extremely strong capacity to meet financial commitments. Highest Rating.
- 'AA' - Very strong capacity to meet financial commitments.

Fitch Ratings also uses a rating system similar to that of Standard & Poors. Ratings from 'AAA' to 'CCC' may be modified by the addition of a plus (+) or minus (-) sign to show relative standing within the major rating categories.

Moody's bond ratings range from Aaa (highest quality) to C (lowest quality) for long term obligations. Moody's applies numerical modifiers 1-high, 2-mid, and 3-low in each generic rating classification from Aaa to C. The bond rating process is a comprehensive analysis of the Commission's financial practices and performance. Forecasts of future performance and projected long-term planning practices are also reviewed. The following data are typically requested and analyzed by the rating agencies:

- Trends of demographic/economic information
- Capital Improvement Program
- Budget documents/Performance to Budget
- Financial audits/Performance
- Airline industry
- Major employers in the area
- Diversity of local economy
- Financial policies and practices

The Statistics & Informative Facts section shows statistics commonly analyzed by the rating agencies.

Sources and Uses of Funds

The Debt Service Budget is shown below.

2018 DEBT SERVICE BUDGET						
(\$=000)						
	2016	2017	2017	2018	2019	2020
	<u>Actual</u>	<u>Estimate</u>	<u>Budget</u>	<u>Budget</u>	<u>Projected</u>	<u>Projected</u>
January 1 Balance	\$ 227,487	\$ 196,054	\$ 251,930	\$ 219,629	\$ 226,354	\$ 270,369
Source Of Funds:						
Transfer from Operating Fund	89,675	91,106	84,917	102,278	108,266	101,773
Transfer from PFCs ¹	31,522	27,454	27,533	26,244	26,237	26,239
Interest earnings ²	1,703	1,898	985	1,103	1,336	1,658
Bond Proceeds ³	643,547	-	-	-	42,259	-
Total Sources Of Funds	\$ 766,447	\$ 120,458	\$ 113,435	\$ 129,625	\$ 178,098	\$ 129,670
Uses Of Funds						
Bond Refundings	\$ (645,380)	\$ -	\$ -	\$ -	\$ -	\$ -
Rebate Payment	-	-	-	-	-	-
Total Principal/Interest Paid	(152,500)	(96,883)	(122,557)	(122,900)	(134,083)	(151,470)
Ending Balance	<u>\$ 196,054</u>	<u>\$ 219,629</u>	<u>\$ 242,808</u>	<u>\$ 226,354</u>	<u>\$ 270,369</u>	<u>\$ 248,569</u>

¹ Used to pay existing debt which was formerly paid for with operating funds.

² Interest Rate Assumed 1.00% for the entire period.

³ Includes Debt Reserve and Capitalized Interest.

Sources of Funds

Each source of funding is discussed below.

The transfer from the operating fund occurs each October 10th for General Obligation Revenue Bonds. The Commission currently has no GORBs outstanding. Therefore there is no funding requirement during 2016-2020. For General Airport Revenue Bonds, the transfer occurs in late June and December each year. This transfer will fluctuate due to interest earnings, refundings, and new issues.

The Passenger Facility Charge (PFC) transfer represents the use of PFCs to pay a portion of existing debt beginning in 2003 for various general airport revenue bonds instead of operating funds. This transfer will fluctuate due to interest earnings, scheduled increases in annual debt service amounts, refundings and new issues.

Interest earnings are assumed at 1.0% for 2018-20. In projecting interest income, the Commission typically takes a conservative approach.

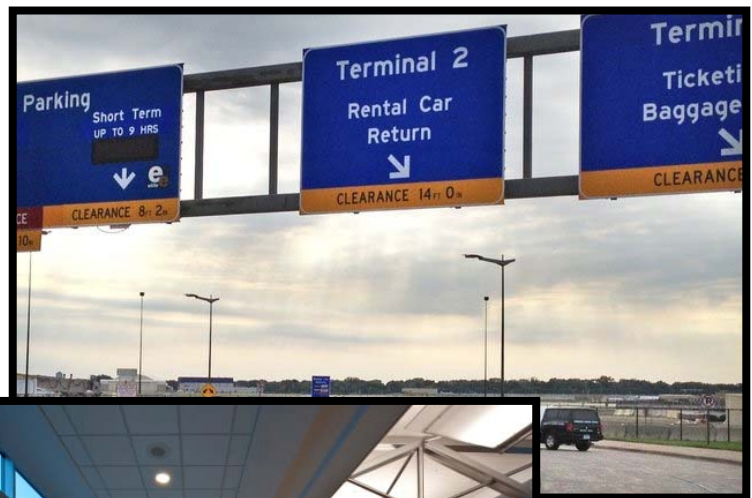
Bond proceeds are made up of reserves, issuance costs, and capitalized interest. The proceeds in 2016 represent the refunding of General Airport Revenue Bonds Series 2007 and new money issues in 2016 and 2019. The amounts shown in the prior table represents the required debt service reserve and capitalized interest.

Uses of Funds

Disbursements represent principal and interest payments made during the year by bond series as well as rebate payments due on excess investment interest earnings, if any, on bond issues. In 2016, the Commission refunded General Airport Revenue Bonds Series 2007. These refundings accounted for the increase in uses in 2016. In 2019 increases in principal and interest payments are primarily due to principal payments starting from the new money 2016 bond issues.

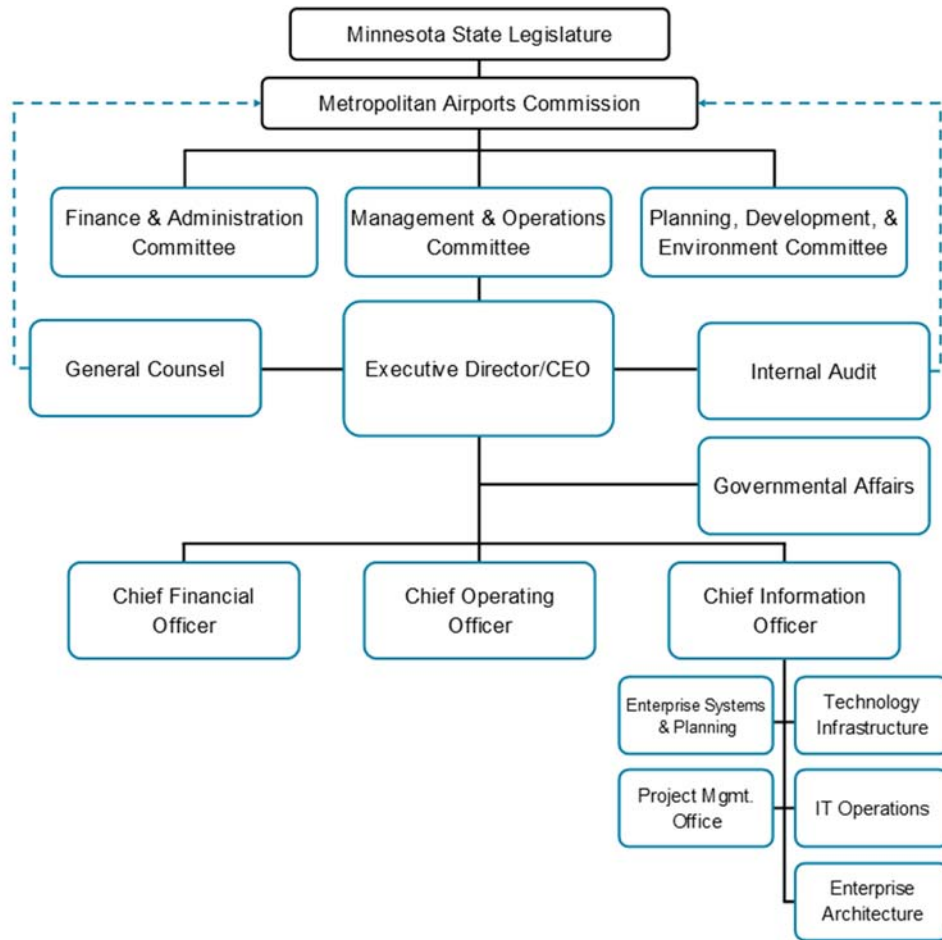


Terminal 2-Humphrey



Executive Division

Division Organizational Chart



Service Centers

Number	Name
75000	Executive-General
75100	Executive-Commissioner
75600	Finance & Administration
81000	General Counsel
78300	Internal Audit
79500	Governmental Affairs
79000	Information Technology

Notations to Service Center Summaries:

- Variance (dollars and %) is computed between 2017 Budget and 2018 Budget amounts
- Explanations for the variances are based upon the 2017 Budget and 2018 Budget amounts
- Negative variances, in most cases, are the result of reductions in one-time expenses or budget reductions
- The FTE count in each service center is as of January 1, 2018. The FTE budget was calculated in 2017 and may not reflect the budgeted FTE count for some service centers.
- Significant changes were made to the organization staff, including the addition of two divisions and the addition of several vice president roles. No changes were made to the service center structure. Therefore, presented at the beginning of each division within this section are the division's organizational chart as approved by the commission, as well as a list of the service centers that are managed within that division.

EXECUTIVE - GENERAL

The Executive-General service center is responsible for the overall administration of the Metropolitan Airports Commission and for the implementation of all Commission policies. The Office of the Executive Director/CEO is directly accountable to the Board of Commissioners for the safe and efficient operation of the seven airports under the Commission's jurisdiction. Responsibilities include the coordination, direction, and implementation of programs and services of the Commission, as well as external relations with those regulatory agencies and governmental bodies concerned with the operation and administration of the Commission.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	570,849	540,126	506,857	(33,269)	-6.2%
Administrative Expenses	197,262	192,925	192,925	0	0.0%
Professional Services	1,500			0	0.0%
Utilities	2,334	1,800	1,800	0	0.0%
Operating Services/Expenses	20,662	800		(800)	-100.0%
Maintenance				0	0.0%
Other	2,674			0	0.0%
Total Budget	795,282	735,651	701,582	(34,069)	-4.6%

Full-time Equivalent (FTE) Total

3 3 3

HIGHLIGHTS OF BUDGET

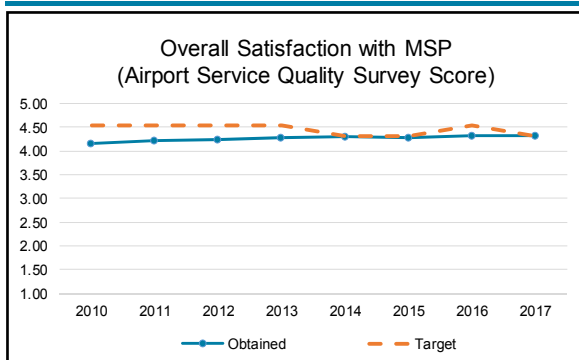
- Personnel The decrease in Personnel is attributable to vacancies due to employee turnover.

2018 SERVICE CENTER OBJECTIVE

Organizational Strategic Goal: Maintain our competitive cost structure while maintaining our airports' economic benefit

Organizational Strategic Objective: Maintain the MAC's competitive cost structure

SERVICE CENTER PERFORMANCE MEASURES



*Airport Service Quality Survey Score: 5-point scale
(5 = excellent, 1 = poor)*

EXECUTIVE - COMMISSIONER

The responsibilities of the Board of Commissioners are: 1) promoting public welfare; 2) promoting national, international, state, and local air transportation; 3) promoting the safe, efficient, and economical handling of air commerce both nationally and internationally, and to developing the potential of the metropolitan area as an aviation center, providing for the most economical and effective use of aeronautical facilities and services; and 4) assuring metropolitan area residents that the environmental impact from air transportation will be minimized by promoting the overall goals of the State's environmental policies, minimizing the public's exposure to noise, and pursuit of the highest level of safety at all Commission airports.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	48,464	48,825	49,325	500	1.0%
Administrative Expenses	39,281	35,900	33,700	(2,200)	-6.1%
Professional Services				0	0.0%
Utilities	390	540	840	300	55.6%
Operating Services/Expenses				0	0.0%
Maintenance				0	0.0%
Other				0	0.0%
Total Budget	88,135	85,265	83,865	(1,400)	-1.6%

Full-time Equivalent (FTE) Total	0.5	0.5	0.5
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HIGHLIGHTS OF BUDGET

- Utilities The Utilities increase is a result of increased cell phone expenses for Commissioners.

FINANCE & ADMINISTRATION

Finance & Administration is responsible for overseeing the implementation of the Commission's financial policies, strategic financial planning and analysis, revenue development, commercial management, airline affairs, and the establishment of good fiscal and budgetary practices. The Commission's conservative fiscal policies provide funding as required for operating and capital expenditures for its system of airports. The policy also allows for the establishment of good business practices to optimize the generation of revenues, both aeronautical and non-aeronautical. This division also oversees and guides the strategic implementation and management of the organization's Live Well, Stay Well Program and Risk/Insurance/Safety Department/Programs. The Chief Financial Officer is the staff liaison to the Commission's Finance & Administration Committee.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	226,238	230,713	373,630	142,917	61.9%
Administrative Expenses	2,706	6,250	6,025	(225)	-3.6%
Professional Services		26,500	35,500	9,000	34.0%
Utilities	540	540	1,404	864	160.0%
Operating Services/Expenses				0	0.0%
Maintenance				0	0.0%
Other		1,200	700	(500)	-41.7%
Total Budget	229,483	265,203	417,259	152,056	57.3%

Full-time Equivalent (FTE) Total

2

2

3

HIGHLIGHTS OF BUDGET

- Personnel In 2017 a new position, Vice President, Finance & Revenue Development was created. This position reports directly to the CFO and is new to the division.
- Professional Services This increase is the result of final modeling of the airline calculation and potential help in the airline negotiations.
- Utilities The added costs are the result of the new position (Vice President, Finance & Revenue Development) cell phone expenditures.
- Other The reduction is due to a one-time expense in 2017 for office furniture.

2017 SERVICE CENTER OBJECTIVE RESULTS

Objective: Update and complete funding analysis for the 2017-2023 Capital Improvement Program (CIP) while maintaining our Cost Per Enplaned Passenger and Bond Ratings

Results: Funding analysis for the 2017-2023 Capital Improvement Program (CIP) was completed.

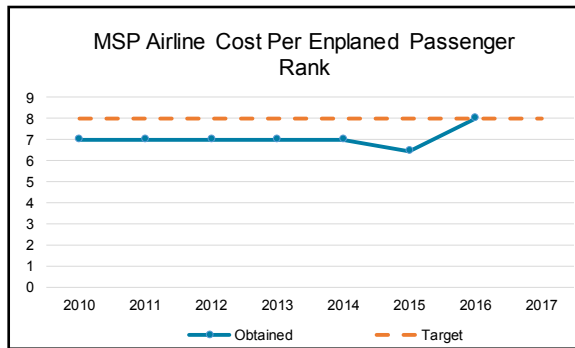
2018 SERVICE CENTER OBJECTIVE

Objective: Update and complete funding analysis for the 2018-2024 Capital Improvement Program (CIP) in conjunction with the extension of the Airline Agreement while maintaining our Cost Per Enplaned Passenger and bond ratings

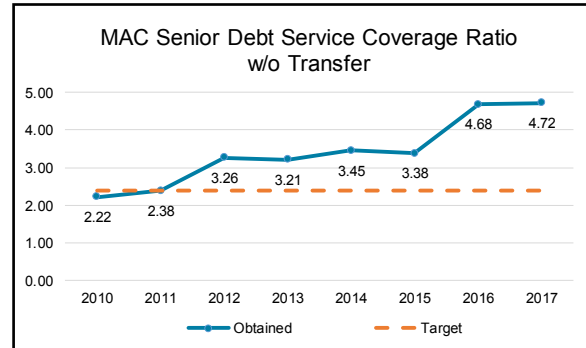
Organizational Strategic Goal: Maintain our competitive cost structure while maintaining our airports' economic benefit

Organizational Strategic Objective: Maintain the MAC's competitive cost structure

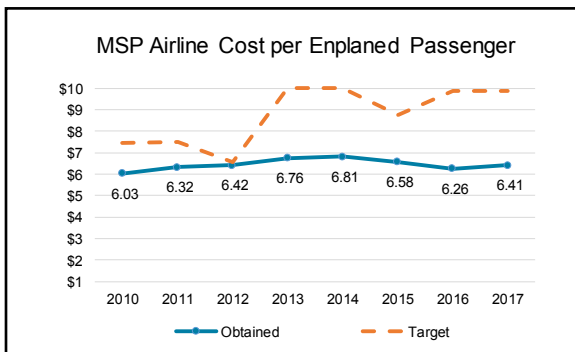
SERVICE CENTER PERFORMANCE MEASURES



MSP's Airline Cost Per Enplaned Passenger rank for large hub airports*



Net revenues divided by debt



Airline cost per enplaned passenger*

*These graphs contain target lines that indicate a maximum target value. Measures are met successfully when the actual values are below the target values.

GENERAL COUNSEL

General Counsel is responsible for providing legal advice and representation to the Commission, preparing legal documents, and monitoring/coordinating outside legal counsel.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	957,073	1,021,402	1,130,235	108,833	10.7%
Administrative Expenses	47,690	53,072	56,450	3,378	6.4%
Professional Services	877,204	799,000	799,000	0	0.0%
Utilities	4,980	4,680	4,800	120	2.6%
Operating Services/Expenses	541	887	1,420	533	60.1%
Maintenance				0	0.0%
Other				0	0.0%
Total Budget	1,887,488	1,879,041	1,991,905	112,864	6.0%

Full-time Equivalent (FTE) Total

8.5 9 9

HIGHLIGHTS OF BUDGET

- Personnel The increase in Personnel Expenses is attributable to one staff member increasing from .5 FTE (actual) to 1 FTE (actual), as well as wage structure adjustments and step increases.
- Administrative Expenses Administrative Expenses increased to properly reflect average spending in most areas.
- Operating Services/Expenses Operating Services increased to properly reflect average spending in most areas.

2017 SERVICE CENTER OBJECTIVE RESULTS

Objective: Provide legal advice, and draft and negotiate documents related to the concessions process

Results: Advised staff and drafted and negotiated documents regarding the Phase II concessions Request for Proposals process, the Rental Auto Request for Bid process, and the awarded concessions agreements including the termination of previous generation concessions agreements, as well as other miscellaneous lease amendment issues.

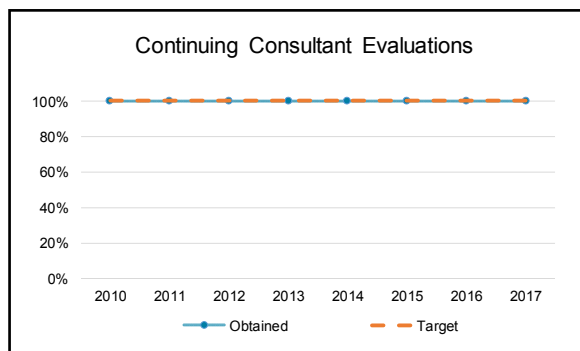
2018 SERVICE CENTER OBJECTIVE

Objective: Provide legal advice, strategize, negotiate, and draft amendments to airline operating agreements

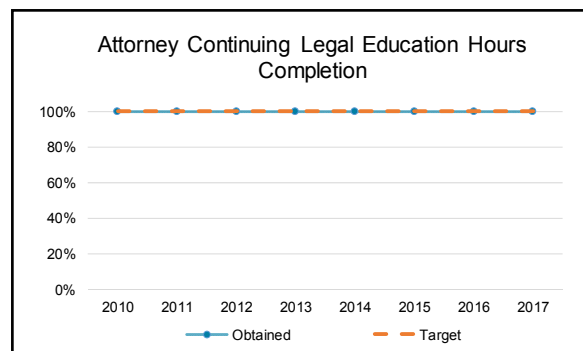
Organizational Strategic Goal: Maintain our competitive cost structure while maintaining our airports' economic benefit

Organizational Strategic Objective: Maintain the MAC's competitive cost structure

SERVICE CENTER PERFORMANCE MEASURES



Percentage of continuing consultant evaluations completed



Percentage of attorneys completing an average of 15 CLE hours

INTERNAL AUDIT

Internal Audit provides an independent and objective assurance and consulting service that is guided by a philosophy of adding value by improving the operations of the Metropolitan Airports Commission. The department assists the MAC in accomplishing its objectives by bringing a systematic and disciplined approach to evaluate and improve the effectiveness of the organization's risk management, internal control, and governance processes.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	438,089	449,931	444,766	(5,165)	-1.1%
Administrative Expenses	3,849	7,550	7,950	400	5.3%
Professional Services				0	0.0%
Utilities	540	540	540	0	0.0%
Operating Services/Expenses	406			0	0.0%
Maintenance				0	0.0%
Other				0	0.0%
Total Budget	442,885	458,021	453,256	(4,765)	-1.0%

Full-time Equivalent (FTE) Total

4

4

4

HIGHLIGHTS OF BUDGET

- Personnel The decrease in Personnel is attributable to vacancies due to employee turnover and changes in step levels for positions with employee turnover.
- Administrative Expenses The increase in Administrative Expenses is attributable to the increased cost in the Office Supplies & Materials category, particularly for printer toner cartridges.

2017 SERVICE CENTER OBJECTIVE RESULTS

Objective: Implement the Commission-approved Internal Audit Plan for 2017; issue quarterly reports to the Commission that detail testing processes and results; report audit findings and recommend process improvements for Commission approval

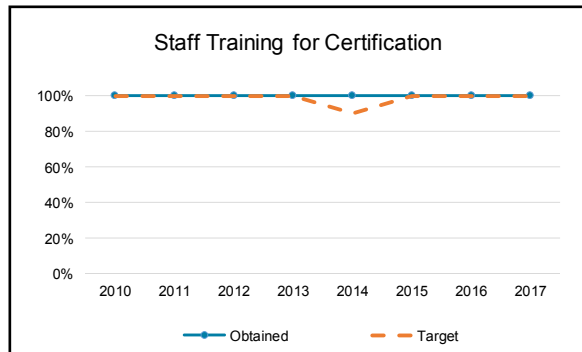
Results: The Audit Plan was implemented as scheduled and the following reports were presented: MAC Continuous Audit Report-2017 3rd Quarter; and Automatic License Plat Reader (ALPR) Audit. Results for Q4 2017 Continuous Audit testing will be issued in Q2 2018.

2018 SERVICE CENTER OBJECTIVE

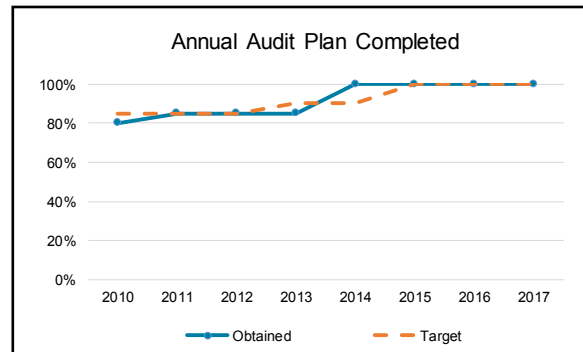
Objective: Implement the Commission-approved Internal Audit Plan for 2018; issue quarterly reports to the Commission that detail testing processes and results; report audit findings and recommend process improvements for Commission approval

Organizational Strategic Goal: Maintain our competitive cost structure while maintaining our airports' economic benefit

Organizational Strategic Objective: Maintain the MAC's competitive cost structure

SERVICE CENTER PERFORMANCE MEASURES

Percentage of required staff training completed for certification maintenance



Percentage of projects in plan completed

GOVERNMENTAL AFFAIRS

Governmental Affairs provides oversight and management of all MAC state and federal legislative issues. The service center monitors and assists in the development of legislative policies that may have an impact on the MAC's goals and objectives. Governmental Affairs staff serve as a first point of contact for federal, state, and local elected officials when they are working on MAC-related issues.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	152,063	186,816	190,731	3,915	2.1%
Administrative Expenses	59,206	65,845	67,915	2,070	3.1%
Professional Services	163,910	207,350	207,350	0	0.0%
Utilities	1,137	840	1,300	460	54.8%
Operating Services/Expenses	107		110	110	100.0%
Maintenance				0	0.0%
Other	1,538	4,300	4,000	(300)	-7.0%
Total Budget	377,960	465,151	471,406	6,255	1.3%

Full-time Equivalent (FTE) Total

1.5

1.5

1.5

HIGHLIGHTS OF BUDGET

- Personnel The increase in Personnel is attributable to wage structure adjustments and step increases.
- Utilities The 2018 budget for Utilities was increased to align with the 2017 actual expended amount, which includes both monthly cell phone stipends and international cell phone charges for business usage during MAC-related travel.

2017 SERVICE CENTER OBJECTIVE RESULTS

Objective: Enhance the MAC's presence in the State Chamber of Commerce

Results: The State Chamber and Minnesota Business Partnership partnered with the MAC and the Airport Foundation MSP on the annual State of the Airport luncheon, including sending invitations to their membership.

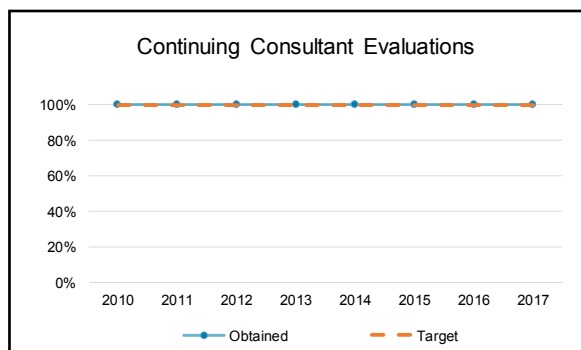
2018 SERVICE CENTER OBJECTIVE

Objective: Work with Greater Minnesota airports to drive state and federal policies that are beneficial to both Minneapolis-St. Paul International Airport and the entire state system of airports

Organizational Strategic Goal: Grow and enhance the narrative

Organizational Strategic Objective: Lead conversations on strategic topics with stakeholders

SERVICE CENTER PERFORMANCE MEASURES



Percentage of evaluations for legislative services consultants completed

INFORMATION TECHNOLOGY

Information Technology (IT) provides leadership and direction to the MAC in the areas of information systems and technology. Responsibilities include reviewing and approving systems, technology plans, budgets, and purchases. IT works with all MAC service centers, airport partners, and airport customers in analyzing needs and implementing business solutions. The work includes analysis, design, selection, acquisition, installation, documentation and support of hardware, applications, infrastructure systems, and technologies.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	3,140,606	3,938,890	4,406,368	467,478	11.9%
Administrative Expenses	336,837	264,163	310,163	46,000	17.4%
Professional Services	1,188,179	958,600	1,105,600	147,000	15.3%
Utilities	333,571	348,050	348,050	0	0.0%
Operating Services/Expenses	4,390,898	6,210,594	6,763,518	552,924	8.9%
Maintenance		20,000	20,000	0	0.0%
Other	1,384,643	1,145,000	1,145,000	0	0.0%
Total Budget	10,774,734	12,885,297	14,098,699	1,213,402	9.4%

Full-time Equivalent (FTE) Total

32

38

45

HIGHLIGHTS OF BUDGET

- Personnel The increase in Personnel is attributable to wage structure adjustments and step increases, as well as the addition of FTEs.
- Administrative Expenses The increase in Administrative Expenses is attributable to extended use of information resources and best practice research to assist with new IT program creation.
- Professional Services The increase in Professional Services is attributable to additional software consulting needs, including support of iVISON, cloud migration, PCI and enterprise architecture.
- Operating Services/Expenses The Operating Services/Expenses increase is attributable to the transfer of software support contract from other units and service agreement cost increases for key IT programs.

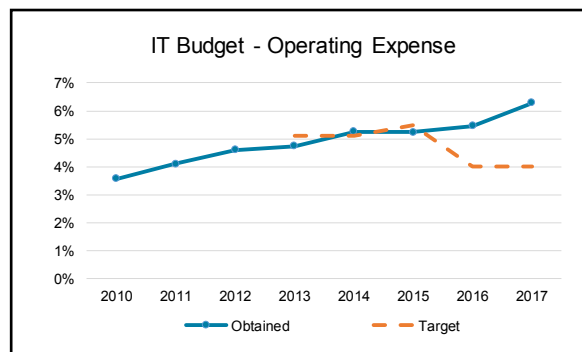
2017 SERVICE CENTER OBJECTIVE RESULTS

- Objective:** Implement a service-oriented Information Technology Service Management toolset that integrates incident and request management while enabling self-service capabilities enterprise-wide
- Results:** At the close of Q4, ServiceNow implementation was complete, IT staff were converted to the new platform as expected, and the MAC-wide launch was completed. This platform represents an online one-stop shop for IT support and need engagement. 2018 will be dedicated to maturing and enhancing its use, with it eventually becoming a service engagement platform for the enterprise.

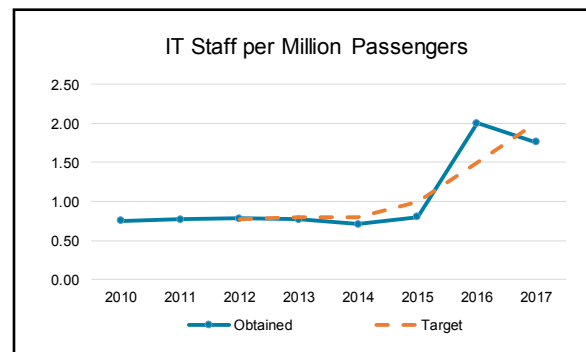
2018 SERVICE CENTER OBJECTIVE

- Objective:** Enable Enterprise Geographical Information Systems (eGIS) for the MAC, positioning our organization to leverage a common set of geospatial assets for operational and development efficiency
- Organizational Strategic Goal:** Innovate through opportunities in technology and sustainability
- Organizational Strategic Objective:** Modernize and accelerate technology use, enabling enterprise solutions

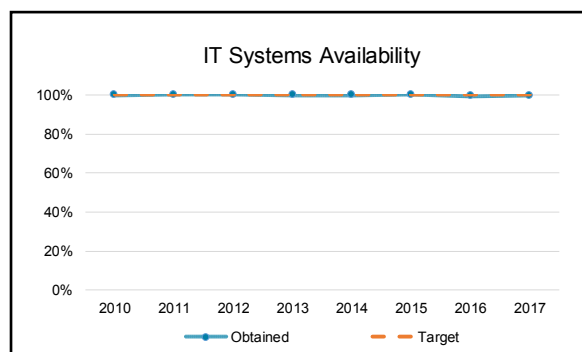
SERVICE CENTER PERFORMANCE MEASURES



Percent of the MAC's total operating expense represented by the IT budget



Ratio of 1 IT staff person to 1 million passengers



Percent of time all systems are available, outside of unplanned downtime

**This graph contains a target line that indicates a maximum target value. The measure is met successfully when the actual value is below the target values.*

Strategy & Stakeholder Engagement Division

Division Organizational Chart



Service Centers

Number	Name
76000	Public Affairs & Marketing
85000	Environment-General
85100	Environmental Affairs
85300	Aviation Noise Program
76100	Air Service Business Development
76200	Sustainability & Strategy

Notations to Service Center Summaries:

- Variance (dollars and %) is computed between 2017 Budget and 2018 Budget amounts
- Explanations for the variances are based upon the 2017 Budget and 2018 Budget amounts
- Negative variances, in most cases, are the result of reductions in one-time expenses or budget reductions
- The FTE count in each service center is as of January 1, 2018. The FTE budget was calculated in 2017 and may not reflect the budgeted FTE count for some service centers.
- Significant changes were made to the organization staff, including the addition of two divisions and the addition of several vice president roles. No changes were made to the service center structure. Therefore, presented at the beginning of each division within this section are the division's organizational chart as approved by the commission, as well as a list of the service centers that are managed within that division.

PUBLIC AFFAIRS & MARKETING

Public Affairs & Marketing (PAM) builds public support for the MAC through media relations, public information, outreach programs, marketing, and advertising; enhances the airport experience by providing information to travelers; and increases MAC revenues through marketing of MAC facilities, parking, and food and retail concessions. In addition, PAM identifies, monitors, and helps address issues that may impact the MAC, communicates airport benefits and issues to surrounding communities, and enhances customer service and the MSP brand by communicating with travelers and tenants. PAM provides information to MAC staff and Commissioners for their use in working to achieve organizational goals, conducts advertising and marketing campaigns aimed at increasing MAC revenues, and continually promotes airport services. In addition, the PAM operates the Information and Paging Office, providing informational services to our customers 14 hours a day, 365 days a year.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	872,842	968,774	1,020,369	51,595	5.3%
Administrative Expenses	187,044	287,114	267,268	(19,846)	-6.9%
Professional Services	251,661	393,000	449,600	56,600	14.4%
Utilities	6,428	6,916	8,100	1,184	17.1%
Operating Services/Expenses	452,434	505,840	615,800	109,960	21.7%
Maintenance	12,831	17,700	18,000	300	1.7%
Other	28,386	17,550	28,000	10,450	59.5%
Total Budget	1,811,625	2,196,894	2,407,137	210,243	9.6%

Full-time Equivalent (FTE) Total

10 10 10

HIGHLIGHTS OF BUDGET

- **Personnel** Information and Paging Office provisional staffing needs increased due to fully integrated real-time customer texting communications as well as a live-chat feature on mspairport.com. The increase is also attributable to wage structure adjustments and step increases.
- **Administrative Expenses** Spending in this category is down largely due to movement of some technology-based information sources to the Information Technology budget.
- **Professional Services** The increase provides more funds for commercial photography, assistance for video shoots, and support for the new MAC website and digital directories that bring the budget in line with actual expenditures as our communications strategies and techniques evolve. Additional funds also address the significant need for professional consultation to guide research, planning, and implementation related to integrating communications and marketing related to our airports, air service development, sustainability and environmental issues, strategic planning, and community engagement.
- **Utilities** The utilities increase is for phone stipends for new FTEs.
- **Operating Services/Expenses** The increase in Operating Services/Expenses is driven by expenses related to Super Bowl LII and increased dollars for advertising and sponsorships to support the MAC's strategic engagement goal and increase the MAC's visibility in the metropolitan community.
- **Other** The increase in the "Other" line brings the budget for rental of audio/visual and lighting equipment for the annual State of the Airport luncheon in line with actual costs and provides funding for cubicle space for new FTEs.

2017 SERVICE CENTER OBJECTIVE RESULTS

Objective: Communicate externally and internally the results of the MSP Airport Economic Impact Study conducted in 2017

Results: MAC Public Affairs & Marketing continued to promote the results of the MSP Airport Economic Impact Study in news distributions, presentations, and ads within MSP's terminals.

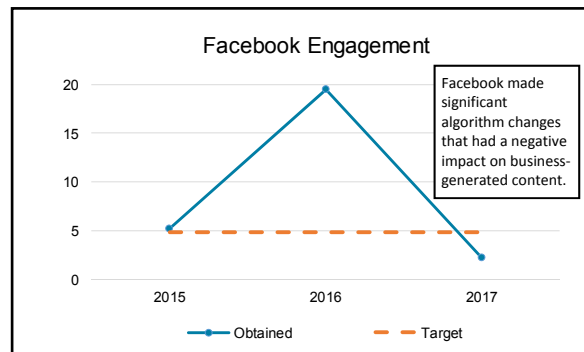
2018 SERVICE CENTER OBJECTIVE

Objective: Provide marketing analytics to support efforts by the Finance and Revenue Development Division and Landside to explore variable parking pricing and packaging, and to market changes in parking options

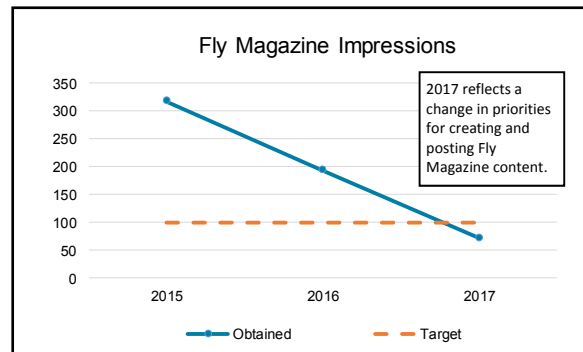
Organizational Strategic Goal: Maintain our competitive cost structure while maintaining our airports' economic benefit

Organizational Strategic Objective: Grow non-aeronautical revenues in concessions, parking, and property development

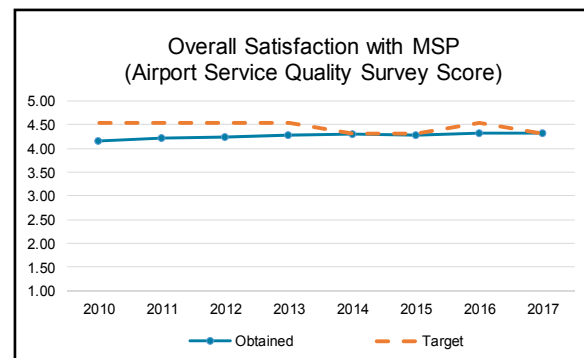
SERVICE CENTER PERFORMANCE MEASURES



Number of Facebook fans who like, share, or comment on a MAC post, in millions



Number of impressions garnered by Fly magazine, in thousands



Number of people subscribing for notices and information through the MAC's subscription news and notification service, in thousands

ENVIRONMENT-GENERAL

Environment-General's vision is to facilitate environmental performance and commitment beyond compliance. Its mission is to support aviation through advancement of innovative and responsible environmental stewardship. Environment facilitates compliance with state and federal environmental regulations at MAC-owned facilities; manages aircraft noise issues and navigation programs; leads environmental review processes in compliance with the Minnesota and National Environmental Policy Acts. Efforts aligned with the MAC's sustainability program including recycling, organics, and greenhouse gas emission management and reduction. Environment maintains an effective working relationship with state and local government. It supports activities to establish sound strategies to reduce environmental impacts from aviation-related activities.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	356,129	474,459	459,396	(15,063)	-3.2%
Administrative Expenses	11,228	19,900	20,900	1,000	5.0%
Professional Services	79,999	207,000	297,000	90,000	43.5%
Utilities	10,878	6,445	2,090	(4,355)	-67.6%
Operating Services/Expenses	39,439			0	0.0%
Maintenance				0	0.0%
Other	1,117			0	0.0%
Total Budget	498,791	707,804	779,386	71,582	10.1%

Full-time Equivalent (FTE) Total

3

4

4

HIGHLIGHTS OF BUDGET

- Personnel The decrease in Personnel is attributable to the realignment of the budget to wages for current personnel.
- Administrative Expenses The increase in Administrative Services expense is driven by an increase in office supplies.
- Professional Services The increase in Professional Services expense is driven by increasing strategic planning activities and expanded stakeholder communication efforts that include the integration of the MAC organization, noise, environment, and sustainability websites.

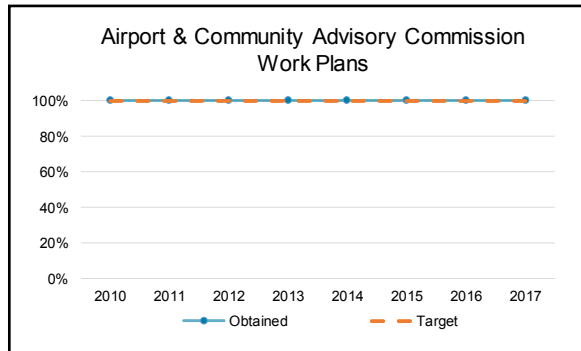
2017 SERVICE CENTER OBJECTIVE RESULTS

- Objective:** Expand the MAC's commitment to air quality and greenhouse gas emissions reductions by establishing a program focused on developing and implementing strategies to reduce air quality impacts and greenhouse gas emissions, and the evaluation of climate adaptation
- Results:** The MAC successfully achieved Level 2 certification under the Airport Carbon Accreditation Program in 2017. As part of this achievement, a Carbon Management Plan was developed for MSP, providing a strategy that includes specific projects and a carbon reduction goal that targets reduced air quality impacts and greenhouse gas emissions.

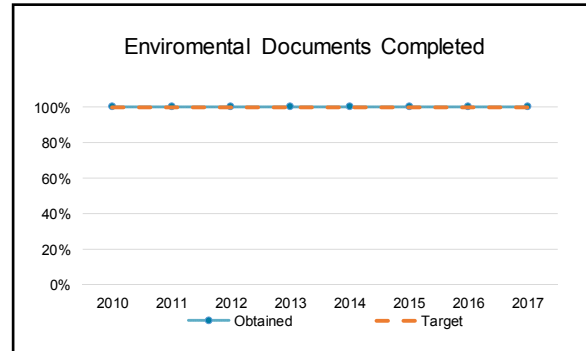
2018 SERVICE CENTER OBJECTIVE

- Objective:** Provide for the proactive maintenance and execution of the Environment Department Strategic Plan in alignment with enterprise strategies to help the organization achieve its goals effectively
- Organizational Strategic Goal:** Innovate through opportunities in technology and sustainability
- Organizational Strategic Objective:** Integrate sustainability into our culture

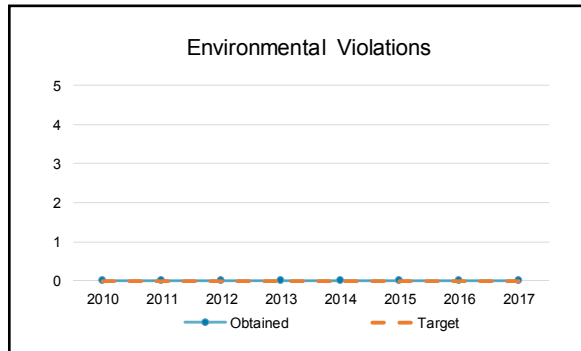
SERVICE CENTER PERFORMANCE MEASURES



Percentage of advisory commission work plans completed



Percentage of environmental documents required for support of MAC activities completed



Total number of environmental violations assessed against the MAC

ENVIRONMENTAL AFFAIRS

Environmental Affairs facilitates compliance with local, state, and federal environmental regulations at MAC-owned facilities. Environmental Affairs maintains programs that document environmental impacts related to construction projects, complies with stormwater and soil management requirements, administers underground and aboveground storage tank rules, monitors and report on air quality and hazardous waste management, implements pollution prevention programs, and performs environmental investigations and audits.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	319,450	316,942	405,360	88,418	27.9%
Administrative Expenses	5,801	7,780	8,055	275	3.5%
Professional Services	334,261	559,400	587,600	28,200	5.0%
Utilities	3,153	3,000	3,200	200	6.7%
Operating Services/Expenses	1,496,750	1,592,650	1,589,900	(2,750)	-0.2%
Maintenance				0	0.0%
Other	63,163	21,150	19,850	(1,300)	-6.1%
Total Budget	2,222,577	2,500,922	2,613,965	113,043	4.5%

Full-time Equivalent (FTE) Total

3

3

4

HIGHLIGHTS OF BUDGET

- **Personnel** The increase in Personnel is attributable to wage structure adjustments and step increases, as well as the addition of FTEs.
- **Administrative Expenses** The increase in Administrative Expenses is attributable to additional travel and increased subscription costs.
- **Professional Services** The increase is driven by an addition of funds to complete the Waste Management Program Assessment started in 2017, to review/report on Water Conservation opportunities for the MSP campus, and to perform an environmental compliance program audit.
- **Utilities** Utilities expense increased as a result of an additional employee cell phone stipend.
- **Other** This decrease is attributable to reallocating costs for environmental licenses to appropriate cost centers.

2017 SERVICE CENTER OBJECTIVE RESULTS

Objective: Continue to reduce airport environmental impacts by minimizing water quality and consumption impacts through the development of a Green Stormwater Infrastructure strategy/plan for the MAC's system of airports

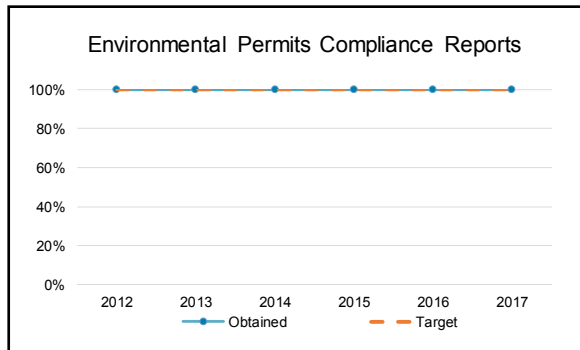
Results: During Q4, a final Green Stormwater Infrastructure (GSI) report was drafted. The report included a GSI implementation plan, which provides a framework for implementing the GSI standard into the MAC Design and Construction Standards, and provides guidance to the MAC on when, where, and how GSI could be implemented on MAC development projects.

2018 SERVICE CENTER OBJECTIVE

Objective: Continue to reduce MSP environmental impacts by developing and implementing a plan to enhance solid waste, recycling, and organics management through a Waste Management Program Assessment

Organizational Strategic Goal: Innovate through opportunities in technology and sustainability

Organizational Strategic Objective: Integrate sustainability into our culture

SERVICE CENTER PERFORMANCE MEASURES

Percentage of regularly-scheduled compliance reports submitted to regulating agencies

AVIATION NOISE PROGRAM

Aviation Noise Program manages aircraft noise issues and navigation programs through an industry-leading noise program built on extensive technology and collaboration efforts with community and aviation stakeholders. Noise Program ensures compliance related to assessing noise impacts and corrective measures that includes management of one of the largest community outreach programs at the MAC and the development and operation of sophisticated technical systems in support of the department's mission.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	466,316	491,359	515,067	23,708	4.8%
Administrative Expenses	24,669	26,887	29,087	2,200	8.2%
Professional Services	153,879	212,000	512,000	300,000	141.5%
Utilities	25,066	19,800	19,800	0	0.0%
Operating Services/Expenses	38,518	123,800	114,000	(9,800)	-7.9%
Maintenance				0	0.0%
Other				0	0.0%
Total Budget	708,448	873,846	1,189,954	316,108	36.2%

Full-time Equivalent (FTE) Total

5 5 5

HIGHLIGHTS OF BUDGET

- Personnel The increase in Personnel is attributable to wage structure adjustments and step increases.
- Administrative Expenses The increase in Administrative Expenses are attributable to print mailing for Crystal Airport environmental assessment and enhanced community engagement efforts.
- Professional Services The increase in Professional Services is driven by costs associated with noise monitoring, community engagement, annual noise contour development, and long-term comprehensive for airports within the MAC system.
- Operating Services/Expenses Operating Services/Expenses decreased as a result of new efficiencies following 2017 equipment purchases.

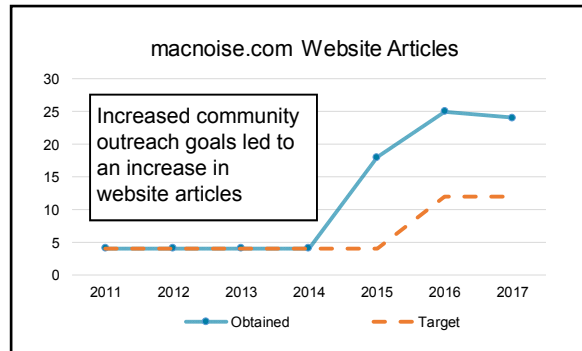
2017 SERVICE CENTER OBJECTIVE RESULTS

- Objective:** Enhance relationships with our stakeholders through implementation of an expanded role for the MAC Noise Program Office to include a focus on wider community engagement with a narrative beyond noise
- Results:** During Q4, MAC Noise Office staff continued to lead the stakeholder engagement efforts for the Lake Elmo Airport Environmental Assessment/Environmental Assessment Worksheet. During the quarter, a public event and Community Engagement Panel (CEP) meetings were held to facilitate stakeholder engagement. MAC Noise Office staff developed and executed a Super Bowl communication plan. Two town hall meetings were held in the community to discuss latest operational trends at MSP, and a Listening Session was held in October to solicit ideas from the public for the Noise Oversight Committee's consideration for their 2018 Work Plan.

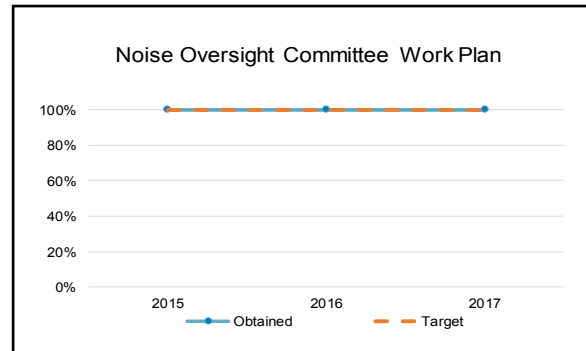
2018 SERVICE CENTER OBJECTIVE

- Objectives:** Increase awareness and transparency of the MAC's commitment to the community by sharing program accomplishments, capabilities, and lessons learned
- Organizational Strategic Goals:** Grow and enhance air service at MSP
- Organizational Strategic Objectives:** Leverage communication tools for a balanced public engagement process

SERVICE CENTER PERFORMANCE MEASURES



Number of website news articles published



Percentage of work plan completed

AIR SERVICE BUSINESS DEVELOPMENT

Air Service Business Development is responsible for three primary areas: 1) developing air service - marketing MSP for new international passenger and cargo flights and for new low-fare domestic passenger flights; 2) promoting the facilities and services of MSP and the MAC's system of airports both domestically and internationally; and 3) building community relations - establishing partnerships with public and private sectors to increase their awareness of the importance of air service in the region and solicit their support for such services.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel			142,297	142,297	100.0%
Administrative Expenses	16,975	24,331	44,168	19,837	81.5%
Professional Services	62,392	119,000	100,000	(19,000)	-16.0%
Utilities				0	0.0%
Operating Services/Expenses	270,428	100,000		(100,000)	-100.0%
Maintenance				0	0.0%
Other				0	0.0%
Total Budget	349,795	243,331	286,465	43,134	17.7%

Full-time Equivalent (FTE) Total

0 0 1

HIGHLIGHTS OF BUDGET

- **Personnel** The increase in Personnel is attributable to one FTE addition to the Air Service Business Development service center.
- **Administrative Expenses** Air service data service is appropriately re-categorized as an administrative expense instead of a professional services expense
- **Professional Services** Air service data service is appropriately re-categorized as an administrative expense instead of a professional services expense
- **Operating Services/Expenses** The Operating Services/Expenses category decreased because incentives moved to MAC General in 2018.

2017 SERVICE CENTER OBJECTIVE RESULTS

Objective: Market MSP to incumbent and potential new entrant airlines at industry air service business development conferences in 2017, with the goal of increasing awareness of the Minneapolis-St. Paul air travel market

Results: Three air service conferences were attended and 35 airline meetings were completed.

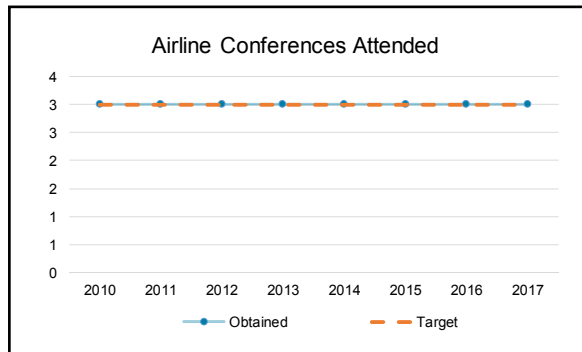
2018 SERVICE CENTER OBJECTIVE

Objective: Market MSP to incumbent and potential new entrant airlines at industry air service business development conferences in 2018, and communicate/leverage Regional Air Services Partnership efforts to target airlines, with the goal of increasing awareness of the Minneapolis-St. Paul air travel market

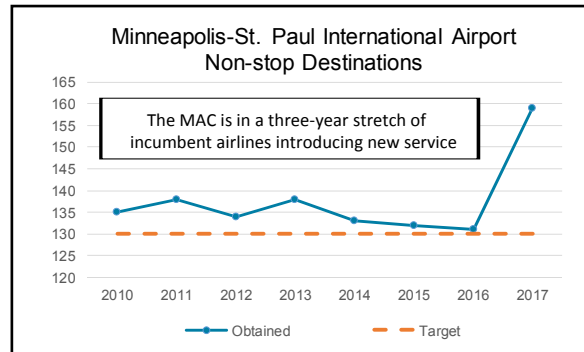
Organizational Strategic Goal: Grow and enhance air service at MSP

Organizational Strategic Objective: Increase competition, attract new airlines, and expand service for non-stop destinations

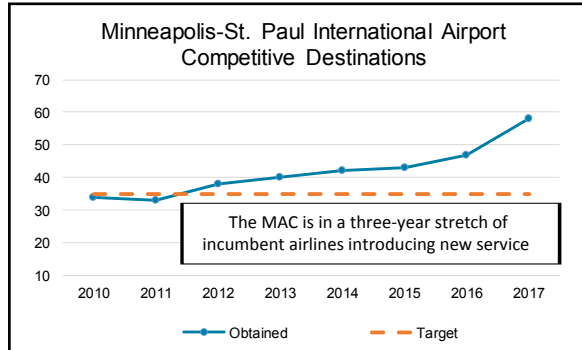
SERVICE CENTER PERFORMANCE MEASURES



Number of airline conferences attended



Total number of non-stop destinations offered



Total number of competitive destinations offered

SUSTAINABILITY & STRATEGY

Sustainability & Strategy is responsible for the Commission's sustainability and strategy plans, processes, and outcomes. The sustainability effort provides a plan, process, and measurement of outcomes for the organization's vision to infuse sustainability into its way of doing business. The strategic plan sets the key goals to achieve the MAC's vision to provide your best airport experience.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	173,622	286,332	287,627	1,295	0.5%
Administrative Expenses	11,721	20,375	20,375	0	0.0%
Professional Services	99,848	125,000	25,000	(100,000)	-80.0%
Utilities	707	840	840	0	0.0%
Operating Services/Expenses			5,000	5,000	100.0%
Maintenance				0	0.0%
Other	1,517	1,500	1,500	0	0.0%
Total Budget	287,416	434,047	340,342	(93,705)	-21.6%

Full-time Equivalent (FTE) Total

2

3

3

HIGHLIGHTS OF BUDGET

- Personnel The increase in Personnel is attributable to wage structure adjustments and step increases.
- Professional Services Position vacancies and unknown timeline for filling them make it unlikely 125K would be utilized in 2018. Expenses in this area may increase beyond amount budgeted if and when positions are filled.
- Operating Services/Expenses The increase in Operating Services/Expenses is due to one-time costs for Super Bowl LII.

2017 SERVICE CENTER OBJECTIVE RESULTS

Objective: Complete the first phase of a sustainability data management program

Results: Hiring of a sustainability data analyst was put on hold by the CEO. As a result, no work on a sustainability data management program took place in 2017.

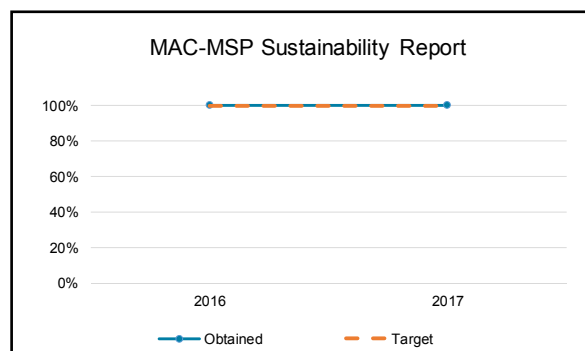
2018 SERVICE CENTER OBJECTIVE

Objective: Support the new division VP in infusing sustainability into everything we do

Organizational Strategic Goal: Innovate through opportunities in technology and sustainability

Organizational Strategic Objective: Integrate sustainability into our culture

SERVICE CENTER PERFORMANCE MEASURES



Publish an annual sustainability report and/or update report

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Finance & Revenue Development Division

Division Organizational Chart



Service Centers

Number	Name
76700	Live Well, Stay Well
76800	Insurance/Risk Management
78000	Finance
78100	MAC General
78200	Purchasing
80000	Commercial Management & Airline Affairs
80100	Concessions & Business Development
82050	MSP Airport Conference Center

Notations to Service Center Summaries:

- Variance (dollars and %) is computed between 2017 Budget and 2018 Budget amounts
- Explanations for the variances are based upon the 2017 Budget and 2018 Budget amounts
- Negative variances, in most cases, are the result of reductions in one-time expenses or budget reductions
- The FTE count in each service center is as of January 1, 2018. The FTE budget was calculated in 2017 and may not reflect the budgeted FTE count for some service centers.
- Significant changes were made to the organization staff, including the addition of two divisions and the addition of several vice president roles. No changes were made to the service center structure. Therefore, presented at the beginning of each division within this section are the division's organizational chart as approved by the commission, as well as a list of the service centers that are managed within that division.

LIVE WELL, STAY WELL

The Live Well, Stay Well Program works to encourage, educate, and support employees in making healthier lifestyle choices and strives to create a positive impact on employee morale and productivity. By achieving these goals, the program is also instrumental in reducing healthcare costs.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	330	1,000	1,000	0	0.0%
Administrative Expenses	8,058	2,000	7,000	5,000	250.0%
Professional Services		6,000	6,000	0	0.0%
Utilities		504	504	0	0.0%
Operating Services/Expenses	134,264	141,000	136,000	(5,000)	-3.5%
Maintenance				0	0.0%
Other	3,265	10,000	10,000	0	0.0%
Total Budget	145,918	160,504	160,504	0	0.0%

Full-time Equivalent (FTE) Total

0 0 0

HIGHLIGHTS OF BUDGET

- Administrative Expenses Funds added for additional administrative expense needs (i.e. WELCOA Conference, etc.)
- Operating Services/Expenses Funds were re-allocated to Administrative Expense needs.

2017 SERVICE CENTER OBJECTIVE RESULTS

Objective: Successfully transition the Well-being brand to the Live Well, Stay Well brand through enhanced internal communications and consistent engagement with MAC staff

Results: Further progress was made in exploring use of an online wellness portal that will more fully integrate the Health Engagement Program and Live Well, Stay Well. Additional progress was made in channeling marketing and communications through one brand that touches all programs and continues to engage employees.

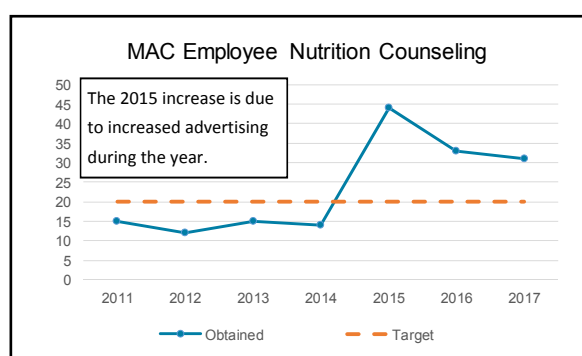
2018 SERVICE CENTER OBJECTIVE

Objective: Investigate online tools for Live Well, Stay Well to streamline processes and further engage our employees and their families, with an eye toward future implementation

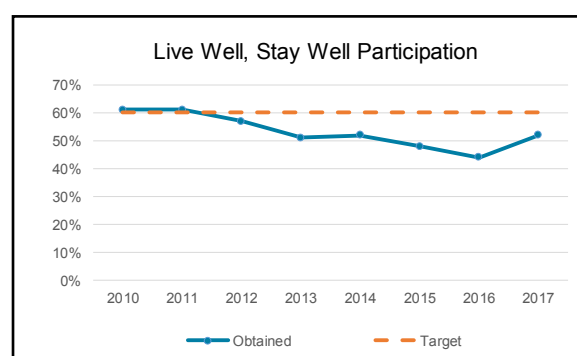
Organizational Strategic Goal: Innovate through opportunities in technology and sustainability

Organizational Strategic Objective: Modernize and accelerate technology use, enabling enterprise solutions

SERVICE CENTER PERFORMANCE MEASURES



Number of employees receiving nutrition counseling



Percent of employees participating in Live Well, Stay Well programs

INSURANCE/RISK MANAGEMENT

Insurance/Risk Management is responsible for the planning, organizing, and administering of risk and insurance programs to safeguard the MAC's assets from the risk of accidental loss, through the use of recognized risk management techniques. Responsibilities include risk identification, evaluation, and measurement; preventative strategies; claims administration; purchase of coverage; and evaluation of financing alternatives. Areas of responsibility also include employee benefit programs and administration, workers' compensation, the MAC's health engagement program, liability and property insurance coverage, employee and fleet safety, and maintaining a safe airports system.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	12,642,115	13,167,099	13,770,916	603,817	4.6%
Administrative Expenses	11,915	23,750	21,750	(2,000)	-8.4%
Professional Services	381,835	371,000	395,535	24,535	6.6%
Utilities	828	504	840	336	66.7%
Operating Services/Expenses	4,139	16,000	13,060	(2,940)	-18.4%
Maintenance	3,960			0	0.0%
Other	1,936,611	2,160,483	2,193,709	33,226	1.5%
Total Budget	14,981,403	15,738,836	16,395,810	656,974	4.2%

Full-time Equivalent (FTE) Total

6

6

6

HIGHLIGHTS OF BUDGET

- Personnel The increase in Personnel is attributable to wage structure adjustments and step increases and includes an increase in employee benefits based on current head count.
- Administrative Expenses The decrease in Administrative Expenses is attributable to lower service center travel expenses in 2018.
- Professional Services The increase in Professional Services is attributable to a 2018 special project to be led by the Benefits consultant.
- Utilities The Utilities increase is attributable to additional business cell phone usage.
- Operating Services/Expenses The 2017 Operating Services/Expenses budget included one-time purchases of equipment. This is not included in the 2018 budget.
- Other The Other expense increase is attributable to increased insurance needs in 2018.

2017 SERVICE CENTER OBJECTIVE RESULTS

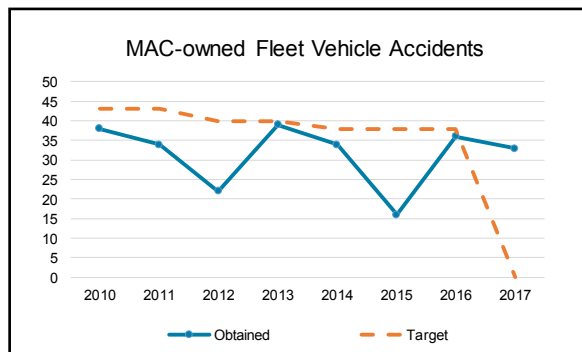
Objective: Complete harmonization of the Business Continuity Plans and the Continuity of Operations Plan
Results: Harmonization of the Business Continuity Plan and the Continuity of Operations Plan was completed.

2018 SERVICE CENTER OBJECTIVE

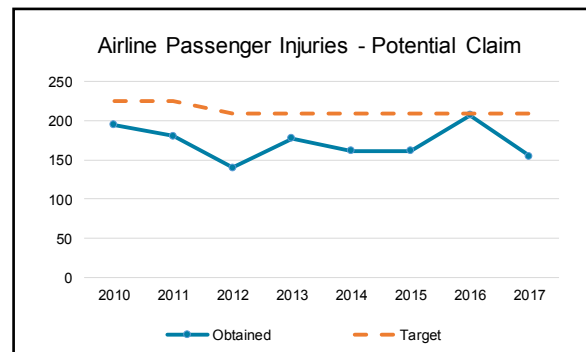
Objective: Designate efforts to reduce MAC employee accidents and injuries; outline methods to increase employee trainings with relevant content, increase attendance at Safety Meetings, and update and revamp safety policies

Organizational Strategic Goal: Keep our airports safe and secure

Organizational Strategic Objective: Prepare for current and potential threats to public safety and critical infrastructure through robust and aligned airport planning processes

SERVICE CENTER PERFORMANCE MEASURES

Total number of accidents involving MAC-owned fleet vehicles



Total injuries with potential for damage claim*

**This graph contains a target line that indicates a maximum target value. The measures is met successfully when the actual value is below the target values.*

FINANCE

Finance is responsible for the Commission's accounting and cash management functions and the preparation of the annual operating budget as well as the Comprehensive Annual Financial Report. Finance oversees financial planning which includes, but is not limited to, issuance of all debt, development of tenant rates and charges, cost-benefit analysis, financial analysis, and request for proposal assistance.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	1,423,359	1,456,275	1,669,209	212,934	14.6%
Administrative Expenses	26,711	25,796	24,691	(1,105)	-4.3%
Professional Services	209,552	205,900	214,750	8,850	4.3%
Utilities	1,980	2,160	2,160	0	0.0%
Operating Services/Expenses	226,310	213,200	219,805	6,605	3.1%
Maintenance	821			0	0.0%
Other	1,949	2,000	1,000	(1,000)	-50.0%
Total Budget	1,890,681	1,905,331	2,131,615	226,284	11.9%

Full-time Equivalent (FTE) Total

15

15

15

HIGHLIGHTS OF BUDGET

- **Personnel** The increase in Personnel is attributable to wage structure adjustments and step increases, as well as to salary increases for positions that were reclassified in the organizational structure.
- **Professional Services** The increase is due to additional actuarial costs in determining the best course of action in implementing GASB No. 75
- **Operating Services/Expenses** The increase is due to additional trustee costs associated with borrowing from the Commission's revolving line of credit

2017 SERVICE CENTER OBJECTIVE RESULTS

Objective: Manage the construction of new concession lease management files as new store units open, and the deconstruction of existing leases as old store units close

Results: With the completion of the Phase I concessions program, new concession lease management lease files for Phase II will be created and managed as the Phase II units come on line.

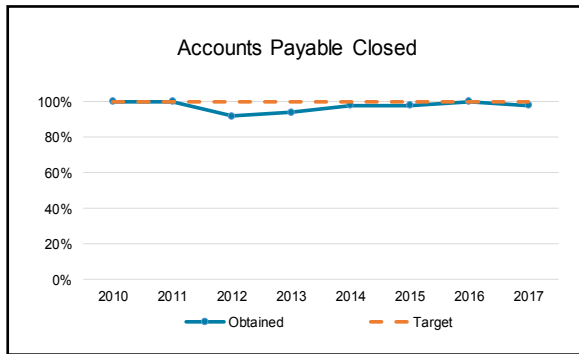
2018 SERVICE CENTER OBJECTIVE

Objective: Manage the construction of new concession lease management files as new Phase II concessions program store units open, and the deconstruction of existing leases as old store units close. Evaluate the best cost-effective course of action in the implementation of Governmental Accounting Standards Board Statement #75 - Accounting and Financial Reporting for Post-employment Benefits other than Pensions; possible considerations are establishing a trust to pay for future benefits.

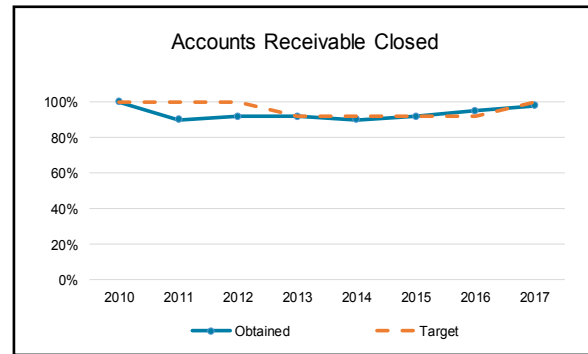
Organizational Strategic Goal: Maintain our competitive cost structure while maintaining our airports' economic benefit

Organizational Strategic Objective: Maintain the MAC's competitive cost structure

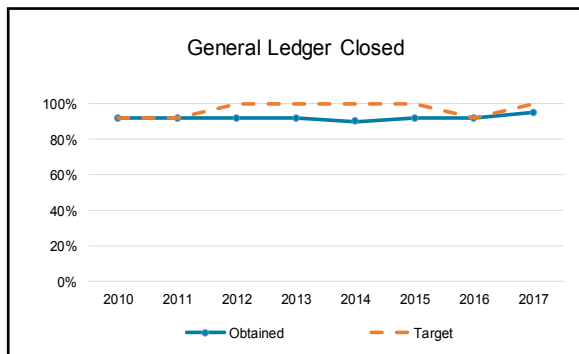
SERVICE CENTER PERFORMANCE MEASURES



Percentage of Accounts Payable closed by the Friday before General Ledger closing



Percentage of Accounts Receivable closed within two business days



Percentage of Monthly General Ledger closed by the second Monday of the month

PURCHASING

Purchasing oversees the acquisition of materials, equipment, and supplies; coordinating minor construction; and repairing or performing minor maintenance to meet the needs of end users by using the method that results in the most efficient use of MAC resources. Purchasing administers the Commercial Card Program for the MAC and maintains blanket orders, including insurance certificates, for contracts generated by Purchasing. Purchasing's responsibilities also include disposing of surplus property by distribution of surplus items between MAC departments, selling items on the open market, and donating items to various charities.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	435,487	455,401	470,078	14,677	3.2%
Administrative Expenses	38,774	49,200	44,200	(5,000)	-10.2%
Professional Services				0	0.0%
Operating Services/Expenses	183,068	171,100	185,400	14,300	8.4%
Maintenance				0	0.0%
Other	7,184	1,700	8,100	6,400	376.5%
Total Budget	664,513	677,401	707,778	30,377	4.5%

Full-time Equivalent (FTE) Total

6 6 6

HIGHLIGHTS OF BUDGET

- Personnel The increase in Personnel is attributable to wage structure adjustments and step increases.
- Administrative Expenses The decrease in Administrative Expenses is attributable to postage costs, which are decreasing as electronic transmissions increase.
- Operating Services/Expenses This increase includes the MAC-wide management of the multi-functional devices contract and the management of the General Offices Service Center.
- Other This increase primarily includes the MAC-wide tax exempt vehicle tab renewals, which come due in even-numbered years.

2017 SERVICE CENTER OBJECTIVE RESULTS

Objective: Develop and implement a paperless submission and review process for Request for Proposals (RFPs)

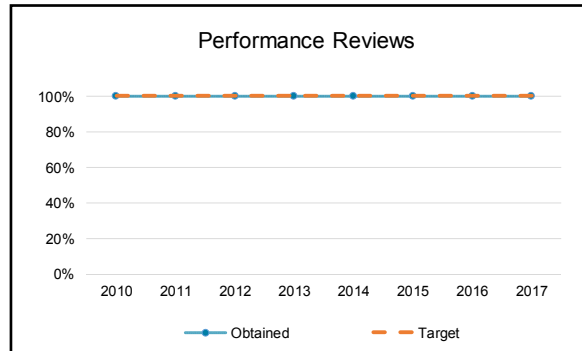
Results: Purchasing continues to accept one original proposal document along with an electronic copy on a flash drive; the electronic copy is saved to a shared drive for the project team to review

2018 SERVICE CENTER OBJECTIVE

Objective: Create and implement a quarterly newsletter covering Organizational Staff, Division, Finance, and Purchasing meetings to improve division communications

Organizational Strategic Goal: Be a model employer

Organizational Strategic Objective: Talent - Cultivate an engaged workforce

SERVICE CENTER PERFORMANCE MEASURES

Percentage of department employee performance reviews completed by year-end

COMMERCIAL MANAGEMENT & AIRLINE AFFAIRS

Commercial Management & Airline Affairs (CMAA) oversees revenue generation from airline and airport concession agreements, MSP leases, and system-wide non-aeronautical leases. CMAA manages MAC property and real estate. It also works to maintain and enhance air service at MSP, including development and management of incentive programs and efforts to spur additional domestic and international route development.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	520,275	537,170	527,675	(9,495)	-1.8%
Administrative Expenses	22,970	24,600	29,529	4,929	20.0%
Professional Services	116,042	120,000	100,000	(20,000)	-16.7%
Utilities	4,350	4,500	4,500	0	0.0%
Operating Services/Expenses	394	2,500	1,500	(1,000)	-40.0%
Maintenance	331,696	346,015	360,845	14,830	4.3%
Other	(113)			0	0.0%
Total Budget	995,613	1,034,785	1,024,049	(10,736)	-1.0%

Full-time Equivalent (FTE) Total

5

5

5

HIGHLIGHTS OF BUDGET

- Personnel The decrease in Personnel is attributable to vacancies due to employee turnover and changes in step levels for positions with employee turnover.
- Administrative Expenses The increase in Administrative Expenses is attributable to increased local and conference travel expenses.
- Professional Services Professional Services is lower due to an anticipated decrease in consultant needs.
- Maintenance Increased maintenance expenses are attributable to air cargo building maintenance, which includes expenses for a new escalator built into the annual contract.

SERVICE CENTER PERFORMANCE MEASURES



*Number of real estate leases entered into at MAC
Reliever Airports*

CONCESSIONS & BUSINESS DEVELOPMENT

Concessions & Business Development oversees revenue generation from airport concession agreements and implements new concepts to improve the customer experience and revenue generation at MSP. Concessions & Business Development manages MAC property and real estate within the terminals.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	458,700	485,800	512,964	27,164	5.6%
Administrative Expenses	11,756	16,557	17,980	1,423	8.6%
Professional Services	319,535	425,000	120,000	(305,000)	-71.8%
Utilities	3,360	3,780	3,780	0	0.0%
Operating Services/Expenses	1,170	5,000	3,000	(2,000)	-40.0%
Maintenance				0	0.0%
Other	2,331	10,000	10,000	0	0.0%
Total Budget	796,852	946,137	667,724	(278,413)	-29.4%

Full-time Equivalent (FTE) Total

5

5

5

HIGHLIGHTS OF BUDGET

- Personnel The increase in Personnel is attributable to wage structure adjustments and step increases.
- Professional Services The decrease in Professional Services anticipates lower consultant payments due to the expiration of the current consultant agreement.
- Operating Services/Expenses The decrease in Operating Services/Expenses is attributable to a decreased need for special projects advertising.

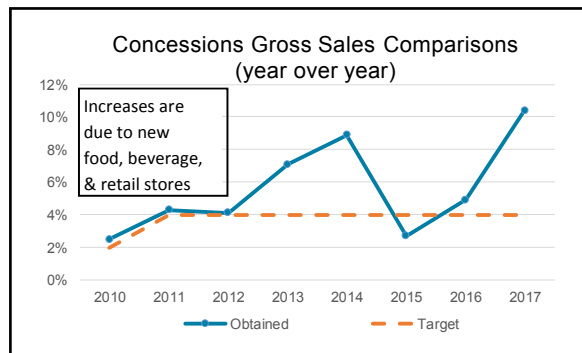
2017 SERVICE CENTER OBJECTIVE RESULTS

- Objective:** Curate a food-beverage program diverse in meeting traveling public needs, bid competitively through an RFP process; refine and enhance the new retail program to ensure accessible customer service training standards and identify opportunities to drive revenue
- Results:** During Q4 we initiated, and engaged MAC Public Affairs & Marketing to join, monthly sales comps meetings to study results of year-over-year comps, identify underperforming units, and look for areas to increase revenue. Moving forward, we will target one Food & Beverage and one Retail unit each month to study ways to increase customer satisfaction within the unit and increase the average guest check.

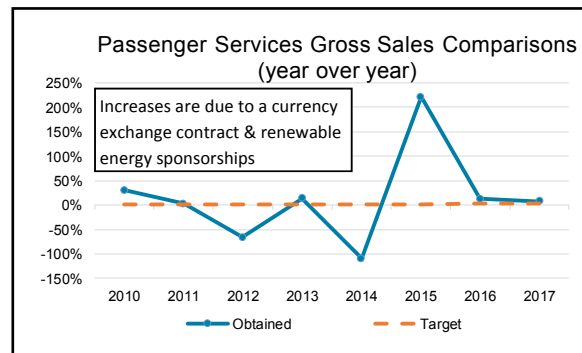
2018 SERVICE CENTER OBJECTIVE

- Objective:** Initiate the MAC concessions design process and commence construction for 30 new restaurants for the MSP Phase 2 Concessions Program; ensure that the concept executions and design support the vision to evolve the customer experience from current MSP offerings
- Organizational Strategic Goal:** Delight our passengers
- Organizational Strategic Objective:** Reimagine and renew our airports to continually evolve our customer experience

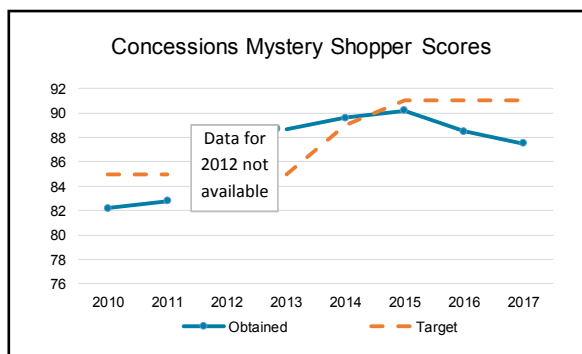
SERVICE CENTER PERFORMANCE MEASURES



Percentage increase or decrease in concessions gross sales (n/a passenger services)



Percent change in passenger services gross sales



Annual average mystery shopper score observed by third party

MSP AIRPORT CONFERENCE CENTER

The MSP Airport Conference Center provides first-class customer service to the external and internal customer. Staff are responsible for the management and promotion of the conference center, providing catering services, maintaining audio-visual equipment, and invoicing internal/external clients.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	170,201	203,110	244,938	41,828	20.6%
Administrative Expenses	6,801	7,000	8,500	1,500	21.4%
Professional Services				0	0.0%
Utilities	840	864	864	0	0.0%
Operating Services/Expenses	26,549	33,700	33,700	0	0.0%
Maintenance				0	0.0%
Other	4,989	7,600	10,600	3,000	39.5%
Total Budget	209,380	252,274	298,602	46,328	18.4%

Full-time Equivalent (FTE) Total

2

3

3

HIGHLIGHTS OF BUDGET

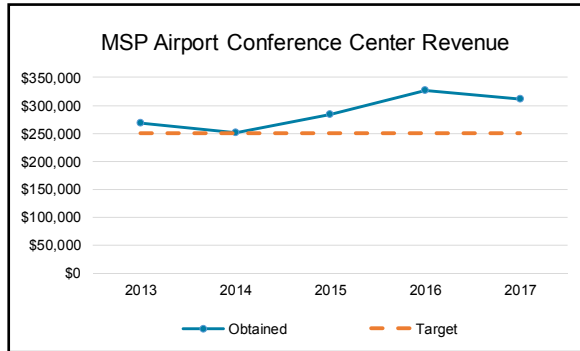
- Personnel The increase in Personnel is attributable to wage structure adjustments and step increases. It also includes an increase for temporary staff to cover increased business clientele and the needs of those clients.
- Administrative Expenses The increase in Administrative Expenses is attributable to better aligning budgeted office supply amounts to anticipated actual needs.
- Other The increase in Other is due to a minor asset purchase required by the Minnesota Department of Health.

2017 SERVICE CENTER OBJECTIVE RESULTS

- Objective:** Improve the initial online customer experience, enhance the face-to-face experience, and expand technological offerings to our customers
- Results:** During 2017, the Conference Center completed the technology upgrades in the Commission Chambers, and upgraded the online experience to include updated photos of the new technology and interior features. In an effort to enhance the face-to-face customer experience, Conference Center staff worked to increase staff presence in the office. This effort will continue to be a focus in 2018.

2018 SERVICE CENTER OBJECTIVE

- Objective:** Explore and introduce new offerings to our customers
- Organizational Strategic Goal:** Delight our passengers
- Organizational Strategic Objective:** Reimagine and renew our airports to continually evolve our customer experience

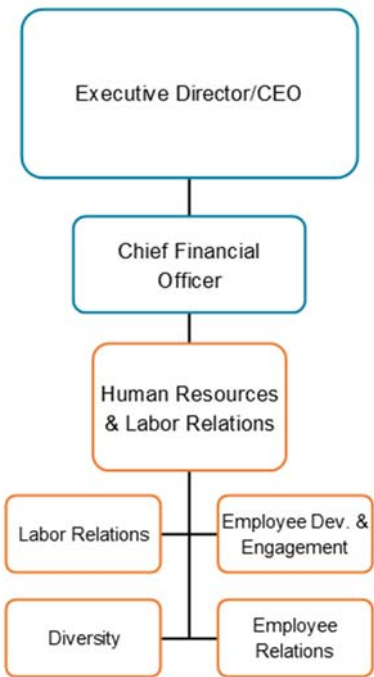
SERVICE CENTER PERFORMANCE MEASURES

Gross revenue generated

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Human Resources & Labor Relations Division

Division Organizational Chart



Service Centers

Number	Name
75700	Human Resources & Labor Relations
76600	Employee Development & Engagement
80600	Diversity
81500	Employee Relations

Notations to Service Center Summaries:

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- Explanations for the variances are based upon the 2017 Budget and 2018 Budget amounts
- Negative variances, in most cases, are the result of reductions in one-time expenses or budget reductions
- The FTE count in each service center is as of January 1, 2018. The FTE budget was calculated in 2017 and may not reflect the budgeted FTE count for some service centers.
- Significant changes were made to the organization staff, including the addition of two divisions and the addition of several vice president roles. No changes were made to the service center structure. Therefore, presented at the beginning of each division within this section are the division's organizational chart as approved by the commission, as well as a list of the service centers that are managed within that division.

HUMAN RESOURCES & LABOR RELATIONS

Human Resources & Labor Relations is responsible for two main areas. Human Resources facilitates the continuation of the MAC as a high-performing organization where employees experience excellence in leadership, challenging work, and opportunities for growth and development while being rewarded competitively. This area is responsible for the oversight and management of human resources, products, and services delivered by Employee Relations, Employee Development & Engagement, and the Office of Diversity. Each of these areas has a separate budget. The Labor Relations area negotiates and administers 13 labor contracts at the Commission. Labor Relations also interacts with and mediates disputes between outside unions and contractors that could jeopardize Commission operations.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	460,168	604,685	591,236	(13,449)	-2.2%
Administrative Expenses	15,031	15,470	15,410	(60)	-0.4%
Professional Services	75,623	95,000	80,000	(15,000)	-15.8%
Utilities	700	840	840	0	0.0%
Operating Services/Expenses	18,028	32,500	32,000	(500)	-1.5%
Maintenance				0	0.0%
Other				0	0.0%
Total Budget	569,550	748,495	719,486	(29,009)	-3.9%

Full-time Equivalent (FTE) Total

5

5

5

HIGHLIGHTS OF BUDGET

- Personnel The decrease in Personnel is attributable to vacancies due to employee turnover and changes in step levels for positions with employee turnover.
- Professional Services Professional Services decreased as a result of lower recruitment needs at the executive level in 2018 and to better align the budgeted general recruiting costs with actual spending in recent years.

2017 SERVICE CENTER OBJECTIVE RESULTS

Objective: During 2017, complete the negotiation process for all labor agreements

Results: Negotiation of all MAC labor agreements was completed.

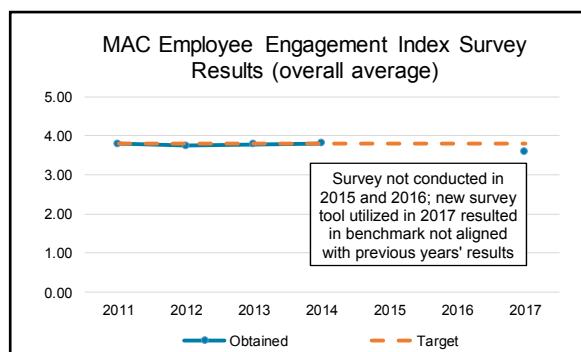
2018 SERVICE CENTER OBJECTIVE

Objective: Form and lead a committee whose objective will be to establish an employee recognition program for the MAC

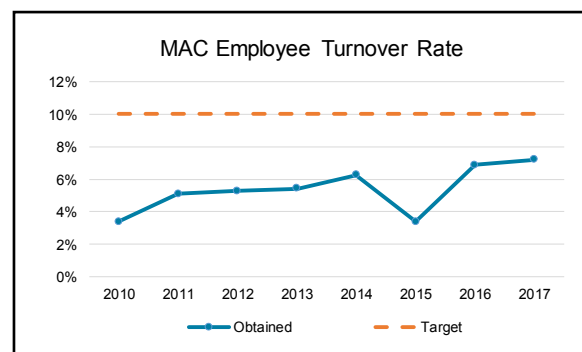
Organizational Strategic Goal: Be a model employer

Organizational Strategic Objective: Cultivate an engaged workforce

SERVICE CENTER PERFORMANCE MEASURES



Employee Engagement Index



Percentage rate of employee turnover*

*This graph contains a target line that indicates a maximum target value. The measure is met successfully when the actual value is below the target values.

EMPLOYEE DEVELOPMENT & ENGAGEMENT

Employee Development & Engagement is responsible for the facilitation of employee development throughout the organization. This includes live and on-line training programs, coaching, mentorship, and individual development plans. The department also works with Human Resources and Employee Relations on performance improvement plans and workforce planning.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	263,974	413,887	225,029	(188,858)	-45.6%
Administrative Expenses	1,858	7,500	12,300	4,800	64.0%
Professional Services		25,000	25,000	0	0.0%
Utilities				0	0.0%
Operating Services/Expenses	5,952	7,500	6,500	(1,000)	-13.3%
Maintenance				0	0.0%
Other				0	0.0%
Total Budget	271,784	453,887	268,829	(185,058)	-40.8%

Full-time Equivalent (FTE) Total

3 3 1

HIGHLIGHTS OF BUDGET

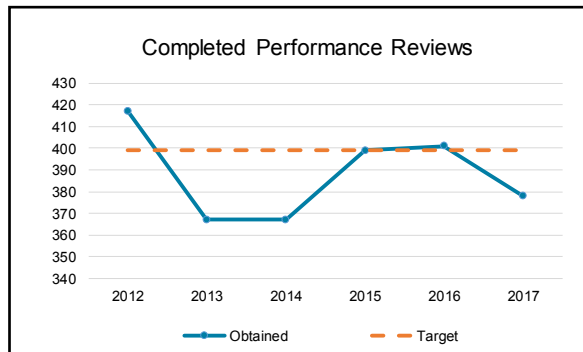
- **Personnel** The decrease in Personnel is attributable to two FTEs transferred in 2018 from service center 76600-Employee Development to 81500-Employee Relations.
- **Administrative Expenses** The increase in Administrative Expenses is attributable to additional training materials and supplies for onsite staff development and training classes.
- **Operating Services/Expenses** The decrease in Operating Services/Expenses is attributable to an anticipated reduction in the number of retirement awards to be distributed in 2018.

2017 SERVICE CENTER OBJECTIVE RESULTS

- Objective:** Redesign the performance review process to improve organization-wide understanding of the MAC's strategic goals
- Results:** The redesign of the performance review process to improve organization-wide understanding of the MAC's strategic goals was 50% complete.

2018 SERVICE CENTER OBJECTIVE

- Objective:** Re-design the MAC's competency architecture to improve how employees are selected, developed, and evaluated
Support management and senior leadership in the development of employee engagement action plans
- Organizational Strategic Goal:** Be a model employer
- Organizational Strategic Objective:** Invest in training and professional development opportunities that align with our goals
Cultivate an engaged workforce

SERVICE CENTER PERFORMANCE MEASURES

*Number of employee performance reviews
completed across the MAC*

DIVERSITY

Diversity is responsible for contract compliance and affirmative action programs. Contract compliance includes the Targeted Group Business (TGB) and the Disadvantaged Business Enterprise (DBE) Programs. TGB/DBE responsibilities are community relations, training, certification, and state and federal reporting. The TGB/DBE programs provide business opportunities for firms owned by women, minorities, and persons with disabilities. The Affirmative Action Program includes American with Disabilities Act, English as a Second Language, hiring, and complaint investigations. Customers include the traveling public, the Commission, internal staff, business owners, vendors, contractors, and consultants.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	198,969	200,712	214,678	13,966	7.0%
Administrative Expenses	27,804	34,575	34,675	100	0.3%
Professional Services	1,200	30,000		(30,000)	-100.0%
Utilities	840	850	850	0	0.0%
Operating Services/Expenses	2,845	4,000	4,000	0	0.0%
Maintenance				0	0.0%
Other				0	0.0%
Total Budget	231,657	270,137	254,203	(15,934)	-5.9%

Full-time Equivalent (FTE) Total

2

2

2

HIGHLIGHTS OF BUDGET

- Personnel The increase in Personnel is attributable to wage structure adjustments and step increases.
- Professional Services The 2017 budget included funds for the recruitment of Fire Department interns.

2017 SERVICE CENTER OBJECTIVE RESULTS

Objective: Review, revise, and expand the scope of the MAC's diversity plan by the end of 2017

Results: During Q4, the MAC's Diversity Plan was reviewed, revised, and expanded.

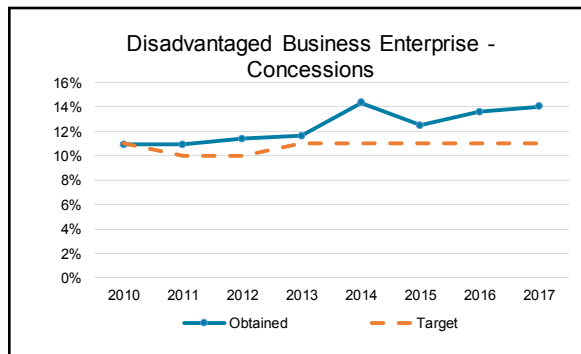
2018 SERVICE CENTER OBJECTIVE

Objective: Establish a diverse, inclusive and local talent pipeline for future maintenance hires representing economically disadvantaged neighborhoods around Minneapolis-St. Paul International Airport; finalize the MAC's Diversity and Inclusion Plan and present to MAC employees and Commissioners

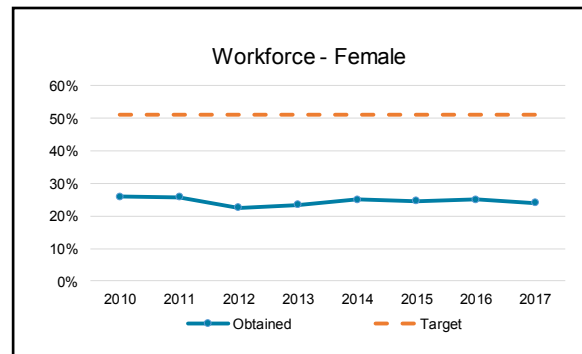
Organizational Strategic Goal: Be a model employer

Organizational Strategic Objective: Increase diversity, inclusion, and equity at MAC

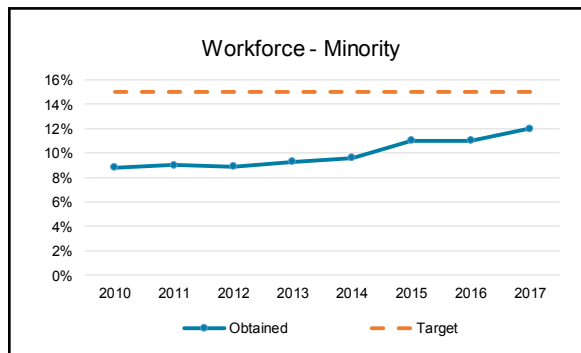
SERVICE CENTER PERFORMANCE MEASURES



Percentage of concession dollars generated by DBEs



Percentage of MAC workforce that is female



Percentage of MAC workforce that is minority

EMPLOYEE RELATIONS

Employee Relations staff are responsible for: 1) administering compensation programs for all employees; 2) maintaining all personnel data, personnel files, and the Human Resource Information System (HRIS); 3) developing, maintaining, and distributing personnel policies and management reports; 4) counseling management and non-management employees with regard to Human Resource policies and practices; 5) working with supervisors and leaders to strengthen skills related to employee relations issues; and 6) administering all policies related to recruitment and staffing for all open positions.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	341,305	345,243	553,181	207,938	60.2%
Administrative Expenses	9,677	17,645	15,607	(2,038)	-11.6%
Professional Services	74,994	62,264	80,000	17,736	28.5%
Utilities				0	0.0%
Operating Services/Expenses	8,164	8,000	9,500	1,500	18.8%
Maintenance				0	0.0%
Other				0	0.0%
Total Budget	434,140	433,152	658,288	225,136	52.0%

Full-time Equivalent (FTE) Total

3

3

5

HIGHLIGHTS OF BUDGET

- Personnel The increase in Personnel is attributable wage and step increases, as well as to 2 FTEs transferred in 2018 from service center 76600-Employee Development to 81500-Employee Relations.
- Administrative Expenses Administrative Expenses have decreased primarily due to reduced out of town travel. Reductions were also made due to previous actual spending.
- Professional Services Professional Services increased due to increased staffing and recruiting activity. The increase also reflects actual spending in years that include high levels of staffing activity.
- Operating Services/Expenses Operating Services/Expenses increased due to increased recruitment advertising costs related to higher levels of staffing and recruiting.

2017 SERVICE CENTER OBJECTIVE RESULTS

Objective: Obtain Commission approval of revisions to current Human Resources policies and new policies scheduled for review

Results: During Q4, the Commission reviewed and approved revisions to the MAC Health Care Savings Plan policy.

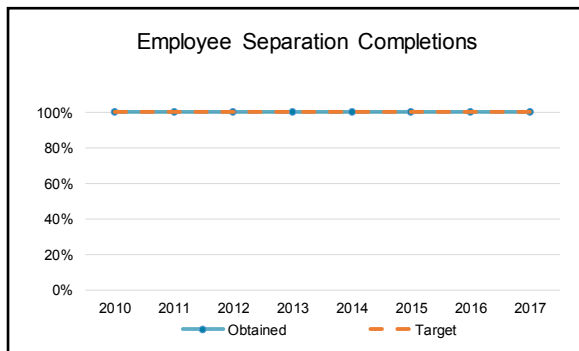
2018 SERVICE CENTER OBJECTIVE

Objective: Develop and implement a social media policy throughout the MAC

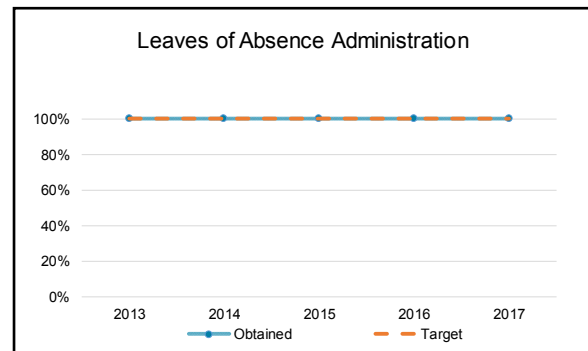
Organizational Strategic Goal: Be a model employer

Organizational Strategic Objective: Cultivate an engaged workforce

SERVICE CENTER PERFORMANCE MEASURES



Employee separation completions according to policies, procedures and law



Leaves of absence administration - return employees to active employment status upon receipt of employee medical clearance

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Planning & Development Division

Division Organizational Chart



Service Centers

Number	Name
75500	Planning & Development
77000	Airport Development
77100	Building Official

Notations to Service Center Summaries:

- Variance (dollars and %) is computed between 2017 Budget and 2018 Budget amounts
- Explanations for the variances are based upon the 2017 Budget and 2018 Budget amounts
- Negative variances, in most cases, are the result of reductions in one-time expenses or budget reductions
- The FTE count in each service center is as of January 1, 2018. The FTE budget was calculated in 2017 and may not reflect the budgeted FTE count for some service centers.
- Significant changes were made to the organization staff, including the addition of two divisions and the addition of several vice president roles. No changes were made to the service center structure. Therefore, presented at the beginning of each division within this section are the division's organizational chart as approved by the commission, as well as a list of the service centers that are managed within that division.

PLANNING AND DEVELOPMENT

Planning and Development supervises property acquisition, planning, design, engineering, architecture, construction of all Commission facilities, and grants management. In addition, the division is responsible for maintaining good relationships with local, state, and federal government partners and airport stakeholders. The Vice President of Planning and Development is the staff liaison to the Commission's Planning, Development & Environment Committee.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	233,197	230,409	227,558	(2,851)	-1.2%
Administrative Expenses	4,827	12,800	12,800	0	0.0%
Professional Services	45,514	245,000	195,000	(50,000)	-20.4%
Utilities	840	840	840	0	0.0%
Operating Services/Expenses	230,381	222,500	240,000	17,500	7.9%
Maintenance				0	0.0%
Other	450			0	0.0%
Total Budget	515,209	711,549	676,198	(35,351)	-5.0%

Full-time Equivalent (FTE) Total

2 2 2

HIGHLIGHTS OF BUDGET

- Personnel The decrease in Personnel is attributable to vacancies due to employee turnover.
- Professional Services The decrease in Professional Services is due to costs expected to be less than originally envisioned related to zoning for the St. Paul Downtown Airport.
- Operating Services/Expenses The increase in Operating Services/Expenses is due to additional Metropolitan Council fees related to Aviation System Planning and Airport System Implementation.

AIRPORT DEVELOPMENT

Airport Development develops and implements the Commission's Capital Improvement Program (CIP). Within the CIP, the service center supervises the planning, design, engineering, architecture, and construction of all Commission facilities at MSP and the Commission's six Reliever Airports.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	664,357	724,079	632,209	(91,870)	-12.7%
Administrative Expenses	37,793	42,750	43,800	1,050	2.5%
Professional Services	308,534	353,750	400,000	46,250	13.1%
Utilities	7,111	6,720	6,720	0	0.0%
Operating Services/Expenses	843	3,000	18,120	15,120	504.0%
Maintenance				0	0.0%
Other	5,109	9,500	9,500	0	0.0%
Total Budget	1,023,746	1,139,799	1,110,349	(29,450)	-2.6%

Full-time Equivalent (FTE) Total

16

16

16

HIGHLIGHTS OF BUDGET

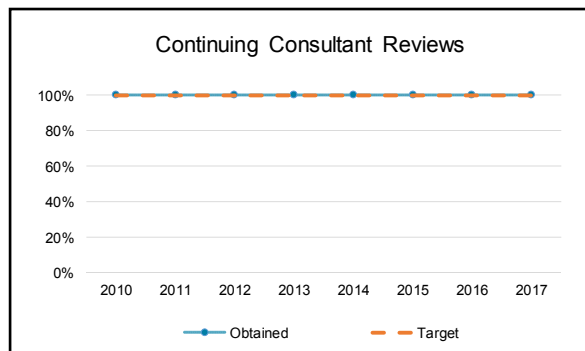
- Personnel The decrease in Personnel is attributable to vacancies due to employee turnover and changes in step levels for positions with employee turnover.
- Administrative Expenses Administrative Expense increases are attributable to additional professional association costs.
- Professional Services Increased Professional Services costs are attributable to data collection and analysis for the Long-Term Comprehensive Plans and the update/revisions to the MAC Design and Construction Standards.
- Operating Services/Expenses This increase is due to the addition of a land record scanning project for the Reliever Airports. The project will assure the records' legibility and retrievability by various departments.

2017 SERVICE CENTER OBJECTIVE RESULTS

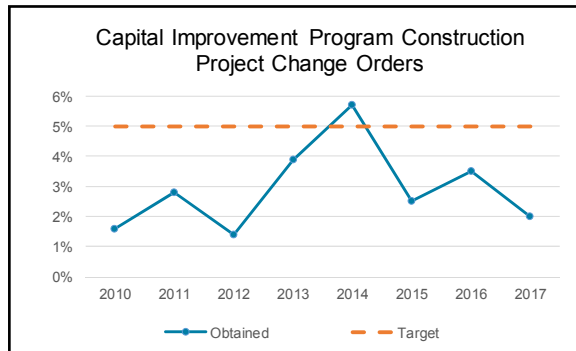
- Objective:** Launch and advance the revamp of the MAC Design and Construction Standards to reformat, update, and integrate the defined initiatives in the MAC Sustainability Management Plan
- Results:** During Q4, Airport Development launched the revamp of the MAC Design and Construction Standards, with work planned to continue into 2018.

2018 SERVICE CENTER OBJECTIVE

- Objective:** Complete the Airport Development restructuring effort with staff input on roles and responsibilities
- Organizational Strategic Goal:** Be a model employer
- Organizational Strategic Objective:** Cultivate an engaged workforce

SERVICE CENTER PERFORMANCE MEASURES

Percentage of annual performance reviews completed by year-end



Percentage of CIP construction projects within historic change order parameters

BUILDING OFFICIAL

The Building Official is responsible for the overall administration of the Metropolitan Airports Commission Building Code Ordinance. Service center responsibilities include the application, administration, implementation, and enforcement of the State of Minnesota Building Code and the MAC Construction Standards and Procedures, Design Standards and Guidelines. Duties include plan review, issuance of permits, inspections, and retention of inspection history and building construction plans. In addition, the service center provides construction coordination for retail, food, and beverage construction build-outs and remodeling of existing tenant spaces within MSP's Terminal 1 and Terminal 2.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	191,030	195,001	204,554	9,553	4.9%
Administrative Expenses	21,351	20,000	4,710	(15,290)	-76.5%
Professional Services				0	0.0%
Utilities	840	840	900	60	7.1%
Operating Services/Expenses		100	100	0	0.0%
Maintenance				0	0.0%
Other				0	0.0%
Total Budget	213,221	215,941	210,264	(5,677)	-2.6%

Full-time Equivalent (FTE) Total

2 2 2

HIGHLIGHTS OF BUDGET

- Personnel The increase in Personnel is attributable to wage structure adjustments and step increases.
- Administrative Expenses The decrease in Administrative Expenses is attributable to software costs that have been appropriately moved to Information Technology.

2017 SERVICE CENTER OBJECTIVE RESULTS

Objective: Issue new space permits within 10-14 days after applications are received and plan reviews are completed

Results: All new space permits were issued within 10-14 days of application and plan review.

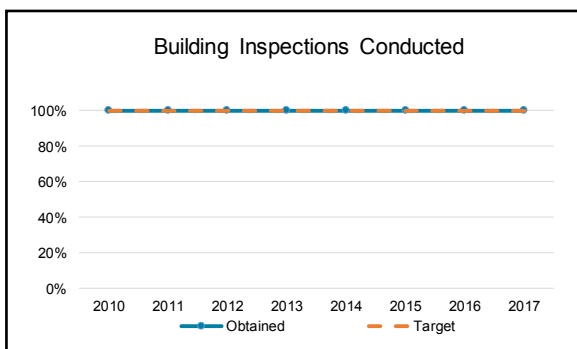
2018 SERVICE CENTER OBJECTIVE

Objective: Receive and review at least 50% of submitted plans electronically

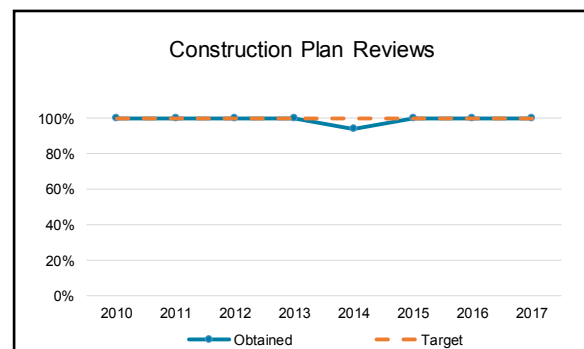
Organizational Strategic Goal: Innovate through opportunities in technology and sustainability

Organizational Strategic Objective: Modernize and accelerate technology use, enabling enterprise

SERVICE CENTER PERFORMANCE MEASURES



Conduct inspections within 24 hours of the request



Conduct Plan Reviews on construction plans within 14 days of submittals

Management & Operations Division

Division Organizational Chart



Service Centers

Number	Name
75800	Management & Operations
82000	MSP Airport Operations
83400	Landside-Administration
85500	Facilities-Terminal 2
86100	Facilities-Terminal 1
86300	Facilities-Energy Management Center
88400	Trades-Administration
88000	Trades-Electricians
88100	Trades-Painters
88200	Trades-Carpenters
88300	Trades-Plumbers
89000	Field Maintenance
82600	Airside Operations
83600	Fire
84200	Police
90000	Relievers-Administration
90200	Relievers-St. Paul
90300	Relievers-Lake Elmo
90400	Relievers-Airlake
90500	Relievers-Flying Cloud
90600	Relievers-Crystal
90700	Relievers-Anoka

Notations to Service Center Summaries:

- Variance (dollars and %) is computed between 2017 Budget and 2018 Budget amounts
- Explanations for the variances are based upon the 2017 Budget and 2018 Budget amounts
- Negative variances, in most cases, are the result of reductions in one-time expenses or budget reductions
- The FTE count in each service center is as of January 1, 2018. The FTE budget was calculated in 2017 and may not reflect the budgeted FTE count for some service centers.
- Significant changes were made to the organization staff, including the addition of two divisions and the addition of several vice president roles. No changes were made to the service center structure. Therefore, presented at the beginning of each division within this section are the division's organizational chart as approved by the commission, as well as a list of the service centers that are managed within that division.

MANAGEMENT & OPERATIONS

Management & Operations is led by the Vice President of Management & Operations and is responsible for oversight and administration of the departments that manage the day-to-day operations of the MAC's system of airports. These departments include Police, Fire, MSP Operations & Administration, and Reliever Airports. The Vice President of Management & Operations is the staff liaison to the Commission's Management & Operations Committee. Working with the Committee Chair, the Vice President is responsible for ensuring the effective conduct of business through the committee process of all operations-related issues, and for participating at the senior staff level in policy development, strategic planning, and interdepartmental coordination.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	359,968	345,498	380,254	34,756	10.1%
Administrative Expenses	9,501	9,500	10,050	550	5.8%
Professional Services	20,000	24,000	24,000	0	0.0%
Utilities	1,680	840	1,700	860	102.4%
Operating Services/Expenses				0	0.0%
Maintenance				0	0.0%
Other				0	0.0%
Total Budget	391,149	379,838	416,004	36,166	9.5%

Full-time Equivalent (FTE) Total

3.5

3.5

3.5

HIGHLIGHTS OF BUDGET

- Personnel The increase in Personnel is attributable to wage structure adjustments and step increases.
- Utilities The 2018 "Telephone - Cellular" budget was increased to account for two individuals rather than just one.

2017 SERVICE CENTER OBJECTIVE RESULTS

Objective: Align divisional activities to maintain public safety, prevent runway incursions, and prepare facilities and operations plans for Super Bowl LII in 2018

Results: Staff completed Operational Plans for each airport that anticipated Super Bowl LII aircraft traffic. Staff conducted multiple training sessions for airport and airline employees and MAC staff in the recognition of indicators of possible human trafficking activity, and met monthly to track plans, identify issues, and coordinate with Fixed Base Operators, airlines, law enforcement agencies, and security details. In addition, the MSP Regional/Diversion Irregular Operations Workshop was held with great regional attendance; discussions included an in-depth look into security-related disruptions and updating the group on capabilities of regional assets.

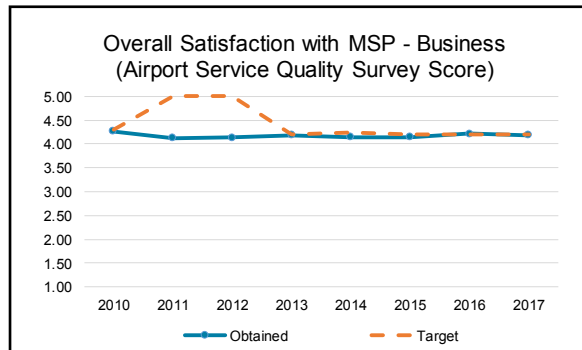
2018 SERVICE CENTER OBJECTIVE

Objective: Develop a comprehensive airport evacuation plan, conduct an airport-wide emergency exercise, and develop enhanced security measures for airport stakeholders

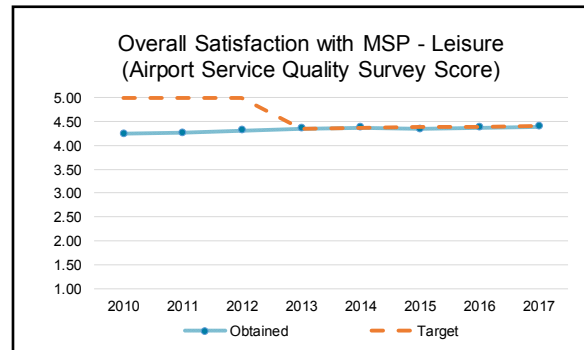
Organizational Strategic Goal: Keep our airports safe and secure

Organizational Strategic Objective: Engage, support, and expand emergency preparedness and response training for the airport community

SERVICE CENTER PERFORMANCE MEASURES



Airport Service Quality Survey Score: 5-point scale (5 = excellent, 1 = poor)



Airport Service Quality Survey Score: 5-point scale (5 = excellent, 1 = poor)

MSP AIRPORT OPERATIONS

MSP Airport Operations responds to the operational, maintenance, and emergency preparedness needs of the traveling public, outside agencies, airlines, and tenants. Considered the "landlord" of MSP, customer service is a key element of this department. Furthermore, special events and terminal complex activities are coordinated through this department.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	328,747	339,994	396,344	56,350	16.6%
Administrative Expenses	36,310	47,370	47,370	0	0.0%
Professional Services	26,087	38,920	38,920	0	0.0%
Utilities	6,032	5,294	5,294	0	0.0%
Operating Services/Expenses	153,321	122,338	132,850	10,512	8.6%
Maintenance		32,100		(32,100)	-100.0%
Other	16,699	10,029	10,029	0	0.0%
Total Budget	567,197	596,045	630,807	34,762	5.8%

Full-time Equivalent (FTE) Total

3

3

3

HIGHLIGHTS OF BUDGET

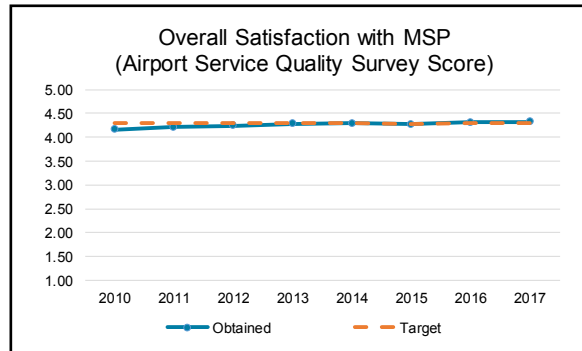
- Personnel** The increase in Personnel is attributable to wage structure adjustments and step increases, as well as the inclusion of a temporary position to update and maintain the Everbridge System and Tenant Directory.
- Operating Services/Expenses** The primary increase in this category is due to the Customer Service Action Council and MSP Jobs Committee including English as a Second Language training.
- Maintenance** The 2017 budget included a one-time project. The decrease in this category is a result of no special projects planned during 2018.

2017 SERVICE CENTER OBJECTIVE RESULTS

- Objective:** Partner with the FAA and AAEE to research and develop potential national standards, prototype solutions, and propose guidelines for consistent and effective independent navigation for travelers with disabilities and the elderly in multi-modal airport hubs
- Results:** The Federal Aviation Administration suspended work on this project due to unforeseen circumstances. We hope to restart the project during 2018.

2018 SERVICE CENTER OBJECTIVE

- Objective:** Partner with Open Doors Organization (ODO) to host the 2018 Universal Access in Airports Conference, an open exchange of ideas and best practices on customer service and accessibility for travelers with disabilities and aging adults, at MSP
- Organizational Strategic Goal:** Delight our passengers
- Organizational Strategic Objective:** Advance the culture of customer experience at our airports

SERVICE CENTER PERFORMANCE MEASURES

*Airport Service Quality Survey Score: 5-point scale
(5 = excellent, 1 = poor)*

LANDSIDE-ADMINISTRATION

Landside is responsible for the administration of public parking, employee parking, commercial vehicle operations, and Lost & Found program at MSP. This includes the parking facilities, commercial vehicle roadways, and related automated access and revenue control systems. Landside also manages the ground transportation regulations at MSP, including taxis, limousines, shared ride shuttles, transportation network companies, charter buses, courtesy shuttles, etc. Additionally, Landside oversees the inter-terminal transportation services provided by light rail and/or shuttle bus service and acts as a liaison between the Metropolitan Airports Commission and the Metropolitan Council for such services.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	2,110,079	2,157,162	2,380,530	223,368	10.4%
Administrative Expenses	85,995	80,307	59,352	(20,955)	-26.1%
Professional Services	19,384			0	0.0%
Utilities	7,203	7,200	10,704	3,504	48.7%
Operating Services/Expenses	9,852,147	10,626,840	10,732,437	105,597	1.0%
Maintenance	219,616	203,040	209,232	6,192	3.0%
Other	1,463	1,440	1,440	0	0.0%
Total Budget	12,295,885	13,075,989	13,393,695	317,706	2.4%

Full-time Equivalent (FTE) Total

34.5

35.5

37.5

HIGHLIGHTS OF BUDGET

- Personnel The increase in Personnel is attributable to wage structure adjustments and step increases, as well as the addition of two FTEs.
- Administrative Expenses Taxi traffic is has decreased. As a result, fewer taxi passenger brochures are expected to be distributed.
- Utilities The increase in Utilities is attributed to cell phone stipend needs.
- Operating Services/Expenses Operating Services/Expenses increases are attributable to increased fees built into multi-year contracts.
- Maintenance Maintenance expenses include two additional satellite restrooms needed for the new Transportation Network Company holding lot.

2017 SERVICE CENTER OBJECTIVE RESULTS

Objective: Install a parking reservation system that would allow travelers to book and pay for parking in advance

Results: Due to personnel and reorganization changes, no further developments took place during Q4. The Finance and Revenue Division will pick up this topic in 2018.

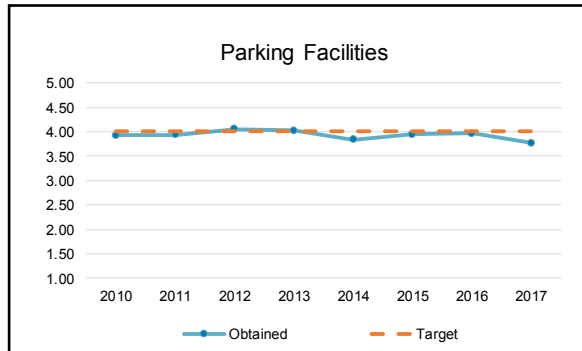
2018 SERVICE CENTER OBJECTIVE

Objective: Conduct a 2018 benchmarking study and plan to visit Phoenix, Denver, Dallas-Ft. Worth, Indianapolis, Tampa, Nashville, Raleigh Durham, and Baltimore-Washington International Airports, and Portland International Jetport

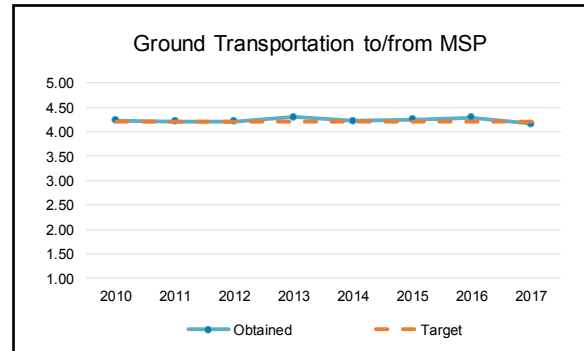
Organizational Strategic Goal: Delight our passengers

Organizational Strategic Objective: Reimagine and renew our airports to continually evolve our customer experience

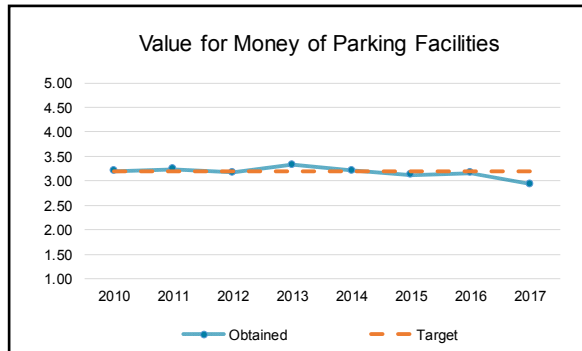
SERVICE CENTER PERFORMANCE MEASURES



Airport Service Quality Survey Score: 5-point scale
(5 = excellent, 1 = poor)



Airport Service Quality Survey Score: 5-point scale
(5 = excellent, 1 = poor)



Airport Service Quality Survey Score: 5-point scale
(5 = excellent, 1 = poor)

FACILITIES-TERMINAL 2

Facilities-Terminal 2 is responsible for daily operations management, maintenance, and planning of all MSP common-use facilities and related equipment, including all of Terminal 2, common use gates at Terminal 1, and U.S. Customs inspections facilities in both Terminal 1 and Terminal 2. The service center shares responsibility with the MAC Information Technology Department for planning, implementation, operation, and support of the many critical MAC common-use and shared-use computer systems and equipment.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	636,395	644,797	672,852	28,055	4.4%
Administrative Expenses	7,081	14,505	14,050	(455)	-3.1%
Professional Services				0	0.0%
Utilities	1,680	2,886	2,900	14	0.5%
Operating Services/Expenses	170,397	285,650	6,875	(278,775)	-97.6%
Maintenance	214,460	344,200	1,266,450	922,250	267.9%
Other	5,287	8,100	20,400	12,300	151.9%
Total Budget	1,035,301	1,300,138	1,983,527	683,389	52.6%

Full-time Equivalent (FTE) Total

9

9

9

HIGHLIGHTS OF BUDGET

- Personnel The increase in Personnel is attributable to wage structure adjustments and step increases.
- Operating Services/Expenses The decrease in Operating Services/Expenses is attributable to appropriately reallocating of costs to the Maintenance category.
- Maintenance The increase in Maintenance expenses is attributable to appropriately reallocating costs from the Operating Services/Expenses category, increased maintenance costs for four gates added during 2017, and the costs associated with the expiration of the baggage handling system warranty. The budget increase covers a new combined contract for passenger boarding bridges maintenance, baggage handling system maintenance, and operations support services.
- Other The increase in Other expenses includes replacement for furniture for the Terminal 2 Operations office.

2017 SERVICE CENTER OBJECTIVE RESULTS

Objective: Expand Terminal 2-Humphrey curbside check-in facilities to support increased use by Terminal-2 airlines

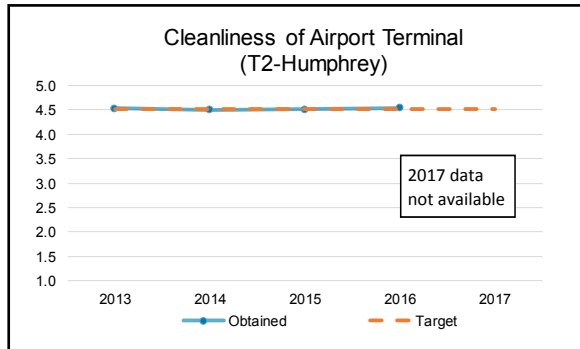
Results: The Terminal 2-Humphrey curbside check-in project was completed in Q3.

2018 SERVICE CENTER OBJECTIVE

Objective: Manage the successful startup of JetBlue operations at Terminal 2

Organizational Strategic Goal: Grow and enhance air service at MSP

Organizational Strategic Objective: Increase competition, attract new airlines, and expand service for non-stop destinations

SERVICE CENTER PERFORMANCE MEASURES

*Airport Service Quality Survey Score: 5-point scale
(5 = excellent, 1 = poor)*

FACILITIES-TERMINAL 1

Facilities-Terminal 1 is responsible for the operation, maintenance, and cleaning of the Terminal 1 facilities and all MAC campus buildings, with oversight responsibility for the Energy Management Center and the Trades work groups. Facilities Management also provides management oversight for various service, operation, and management contracts. The service center also responds to both immediate and long-term tenant and public concerns. The department works with MAC Airport Development staff to ensure that Capital Improvement Projects are completed with the least amount of disruption to the traveling public and the terminal building operations, in order to maintain MSP at a level consistent with the expectations of its internal and external customers and partners.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	717,014	757,056	744,500	(12,556)	-1.7%
Administrative Expenses	9,599	10,000	10,000	0	0.0%
Professional Services	275,908	305,852	342,894	37,042	12.1%
Utilities	7,835	7,584	7,584	0	0.0%
Operating Services/Expenses	3,631,461	3,311,312	4,507,529	1,196,217	36.1%
Maintenance	25,014,697	25,860,088	24,370,443	(1,489,645)	-5.8%
Other	4,461	6,850	6,850	0	0.0%
Total Budget	29,660,975	30,258,742	29,989,800	(268,942)	-0.9%

Full-time Equivalent (FTE) Total

9 9 9

HIGHLIGHTS OF BUDGET

- Personnel The decrease in Personnel is attributable to vacancies due to employee turnover.
- Professional Services The primary increase in Professional Services expense is the contractual fee increase for the consultant who oversees the Elevator / Escalator / Moving Walk and Trams Operation & Maintenance contracts.
- Operating Services/Expenses The primary increases in the Operating Services/Expenses are the contractual increase for loading dock management services and expenses related to Super Bowl LII. Super Bowl expenses include additional porter service, janitorial work, and elevator carpet replacement.
- Maintenance The Maintenance expense decrease is attributable to aligning budgeted cleaning and bathroom supply costs to actual expenses, increased rubbish and recycling costs, vehicle fire extinguisher purchases, and scheduled fee increases for long-term contracts. These were offset by decreased janitorial costs resulting from a new janitorial contract.

2017 SERVICE CENTER OBJECTIVE RESULTS

Objective: Throughout 2017, complete weekly restroom and terminal cleanliness inspections

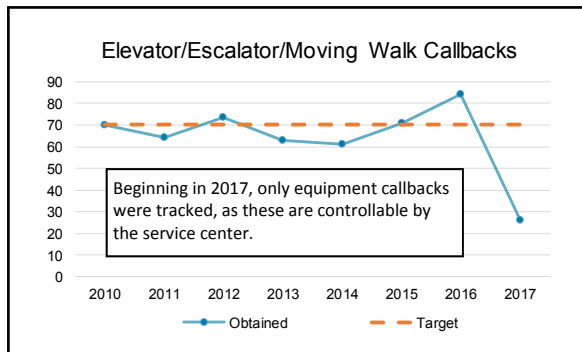
Results: 100% of weekly restroom inspections were completed.

2018 SERVICE CENTER OBJECTIVE

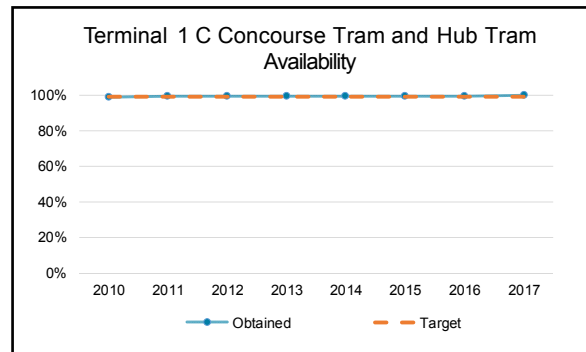
Objective: Develop and implement a key management database that will increase staff efficiency, reduce paper use for key approvals, and improve customer service for our internal and external stakeholders

Organizational Strategic Goal: Innovate through opportunities in technology and sustainability

Organizational Strategic Objective: Integrate sustainability into our culture

SERVICE CENTER PERFORMANCE MEASURES

Number of times the vendor is called back to a unit for service for equipment-related failures, averaged by quarter



Average percent availability of both the C Concourse and Hub trams

FACILITIES-ENERGY MANAGEMENT CENTER

The Energy Management Center (EMC) is responsible for the heating, ventilation, and air conditioning (HVAC) of all MAC facilities. A staff of 19 operating engineers provides 24/7 service. Staff operate and maintain boilers with jet fuel backup, chillers, cooling towers, and numerous miscellaneous components to provide a comfortable environment for all MSP customers, tenants, and staff. The EMC utilizes an Open Architectural Building Automation System (OABA) to operate and maintain the complex, growing airport HVAC systems, and monitors 200 carbon monoxide sensors spread around the MSP campus. The EMC responds to all incoming HVAC-related calls and keeps detailed records of gas, oil, water, and steam usage, as well as all repair work and preventative maintenance.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	1,654,453	1,742,131	1,829,547	87,416	5.0%
Administrative Expenses	3,460	4,338	4,013	(325)	-7.5%
Professional Services	44,770	45,630	47,911	2,281	5.0%
Utilities	7,177	9,820	7,177	(2,643)	-26.9%
Operating Services/Expenses	49,842			0	0.0%
Maintenance	1,741,812	1,805,241	1,869,597	64,356	3.6%
Other	6,627	19,193	12,280	(6,913)	-36.0%
Total Budget	3,508,140	3,626,353	3,770,525	144,172	4.0%

Full-time Equivalent (FTE) Total

23

22

22

HIGHLIGHTS OF BUDGET

- Personnel The increase in Personnel is attributable to wage structure adjustments and step increases.
- Professional Services The Professional Services expense increase is due to the increased use of consulting engineers on construction projects and concessions projects
- Utilities The decrease in Utilities expense is related to a decrease in cell phone stipends.
- Maintenance The Maintenance expense increase is attributable to increases in service contracts and construction-related repairs.
- Other Other expenses decreased to better align budgeted costs over a three-year period with actual expenditures.

2018 SERVICE CENTER OBJECTIVE RESULTS

Objective: Complete installation of all airflow diffusers in Terminal 1-Lindbergh and Terminal 2-Humphrey gate hold areas by the end of 2017

Results: By the close of Q4, 100% of the installation was complete

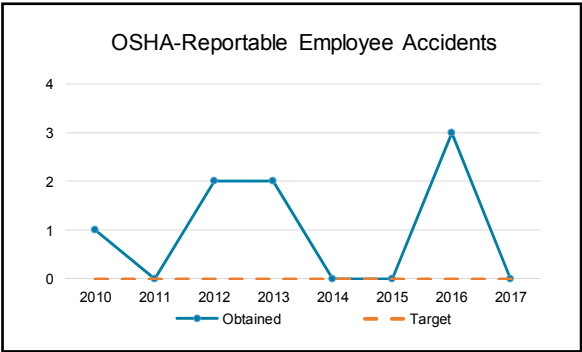
2018 SERVICE CENTER OBJECTIVE

Objective: Install long-life, high-efficiency air filters in all Terminal 1-Lindbergh air handling units that will accept the new-style filter; replace 25% of replaceable filters each quarter in 2018 with a goal of 100% replacement by year-end

Organizational Strategic Goal: Innovate through opportunities in technology and sustainability

Organizational Strategic Objective: Integrate sustainability into our culture

SERVICE CENTER PERFORMANCE MEASURES



Employee accidents

TRADES - ADMINISTRATION

Trades-Administration is responsible for the administration and coordination of the carpenters, electricians, painters, and plumbers. Trades-Administration works on construction projects, enforces the construction standards, conducts construction inspections, and oversees the computerized maintenance management system. Trades-Administration represents the Trades in the Capital Improvement Plan process and interfaces with consultants and vendors on behalf of the Trades group. Trades-Administration is also responsible for the oversight of the MSP Terminal 1 and Terminal 2 emergency generators and Uninterruptible Power Supply contracts.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	179,160	227,758	177,368	(50,390)	-22.1%
Administrative Expenses	10,397	7,700	7,790	90	1.2%
Professional Services	248,534	274,800	275,799	999	0.4%
Utilities	840	1,000	1,000	0	0.0%
Operating Services/Expenses	29,971	34,545	38,902	4,357	12.6%
Maintenance	265,593	439,653	387,795	(51,858)	-11.8%
Other	15,331	31,400	36,000	4,600	14.6%
Total Budget	749,825	1,016,856	924,654	(92,202)	-9.1%

Full-time Equivalent (FTE) Total

2

2

2

HIGHLIGHTS OF BUDGET

- Personnel The decrease in Personnel is attributable to vacancies due to employee turnover and changes in step levels for positions with employee turnover.
- Operating Services/Expenses The Operating Services/Expenses increase is attributable to an additional traffic signal that has been added to a MAC project.
- Maintenance The Maintenance expense decrease is attributable to efficiencies identified in the Honeywell maintenance contract.
- Other The Other expense increase is attributable to planned furniture purchases for the Trades Building.

2017 SERVICE CENTER OBJECTIVE RESULTS

Objective: Develop and implement a paperless work order system for all Trades departments, to increase efficiency in providing quality customer service to those we serve

Results: Meetings and discussions continued, relating to the development of a solution for an Enterprise One (E1) mobile Work Order application.

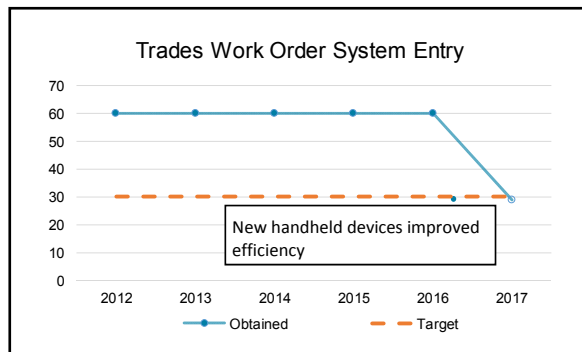
2018 SERVICE CENTER OBJECTIVE

Objective: Develop and implement a paperless work order system for all Trades departments, to increase efficiency in providing quality customer service to those we serve

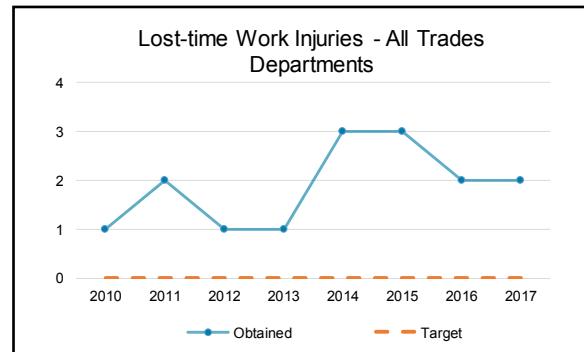
Organizational Strategic Goal: Delight our passengers

Organizational Strategic Objective: Reimagine and renew our airports to continually evolve our customer experience

SERVICE CENTER PERFORMANCE MEASURES



Total number of minutes per day spent by the Foreperson entering data into the Work Order System



Total number of on-the-job injuries sustained by all Trades departments combined

TRADES - ELECTRICIANS

Trades-Electricians provides maintenance and repairs of most electrical equipment and lighting fixtures throughout the MSP campus and Reliever Airports system. Electricians are responsible for the maintenance and repair of all directional signage and runway/taxiway lighting to comply with specific Federal Aviation Administration regulations throughout all MAC airports. Trades-Electricians also maintains and tests all airfield lighting regulators, all emergency generator buildings, and all associated lighting and electrical work within MAC parking facilities. Responsibilities include all security gates and electronic card readers throughout the MAC's airports system, fire alarms, and oversight and repair responsibility for the Light Rail Transit Platform.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	1,958,860	2,115,799	2,177,525	61,726	2.9%
Administrative Expenses	888	300	250	(50)	-16.7%
Professional Services				0	0.0%
Utilities	17,375	20,642	20,000	(642)	-3.1%
Operating Services/Expenses	257,282	321,667	313,000	(8,667)	-2.7%
Maintenance	1,032,244	1,510,355	1,452,531	(57,824)	-3.8%
Other	3,797	31,600	31,900	300	0.9%
Total Budget	3,270,445	4,000,363	3,995,206	(5,157)	-0.1%

Full-time Equivalent (FTE) Total

19

19

19

HIGHLIGHTS OF BUDGET

- Personnel The increase in Personnel is attributable to wage structure adjustments and step increases.
- Administrative Expenses The decrease in Administrative Expenses is attributable to aligning delivery expenses with a three-year average of actual spending.
- Utilities The decrease in Utilities Expenses is attributable to aligning the budgeted amount with a three-year average of actual spending. Additionally, VPN access for the General Foremen was factored in.
- Operating Services/Expenses The reduction in Operating Services/Expenses is attributable to aligning expenses with a the previous year's actual spending.
- Maintenance The decrease in Maintenance is attributable to the appropriate categorization of electrical permitting expenses as Other expenses.
- Other The increase in Other expense is attributable to the appropriate categorization of electrical permitting expenses that were previously budgeted as Maintenance expenses.

2017 SERVICE CENTER OBJECTIVE RESULTS

Objective: Complete weekly inspection of lighting fixtures in Terminal 1-Lindbergh and Terminal 2-Humphrey, and replace outages

Results: Weekly inspections of lighting fixtures in Terminal 1-Lindbergh and in Terminal 2-Humphrey were completed and outages were replaced as soon as practicable.

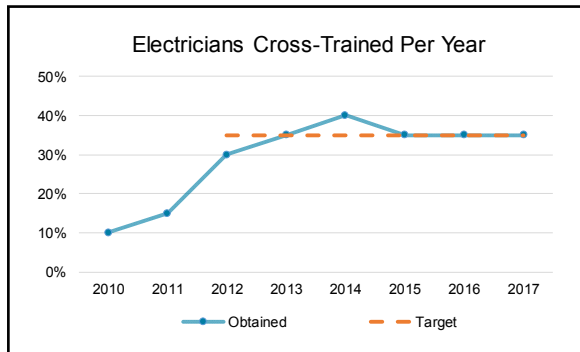
2018 SERVICE CENTER OBJECTIVE

Objective: Make an initial response to all work orders within 48 hours of receipt of the order

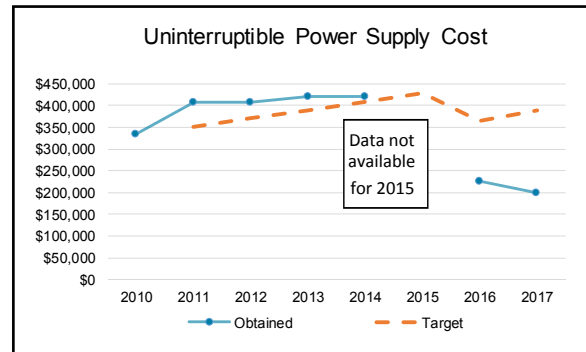
Organizational Strategic Goal: Delight our passengers

Organizational Strategic Objective: Reimagine and renew our airports to continually evolve our customer experience

SERVICE CENTER PERFORMANCE MEASURES



Percent of electricians cross-trained on a discipline or task they normally don't encounter



Total amount of the yearly contract spent on maintenance

TRADES - PAINTERS

The primary role of Trades-Painters is to protect a multitude of surfaces from corrosion and deterioration to ensure a full service life to the surface. Additionally, MAC Painters maintain a clean, comfortable, visually pleasing, and safe environment for the traveling public and meet all Federal Aviation Administration (FAA)-mandated Airport Operations Area markings at MSP and the Reliever Airports. The Painters are responsible for all paint maintenance on buildings, for the correct markings used on public roadways and parking ramps, and for the maintenance of runways/taxiways in accordance with FAA regulations. The Painters insure that the most appropriate and safest materials are utilized and disposed of in an environmentally responsible manner. The sign shop within this service center is responsible for regulatory roadway, interior, and exterior signage; vehicle graphics; and security and directional signage at MSP and the Reliever Airports.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	940,071	981,559	1,033,191	51,632	5.3%
Administrative Expenses	72			0	0.0%
Professional Services				0	0.0%
Utilities	1,290	1,190	1,300	110	9.2%
Operating Services/Expenses				0	0.0%
Maintenance	225,812	299,527	298,742	(785)	-0.3%
Other	14,355	4,403	4,403	0	0.0%
Total Budget	1,181,601	1,286,679	1,337,636	50,957	4.0%

Full-time Equivalent (FTE) Total

10 9 9

HIGHLIGHTS OF BUDGET

- Personnel The increase in Personnel is attributable to wage structure adjustments and step increases.
- Utilities The increase is for new cellular and data device for MAC Paint Shop Foreman.

2017 SERVICE CENTER OBJECTIVE RESULTS

Objective: Reduce 2017 hazardous and non-hazardous waste 10% compared to 2016

Results: At the close of Q4, reported hazardous and non-hazardous waste held steady with the previous year; a 10% reduction was not achieved.

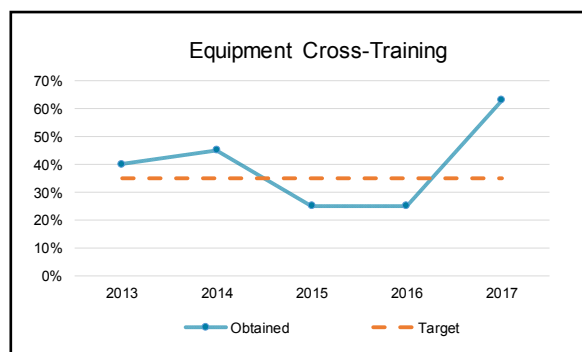
2018 SERVICE CENTER OBJECTIVE

Objective: Reduce hazardous and non-hazardous waste 10% compared to 2017

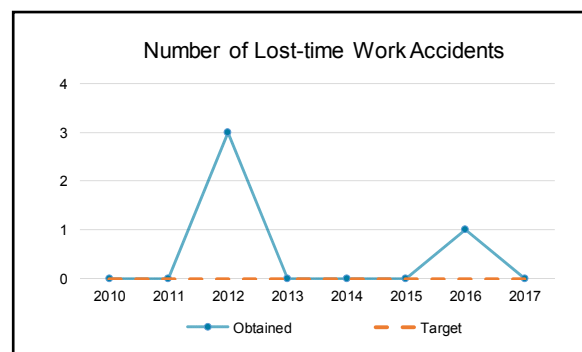
Organizational Strategic Goal: Delight our passengers

Organizational Strategic Objective: Reimagine and renew our airports to continually evolve our customer experience

SERVICE CENTER PERFORMANCE MEASURES



Percentage of MAC Painters receiving equipment cross-training



Lost days to work accidents

TRADES - CARPENTERS

Trades-Carpenters ensures that all of the MAC's terminals and facilities are safe, secure, and aesthetically pleasing for the MAC, its tenants, and the traveling public. This service center provides high-quality service to all MAC departments and airport tenants in a timely manner and at a cost savings. Responsibilities include repair and maintenance of a wide variety of facility finishes; securing and separating "non-secured" areas from "secured" areas; and specialty projects such as upholstery, cabinet making, office remodeling, and naming/numbering doors and concession spaces with identification tags.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	975,487	1,026,205	982,703	(43,502)	-4.2%
Administrative Expenses	2,245	4,622	4,473	(149)	-3.2%
Professional Services				0	0.0%
Utilities	9,743	11,341	12,396	1,055	9.3%
Operating Services/Expenses				0	0.0%
Maintenance	277,411	251,795	308,164	56,369	22.4%
Other	4,930	11,487	27,698	16,211	141.1%
Total Budget	1,269,816	1,305,450	1,335,434	29,984	2.3%

Full-time Equivalent (FTE) Total

10

10

10

HIGHLIGHTS OF BUDGET

- Personnel The decrease in Personnel is attributable to vacancies due to employee turnover, offset by wage structure adjustments and step increases.
- Administrative Expenses The decrease in Administrative Expenses is attributable to cancelled publications.
- Utilities Utilities increase is attributable to smart phone upgrades and accessories, including cases and chargers.
- Maintenance Maintenance expense increases are attributable to increased costs to replace or repair doors, hardware, paper towel dispensers, toilet paper dispensers, and lighted mirrors in new restrooms.
- Other Other expense increases are attributable to additional tools needed for the Carpenter Shop, including a table saw, drill press, and other minor hand tools.

2017 SERVICE CENTER OBJECTIVE RESULTS

Objective: Complete monthly preventative maintenance of all automatic doors within Terminal 1-Lindbergh and Terminal 2-Humphrey

Results: All preventative maintenance on automatic doors was completed in Terminal 1.

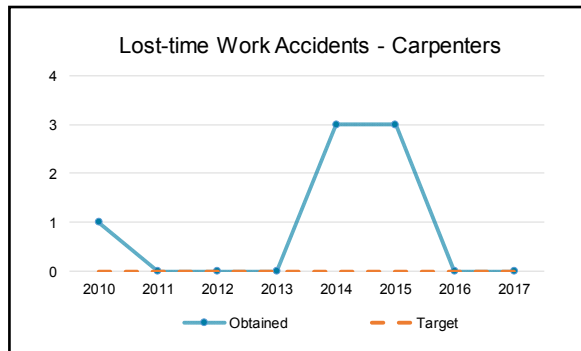
2018 SERVICE CENTER OBJECTIVE

Objective: Complete preventative maintenance work orders to reduce service interruptions, down time, and call backs

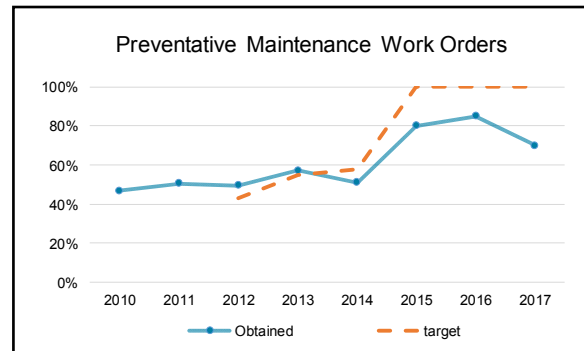
Organizational Strategic Goal: Delight our passengers

Organizational Strategic Objective: Reimagine and renew our airports to continually evolve our customer experience

SERVICE CENTER PERFORMANCE MEASURES



Total number of lost-time work accidents



Percentage of submitted work orders completed

TRADES - PLUMBERS

Trades-Plumbers is responsible for the water supply available to MSP users, tenants, and MAC personnel. This is accomplished through the maintenance, repair, and ongoing preventive measures of the potable water systems, sanitary and storm sewer systems, building plumbing systems, irrigation systems, and fire sprinkler systems. The Plumbers are also responsible for completing plumbing inspections, locating appropriate utility lines, and reviewing plumbing schematics for new projects. Staff stays current with new plumbing technologies, processes, and efficiencies by attending training seminars on new equipment and tooling demonstrations throughout the year.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	1,447,478	1,639,251	1,657,986	18,735	1.1%
Administrative Expenses	2,282	4,200	4,200	0	0.0%
Professional Services	29,980	30,000	30,000	0	0.0%
Utilities	9,338	8,400	8,400	0	0.0%
Operating Services/Expenses	3,640		13,500	13,500	100.0%
Maintenance	305,670	403,160	410,150	6,990	1.7%
Other	15,998	14,960	11,500	(3,460)	-23.1%
Total Budget	1,814,386	2,099,971	2,135,736	35,765	1.7%

Full-time Equivalent (FTE) Total

10

9

9

HIGHLIGHTS OF BUDGET

- Personnel The increase in Personnel is attributable to wage structure adjustments and step increases.
- Operating Services/Expenses Increased Operating Services/Expenses are attributed to support of specialty equipment and expenses related to Super Bowl LII.
- Maintenance A slight increase in Maintenance is due partly to adjustments of maintenance procedures and rising costs of material.
- Other Other expenses decreased as a result of eliminating one-time expenses that were required in previous fiscal years.

2017 SERVICE CENTER OBJECTIVE RESULTS

Objective: During 2017, replace 5% of existing drinking fountains within Terminal 1-Lindbergh and Terminal 2-Humphrey with refillable bottle filling stations

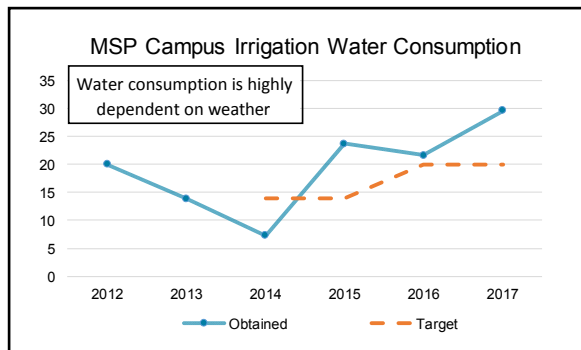
Results: During Q4, five bottle filling stations were installed in Terminal 2-Humphrey and one was installed in the Emergency Response Center.

2018 SERVICE CENTER OBJECTIVE

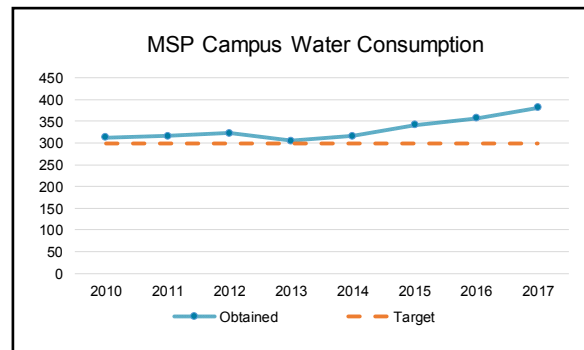
Objective: During 2018, replace 5% of existing drinking fountains within Terminal 1-Lindbergh and Terminal 2-Humphrey with refillable bottle filling stations

Organizational Strategic Goal: Delight our passengers

Organizational Strategic Objective: Reimagine and renew our airports to continually evolve our customer experience

SERVICE CENTER PERFORMANCE MEASURES

Total gallons, in millions, of irrigation water usage on the MSP campus



Total gallons of water, in millions, consumed on the Minneapolis-St. Paul International Airport campus*

*This graph contains a target line that indicates a maximum target value. The measure is met successfully when the actual value is below the target values.

FIELD MAINTENANCE

Field Maintenance is responsible for pavement maintenance, pollution control, landscape/grounds maintenance, security fence and access gate maintenance, traffic control installation, signage installation, parking ramp maintenance, and refuse removal. Winter responsibilities include the removal of snow from runways, taxiways, ramps, aircraft parking areas, airside roadways, public roadways, terminal sidewalks, and MAC buildings. Maintenance personnel supervise contracted snow removal operators who remove snow from parking ramps and landside parking areas. Field Maintenance maintains and repairs a fleet of more than 500 vehicles and partners with other MAC departments to procure vehicles and related equipment.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	9,042,260	9,649,932	9,692,635	42,703	0.4%
Administrative Expenses	35,105	29,875	59,100	29,225	97.8%
Professional Services	27,720	56,000	132,000	76,000	135.7%
Utilities	19,836	22,396	21,700	(696)	-3.1%
Operating Services/Expenses	65,519	29,450	66,400	36,950	125.5%
Maintenance	4,645,900	4,707,300	4,890,200	182,900	3.9%
Other	92,211	66,460	74,600	8,140	12.2%
Total Budget	13,928,552	14,561,413	14,936,635	375,222	2.6%

Full-time Equivalent (FTE) Total

108

110

110

HIGHLIGHTS OF BUDGET

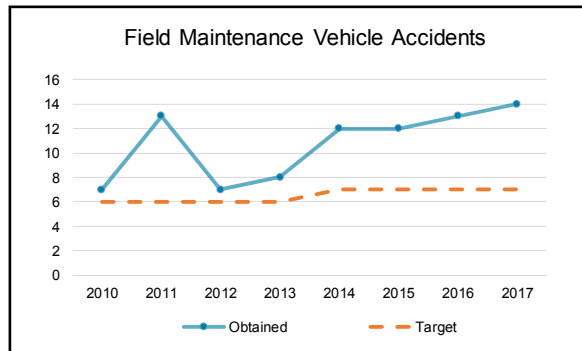
- **Personnel** The increase in Personnel is attributable to wage structure adjustments and step increases.
- **Administrative Expenses** The increase in Administrative Expenses is attributable to new office chairs, work stations for managers, and new crew room chairs and tables.
- **Professional Services** Professional Services increased due to strategic and fleet management planning needs.
- **Operating Services/Expenses** Operating Services/Expenses reflect increases due to rental equipment and supplies for Super Bowl LII.
- **Maintenance** Maintenance expenses increased due to winter chemical usage, tires, and airside treatment for sod areas.
- **Other** The Other expenses increase is attributable to meeting new Occupational Safety and Health Administration requirements for air filtration.

2017 SERVICE CENTER OBJECTIVE RESULTS

- Objective:** Invest in professional development to reflect the importance of Field Maintenance succession planning, allowing the MAC to provide top-quality service to entities operating at MSP
- Results:** Opportunities were provided for managers to attend ICS training and supervisor training. Department members also attended the National Airports Conference, and Field Maintenance engaged employees who are new to the DPMU and began familiarization workshops and training.

2018 SERVICE CENTER OBJECTIVE

- Objective:** Ensure all department members attend monthly training meetings for work performance subject areas at least 75% of the time
- Organizational Strategic Goal:** Be a model employer
- Organizational Strategic Objective:** Invest in training and professional development opportunities that align with our goals

SERVICE CENTER PERFORMANCE MEASURES

*Total number of preventable vehicle accidents
involving Field Maintenance vehicles**

**This graph contains a target line that indicates a maximum target value. The measure is met successfully when the actual value is below the target values.*

AIRSIDE OPERATIONS

Airside Operations' three primary tenets are regulatory compliance, safety, and operational efficiency. Airside Operations is responsible for ensuring that MSP is in compliance with federal and state regulations, particularly Federal Aviation Regulations Part 139-Airport Certification; conducts airfield safety inspections and determines the operating status of the airport; coordinates airfield activities with Federal Aviation Administration Air Traffic Control facilities and air carrier tenants. Airside Operations is responsible for managing the snow and ice control plan, the wildlife control program, construction safety, and the airfield driver's training/testing program. Airside Operations is the 24/7 non-emergency point-of-contact for MSP airport tenants.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	1,588,974	1,574,946	1,519,702	(55,244)	-3.5%
Administrative Expenses	68,557	102,315	104,189	1,874	1.8%
Professional Services	109,882	105,348	113,140	7,792	7.4%
Utilities	19,509	20,202	20,202	0	0.0%
Operating Services/Expenses	172,049	86,608	87,865	1,257	1.5%
Maintenance	24,158	22,000	12,000	(10,000)	-45.5%
Other	25,302	27,000	26,000	(1,000)	-3.7%
Total Budget	2,008,432	1,938,419	1,883,098	(55,321)	-2.9%

Full-time Equivalent (FTE) Total

16

16

15

HIGHLIGHTS OF BUDGET

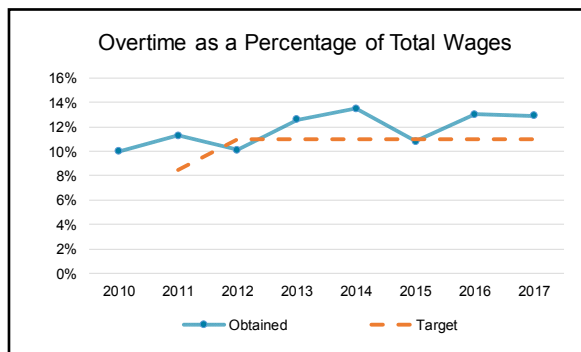
- Personnel The decrease in Personnel is a result of better aligning budgeted overtime costs with actual overtime costs.
- Administrative Expenses The increase is in part due to an increase in travel for two additional staff to the AAAE Great Lakes Chapter's Annual Conference in Alexandria, MN. The MAC is one of three hosts and we are expected to provide significant assistance in running the conference.
- Professional Services The increase is due to the expiration of the 3-year contract with USDA Wildlife Services and the anticipated increased cost of entering into a new contract for these services.
- Operating Services/Expenses The increase is due primarily to the contracted increase in annual service subscriptions.
- Maintenance Maintenance decreases are attributable to the MAC taking over maintenance of the MSP Drivers' Training Center, resulting in a reduction in contracted maintenance service expenses.
- Other The decrease is due to a projection of less equipment/supplies needed for wildlife management in 2018.

2017 SERVICE CENTER OBJECTIVE RESULTS

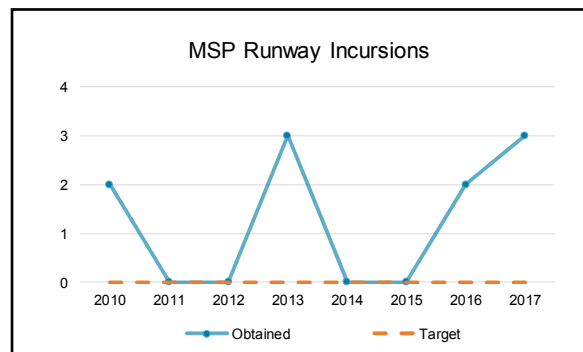
- Objective:** Using data from MAC Airside Operations' and other systems, lead the collaboration with MAC Information Technology and other departments on the design and initial development of an Airfield Situational Awareness Dashboard
- Results:** Airside Operations continued to work with Information Technology and Public Safety on the development of a situational awareness dashboard. Airside has developed a Proof of Concept tool to show the look of an Airfield Situational Awareness Dashboard.

2018 SERVICE CENTER OBJECTIVE

Objective:	Work with the MAC Information Technology Department to replace the "end of life" Woolpert Electronic Logging and Inspection System with a new Airport Operations Database application
Organizational Strategic Goal:	Innovate through opportunities in technology and sustainability
Organizational Strategic Objective:	Modernize and accelerate technology use, enabling enterprise solutions

SERVICE CENTER PERFORMANCE MEASURES

Overtime as a percentage of total department wages*



Total number of vehicle/pedestrian runway incursions over which the MAC has control

*This graph contains a target line that indicates a maximum target value. The measures is met successfully when the actual value is below the target values.

FIRE

The MSP Airport Fire Department is responsible for providing aircraft rescue and firefighting (ARFF), structural firefighting, and first response emergency medical services to the MSP campus and some adjacent areas under agreement. The department is also responsible for fire code enforcement, investigation of all fires that occur within the service area, maintaining Federal Aviation Administration ARFF training and response requirements, and ensuring proper documentation for state and federal reporting requirements.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	4,611,921	4,964,954	5,337,084	372,130	7.5%
Administrative Expenses	10,574	19,085	59,815	40,730	213.4%
Professional Services	6,435	55,200	76,860	21,660	39.2%
Utilities	13,110	14,360	15,360	1,000	7.0%
Operating Services/Expenses	20,634	34,000	34,000	0	0.0%
Maintenance	5,198	4,600	5,100	500	10.9%
Other	161,420	145,500	124,500	(21,000)	-14.4%
Total Budget	4,829,293	5,237,699	5,652,719	415,020	7.9%

Full-time Equivalent (FTE) Total	46	50	51
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HIGHLIGHTS OF BUDGET

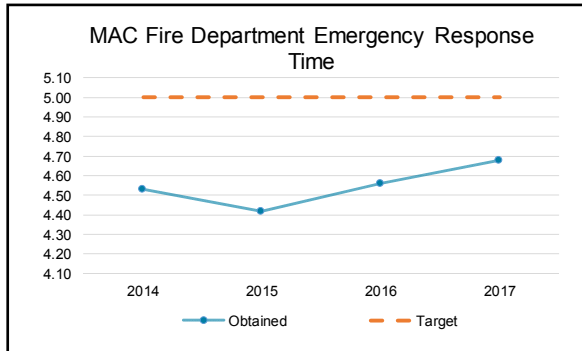
- **Personnel** Personnel increases are due to contracted wage adjustment and uniform allowances. Additionally, overtime expenses were increased to align with actual costs from previous years. One new FTE was approved.
- **Administrative Expenses** Administrative Expenses increased to cover the off-site Aircraft Rescue Fire Fighting training in 2018. This required training includes travel for all firefighting personnel.
- **Professional Services** Increase for Professional Services is attributable to additional fire protection plan reviews for increased construction projects throughout the MAC system.
- **Utilities** The Utilities increase is due to increased cellular and data needs and costs.
- **Maintenance** Maintenance increases are due to additional cost of cleaning supplies.
- **Other** The 2017 budget included a number of one-time purchases in the Other expenses category. As they are not included in the 2018 budget, the Other category reflects the reduction in expenses.

2017 SERVICE CENTER OBJECTIVE RESULTS

- Objective:** Conduct joint response training for complex incidents with MAC Fire Department response partners, including the MAC Police Department, Allina Ambulance, and our mutual aid partners
- Results:** The Fire Department conducted a Fuel Response Exercise with the Environment, Field Maintenance, and Swissport Fueling; Fire and EMS response and staffing plans were finalized with Allina for Super Bowl LII

2018 SERVICE CENTER OBJECTIVE

- Objective:** Develop an implementation plan to expand the inventory control project to include fire extinguishers, personal protective equipment, and other inspection programs
- Organizational Strategic Goal:** Innovate through opportunities in technology and sustainability
- Organizational Strategic Objective:** Modernize and accelerate technology use, enabling enterprise solutions

SERVICE CENTER PERFORMANCE MEASURES

*Average response time to all emergencies from time of dispatch to arrival on scene, in minutes**

**This graph contains a target line that indicates a maximum target value. The measure is met successfully when the actual value is below the target values.*

POLICE

With public service as our foundation, every member of the Airport Police Department is committed to the preservation of peace, order, and safety. We are dedicated to the protection of life and property, the prevention of crime, and the deterrence of terrorism. Our Emergency Communications Center (ECC) is the 911 center for the MSP airport community. ECC staff make critical decisions to ensure the safety of both the traveling public and public safety personnel. The department's vision is to be the standard of excellence in aviation policing throughout North America.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	12,478,840	13,387,167	14,747,581	1,360,414	10.2%
Administrative Expenses	218,092	285,582	290,382	4,800	1.7%
Professional Services	95,527	62,824	96,906	34,082	54.2%
Utilities	83,841	74,984	74,984	0	0.0%
Operating Services/Expenses	750,155	1,196,875	1,842,382	645,507	53.9%
Maintenance	29,958	30,548	58,677	28,129	92.1%
Other	373,246	342,651	254,888	(87,763)	-25.6%
Total Budget	14,029,658	15,380,631	17,365,800	1,985,169	12.9%

Full-time Equivalent (FTE) Total	129	137	141
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HIGHLIGHTS OF BUDGET

- **Personnel** The increase in Personnel is attributable to wage structure adjustments and step increases, as well as the addition of FTEs.
- **Administrative Expenses** The Administrative Expenses category increase is attributable to improvements scheduled for the K9 training building, in-home kennels for Police and TSA K9s, and a 10-year Airport Watch commemorative coin.
- **Professional Services** The increase in Professional Services expense is attributable to the addition of public safety ministries and background check consultants.
- **Operating Services/Expenses** Operating Services/Expense increases are a result of scheduled annual contract increases.
- **Maintenance** Maintenance expense increases are attributable to the purchase of 14 automated external defibrillators and additional security equipment.
- **Other** The decrease in Other expenses is due to the removal of projects completed in previous fiscal years.

2017 SERVICE CENTER OBJECTIVE RESULTS

Objective: Continue to improve upon the MSP public area protection initiative, which is focused on deterrence and rapid response to critical incidents that could occur in public mass gathering locations at MSP

Results: During Q4 we maintained a greater level of highly-visible staffing in public areas through a mixture of grant-funded overtime, reimbursed overtime, and realizing additional headcount approved by the Commission for 2017. This, in addition to training provided earlier in the year on active assailants, insider threats, and diffusion strategies prepared the airport community and the Airport Police Department for Super Bowl LII and beyond.

2018 SERVICE CENTER OBJECTIVE**Objective:**

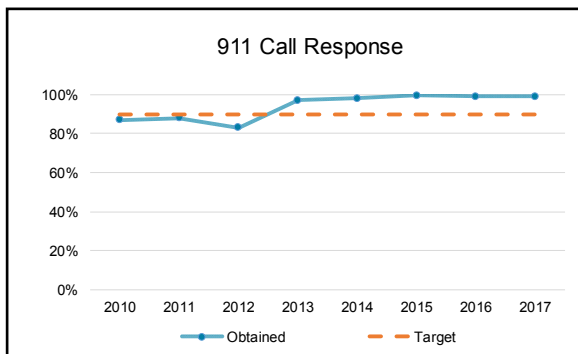
Participate in the planning, training, and execution of MSP's tri-annual emergency drill; exercise the Continuity of Operations Plan for the Emergency Communications Center; continue to work with the MSP Emergency Manager on the development of evacuation plans for both terminals; and sponsor training for general airport staff on personal and airport safety and security

Organizational Strategic Goal:

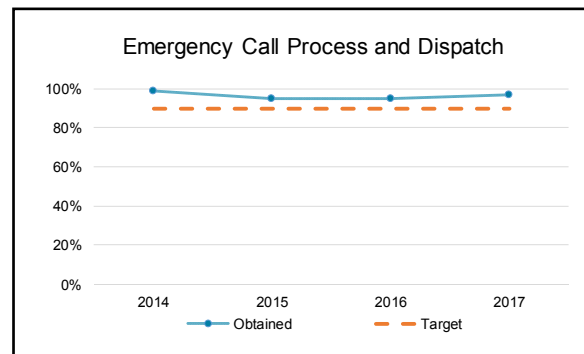
Keep our airports safe and secure

Organizational Strategic Objective:

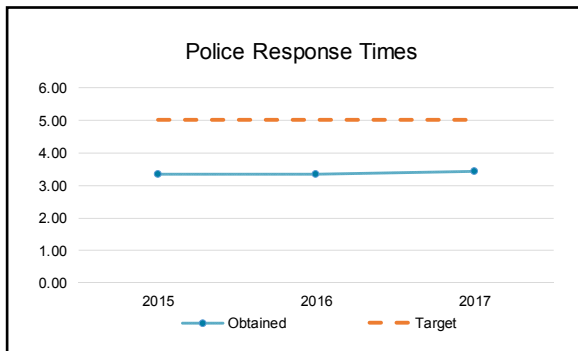
Engage, support, and expand emergency preparedness and response training for the airport community

SERVICE CENTER PERFORMANCE MEASURES

Percentage of 911 calls answered in 10 seconds or fewer, per year



Percentage of emergency calls processed and dispatched within 60 seconds, per year



Response times, in minutes, from dispatch to arrival for Priority 1 and Priority 2 calls

RELIEVERS - ADMINISTRATION

The Reliever Airports Department is responsible for the operation, management, and maintenance of the MAC's six reliever airports. Staff is also responsible for the administration of over 800 tenant leases and contracts on the airport properties.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	758,457	742,611	830,385	87,774	11.8%
Administrative Expenses	12,036	23,575	23,725	150	0.6%
Professional Services		45,000	45,000	0	0.0%
Utilities	7,218	5,880	6,720	840	14.3%
Operating Services/Expenses	5,772	1,500	1,500	0	0.0%
Maintenance				0	0.0%
Other				0	0.0%
Total Budget	783,483	818,566	907,330	88,764	10.8%

Full-time Equivalent (FTE) Total

7

8

8

HIGHLIGHTS OF BUDGET

- Personnel The increase in Personnel is attributable to wage structure adjustments and step increases, the full-year impact of one position that was unfilled during much of 2017, and over-time needs for Super Bowl LII.
- Utilities The increase in Utilities expenses is attributable to increased cell phone and Wi-Fi hot spot requirements of staff.

2017 SERVICE CENTER OBJECTIVE RESULTS

Objective: Collaborate with internal and external stakeholders on a plan to manage general aviation aircraft arriving to and departing from MAC airports during Super Bowl LII

Results: During Q4, the Reliever Airports department continued to meet at least once per week with internal and external stakeholders regarding plans for the 2018 Super Bowl. These meetings addressed facility capabilities, arrival/departure rates, aircraft and automobile maneuvering and parking, aircraft deicing, and security.

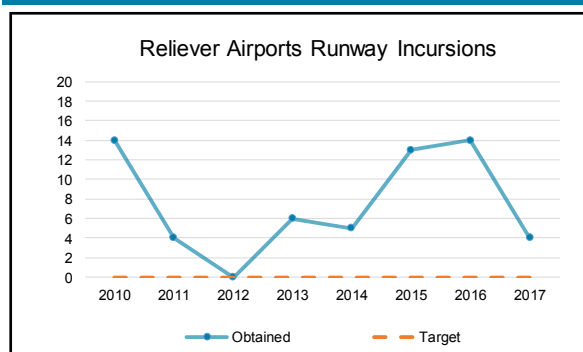
2018 SERVICE CENTER OBJECTIVE

Objective: Implement a departmental employee recognition program

Organizational Strategic Goal: Be a model employer

Organizational Strategic Objective: Cultivate an engaged workforce

SERVICE CENTER PERFORMANCE MEASURES



Total vehicle/pedestrian runway incursions, across all MAC-owned Reliever Airports

RELIEVERS - ST. PAUL

Relievers Airport staff is responsible for the operation, maintenance, and administration of the St. Paul Airport. Staff manages the properties, including the administration of leases. The staff also responds to tenant, airport user, and community issues and concerns.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	594,378	650,413	675,999	25,586	3.9%
Administrative Expenses	7,501	4,050	4,250	200	4.9%
Professional Services	12,074	15,000	15,000	0	0.0%
Utilities	2,448	1,360	1,800	440	32.4%
Operating Services/Expenses	9,547	8,200	57,000	48,800	595.1%
Maintenance	152,112	159,430	163,200	3,770	2.4%
Other	921	1,200	1,300	100	8.3%
Total Budget	778,982	839,653	918,549	78,896	9.4%

Full-time Equivalent (FTE) Total

7

7

7

HIGHLIGHTS OF BUDGET

- Personnel The increase in Personnel is attributable to wage structure adjustments, step increases, and over-time needs for Super Bowl LII.
- Utilities Increased Utilities expenses is attributable to increased cell phone stipends.
- Operating Services/Expenses The increased Operating Services/Expenses are related to Super Bowl LII.

RELIEVERS - LAKE ELMO

Relievers Airport staff is responsible for the operation, maintenance, and administration of the Lake Elmo Airport. Staff manages the properties, including the administration of leases. The staff also responds to tenant, airport user, and community issues and concerns.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	100,430	109,735	113,812	4,077	3.7%
Administrative Expenses	494	290	320	30	10.3%
Professional Services	12,074	12,000	12,000	0	0.0%
Utilities	846	453	616	163	36.0%
Operating Services/Expenses				0	0.0%
Maintenance	23,880	41,000	43,600	2,600	6.3%
Other	43	500	500	0	0.0%
Total Budget	137,767	163,978	170,848	6,870	4.2%

Full-time Equivalent (FTE) Total

1 1 1

HIGHLIGHTS OF BUDGET

- Personnel The increase in Personnel is attributable to wage structure adjustments and step increases.
- Utilities Increased Utilities expenses is attributable to increased cell phone stipends.

RELIEVERS - AIRLAKE

Relievers Airport staff is responsible for the operation, maintenance, and administration of the Airlake Airport. Staff manages the properties, including the administration of leases. The staff also responds to tenant, airport user, and community issues and concerns.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	105,728	102,529	110,247	7,718	7.5%
Administrative Expenses	192	361	367	6	1.7%
Professional Services	12,074	12,500	12,500	0	0.0%
Utilities	820	617	617	0	0.0%
Operating Services/Expenses				0	0.0%
Maintenance	19,412	24,945	25,629	684	2.7%
Other	369	450	456	6	1.3%
Total Budget	138,594	141,402	149,816	8,414	6.0%

Full-time Equivalent (FTE) Total	1	1	1
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HIGHLIGHTS OF BUDGET

- Personnel The increase in Personnel is attributable to wage structure adjustments, step increases, and over-time needs for Super Bowl LII.

RELIEVERS - FLYING CLOUD

Relievers Airport staff is responsible for the operation, maintenance, and administration of the Flying Cloud Airport. Staff manages the properties, including the administration of leases. The staff also responds to tenant, airport user, and community issues and concerns.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	298,738	321,622	350,856	29,234	9.1%
Administrative Expenses	1,176	1,270	1,285	15	1.2%
Professional Services	12,074	12,500	12,500	0	0.0%
Utilities		617	1,175	558	90.4%
Operating Services/Expenses			40,000	40,000	100.0%
Maintenance	52,152	77,650	78,860	1,210	1.6%
Other	185	500	500	0	0.0%
Total Budget	364,325	414,159	485,176	71,017	17.1%

Full-time Equivalent (FTE) Total

4

4

4

HIGHLIGHTS OF BUDGET

- Personnel The increase in Personnel is attributable to wage structure adjustments, step increases, and over-time needs for Super Bowl LII.
- Utilities The increase in Utilities expenses is attributable to increased cell phone and Wi-Fi hot spot requirements for service center staff.
- Operating Services/Expenses The Operating Services/Expenses increase is due to materials required for the Super Bowl. This will include deicing agent recovery, as well as airport safety and security needs.

RELIEVERS - CRYSTAL

Relievers Airport staff is responsible for the operation, maintenance, and administration of the Crystal Airport. Staff manages the properties, including the administration of leases. Staff also responds to tenant, airport user, and community issues and concerns.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	279,921	288,955	312,570	23,615	8.2%
Administrative Expenses	967	2,125	1,435	(690)	-32.5%
Professional Services	12,630	12,000	12,074	74	0.6%
Utilities	870	750	1,249	499	66.5%
Operating Services/Expenses	96			0	0.0%
Maintenance	64,406	61,900	67,035	5,135	8.3%
Other	13	500	500	0	0.0%
Total Budget	358,903	366,230	394,863	28,633	7.8%

Full-time Equivalent (FTE) Total

3

3

3

HIGHLIGHTS OF BUDGET

- Personnel The increase in Personnel is attributable to wage structure adjustments, step increases, and over-time needs for Super Bowl LII.
- Administrative Expenses The decrease in Administrative Expenses reflects the reduction of one-time expenses from previous fiscal years.
- Utilities The increase in Utilities expenses is attributable to increased cell phone requirements for service center staff.
- Maintenance Maintenance expenses increased to reflect a three-year average of actual summer fencing and landscape turf expenses.

RELIEVERS - ANOKA COUNTY-BLAINE

Relievers Airport staff is responsible for the operation, maintenance, and administration of the Anoka County-Blaine Airport. Staff manages the properties, including the administration of leases. Staff also responds to tenant, airport user, and community issues and concerns.

BUDGET SUMMARY

	2016 Actual	2017 Budget	2018 Budget	\$ Variance	% Variance
Personnel	264,505	283,497	299,671	16,174	5.7%
Administrative Expenses	2,417	1,325	1,625	300	22.6%
Professional Services	12,074	28,000	28,000	0	0.0%
Utilities	831	1,300	650	(650)	-50.0%
Operating Services/Expenses	151,880	153,000	206,500	53,500	35.0%
Maintenance	64,630	77,000	86,200	9,200	11.9%
Other	30,768	700	800	100	14.3%
Total Budget	527,104	544,822	623,446	78,624	14.4%

Full-time Equivalent (FTE) Total

3

3

3

HIGHLIGHTS OF BUDGET

- Personnel The increase in Personnel is attributable to wage structure adjustments and step increases.
- Utilities The decrease in Utilities expenses is attributable to decreased cell phone requirements for service center staff.
- Operating Services/Expenses The increased Operating Services/Expenses is attributable to Super Bowl LII.
- Maintenance Maintenance expenses increased due to additional airfield and cleaning supply needs.

Statistics & Informative Facts

The Statistics and Informative Facts sections are:

1. Historical Operating Revenue/Operating Expense and Facility Comparisons
2. Activity/Operations Statistics
3. National Comparisons
4. Informative Facts about Minnesota

Historical Operating Revenue/Operating Expense and Facility Comparisons

The table below compares the years 2007 and 2016 and shows the changes that occurred when comparing the percentage in each category to the total. The average annual percentage increase in Total Operating Revenue from 2007 to 2016 of 4.0% is the same as the annual percentage increase in Total Operating Expenses and Operating Income from 2007 to 2016 which are both also 4.0%.

HISTORICAL OPERATING REVENUE & OPERATING EXPENSE SUMMARY 2007 VS 2016 (\$ = 000)						
	2007		2016		2007-2016	Annual
	\$	% of Total	\$	% of Total	Change \$	% Change
Operating Revenue						
Airline Rates & Charges	\$ 75,294	31.6%	\$ 112,653 *	33.2%	\$ 37,359	4.6%
Concessions	113,794	47.8%	160,691	47.4%	46,897	3.9%
Rentals/Fees	0	0.0%	48,473	14.3%	48,473	
Utilities & Other Revenue	0	0.0%	17,115	5.0%	17,115	
Other	49,163	20.6%	0	0.0%	(49,163)	3.3%
Total Operating Revenue	\$ 238,251	100.0%	\$ 338,932	100.0%	\$ 100,681	4.0%
Operating Expenses						
Personnel	\$ 56,278	47.3%	\$ 78,048	46.2%	\$ 21,770	3.7%
Administrative Expenses	1,538	1.3%	1,723	1.0%	185	1.3%
Professional Services	4,474	3.8%	6,217	3.7%	1,743	3.7%
Utilities	16,466	13.8%	18,816	11.1%	2,350	1.5%
Operating Services	15,437	13.0%	23,389	13.8%	7,952	4.7%
Maintenance	21,527	18.1%	36,319	21.5%	14,792	6.0%
Other	3,238	2.7%	4,411	2.6%	1,173	3.5%
Total Operating Expenses (excludes depreciation and noise amortization)	\$ 118,958	100.0%	\$ 168,923	100.0%	49,965	4.0%
Operating Income (Loss) (excludes non operating)	\$ 119,293		\$ 170,009		\$ 50,716	4.0%

Operating Revenue

In 2008, a major upgrade in the financial software program provided an opportunity to improve revenue reporting. This affected the various individual lines of revenue being reclassified into new categories and the reclassifications are not reflected in the data for 2007 (although the total is accurate). The following explanations for the changes in revenue are general in the categories represented. Changes in revenue are as follows:

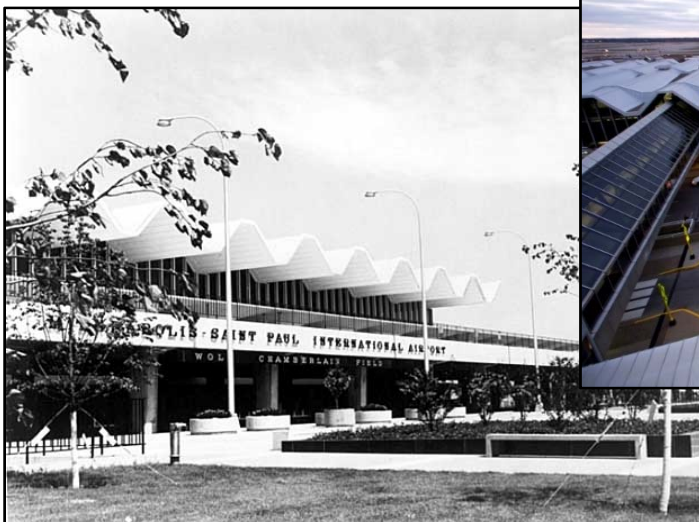
- The average annual percentage increase for Airline Rates and Charges is 4.6% between the years of 2007 and 2016. This is due in part to landing fees and expanded terminal facilities necessary to accommodate the growth in passenger activity between 2007 and 2016. Landing fees are calculated on a breakeven basis with revenue and expense being equal. The increase between 2007 and 2016 also results from changes in the 2007 Amendment to the Airline Use Agreement and new facilities that have become operational. This category generally maintains the largest growth.
- Since 2008, Terminal 2 common use rates and other fees associated with non-signatory airline landing and ramp fees are included in Airline Rates and Charges. (See Operating Budget Revenue.)
- The Concessions category increased 3.9% as a result of increasing auto parking fees, facilities and changes/renewals to the Auto Rental contracts and separate concession/contract agreements with various firms to operate concessions in the terminal building. In addition, the introduction of transportation network companies is bringing in new revenue.

- The annual average percentage increase of 3.3% is in the Other Revenue category (combines Rentals/Fees and Utilities & Other Revenue). In 2008 the Other category was separated into two new components, Rentals/Fees and Utilities and Other Revenue. Due to the conversion of data in the new financial software system, the breakout of this revenue for the years prior to 2008 would be difficult to determine. Therefore, for purposes of this explanation, these numbers have been combined. The increase is attributable to building rentals including the Federal Express and UPS building/facilities, Terminal 2 common use rates and other fees associated with non-signatory airline landing and ramp fees that were included in this category in 2005 through 2007. However, as of 2008 this revenue is included in Airline Rates and Charges. (See Operating Budget Revenue.)

Operating Expenses

Expense changes are as follows:

- Personnel expenses increased from 2007 to 2016 by \$21.8 million. This equates to an average annual increase of 3.7%. Full Time Equivalents (FTEs) in 2007 were at 551.5 while FTE positions in 2016 were at 604.5. This is a direct result of a new runway, terminal 1-Lindbergh and Terminal 2-Humphrey expansions as well as a number of other facilities. Information Technology staff has increased substantially in later years to stay ahead of new and emerging technology.
- Administrative Expenses had an average annual increase of 1.3% as a result of the higher costs related to travel expenses and computer software for the growing technology needs of the airport.
- Professional Services increased 3.7% when comparing 2007 actual expenses to the total expenses for 2016. The majority of the increase is related to consulting for computer related situations, general legal service and construction and environmental engineering.
- Utilities increased 1.5% between 2007 and 2016 and reflect the higher costs of natural gas and electricity along with an increase in facilities.
- Operating Services increased 4.7% between the years 2007 and 2016 due to additional contracts such as implementation of porter service in baggage claim and management of shuttle buses and queue lines as well as increases in service agreements.
- Maintenance increased 6.0% between 2007 and 2016 as a result of additional facilities including Runway 17/35. Contracted maintenance also increased for building mechanical areas, including automated people mover, elevator, escalator and moving walks.
- Other Expenses increased 3.5% primarily as a result of increasing costs for minor assets such as computers annualized between the years 2007 and 2016.



**Minneapolis-St. Paul International
Airport Terminal 1- Lindbergh in 1963
and 2018**

Facility Expansion Terminal 1-Lindbergh and Terminal 2-Humphrey				
	2007	2017	Increase	% Increase
Terminal 1-Lindbergh & Regional				
Terminal Square Footage	2,827,238	2,841,143	13,905	0.5%
Number of Gates (Aircraft Loading Positions)	117	104	-13	-11.1%
Ramp Lineal Footage	11,302	11,001	-301	-2.7%
Terminal 2-Humphrey				
Terminal Square Footage	398,134	626,165	228,031	57.3%
Number of Gates	10	14	4	40.0%
Parking (All Facilities)	19,677	22,123	2,446	12.4%

The chart above compares the development and expansion of the major facilities at MSP International Airport between 2007 and 2017. The significance of this growth impacts both revenue and expenses. New facilities occupied by tenants will continue to generate additional income. Expenses include maintenance (both labor and materials), repairs, utilities, security and administrative costs. All sections of the MAC are impacted by changes in facilities.

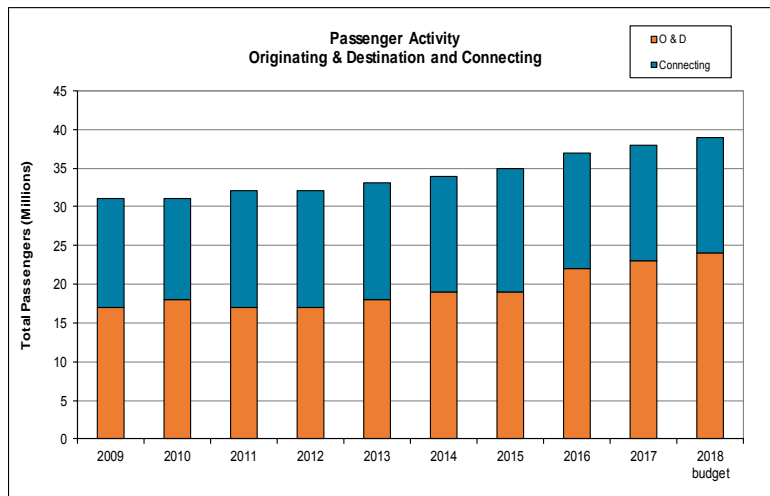
The following table identifies major new facilities that have been completed since 2008.

Major New Facilities Completed 2008 through 2017			
<u>New Facilities</u>	<u>Closing Date</u>	<u>New Facilities</u>	<u>Closing Date</u>
St. Paul Airport Runway Improvements	2008	I-494/34 th Ave. Interchange (Diverging Diamond)	2013
HHH Terminal Parking Expansion	2008	Concourse G Roof Replacements	2013
St. Paul Airport Runway Safety Area	2008	North Side Storm Sewer (Ponds 3 & 4)	2013
Perimeter Fence/Gate Barrier System	2008	Post Road Fuel Farm Fire Protection Improvement	2013
St. Paul Airport-Dike Excavation	2008	Conveyance System Upgrades	2013
Runway 12L/30R Reconstruction - Segment 2	2009	2014 Pavement Rehabilitation-Aprons	2014
North/South Runway-Bloomington Land Acquisition	2009	Terminal 1-Lindbergh Checked Baggage Inspection system	2014
HHH Terminal Parking Facility Expansion	2009	Terminal 1-Lindbergh Bag Claim Fire Protection System	2014
St. Paul Airport - Flood Protection: Perimeter Dike	2009	Terminal 2-Humphrey Auto Rental Facility	2014
Lindbergh Sprinkle System - Phase 3	2009	2012iVSN Projects (CCTV) Phase 1&2, Camera Replacements	2014
MUFIDS Phase 2	2010	Solar Panels on Blue/Red Parking Ramp	2015
Lindbergh Terminal Carpet	2010	Terminal 1-Lindbergh FIS Expansion Gate 8 Holding Room	2015
HHH Skyway Expansion	2010	2014 Airline Accommodations	2015
Flying Cloud Airport -Runway 10R/289L Extension	2010	2014 iVSN-CCTV Improvements	2015
2008/2009 Part 150 Noise Sound Insulation Program	2010	2015 Terminal 1 Modular Cooling Tower Installment	2015
Concourse G Expansion Site Preparation	2011	Terminal 2-Humphrey Checked Baggage Inspection System	2016
Taxiway C Extension to HHH Remote	2011	Terminal 2-Humphrey Gate Expansion	2016
Lindbergh Sprinkle System - Phase 4	2011	Terminal 1-Lindbergh Checkpoint Consolidation	2016
FAA Building Upgrades	2011	Terminal 1-Lindbergh 2014/2015 Restrooms Upgrade	2016
2008/2012 Part 150 Noise Sound Insulation Program	2012	Solar Panels on Terminal 2-Humphrey Parking Ramp	2016
Terminal 2-Humphrey Phase A Security Checkpoint	2012	2015 Pavement Rehabilitation-Aprons	2016
Terminal 2-Humphrey Fuel Facility Relocation	2012	2016 Passenger Boarding Bridge-Phase 2	2017
Terminal 1-Lindbergh Folded Plate Drain Roof Repair	2012	2016 Terminal 1-Lindbergh Restrooms Upgrade	2017
Perimeter Fence Security Improvement	2012	2016 iVSN (CCTV) Improvements	2017
Terminal 1-Lindbergh Jet Bridge Replacements	2012	2016 Concourse A/B Pre-Conditioned Air Upgrades	2017
Terminal 1-Lindbergh South Baggage Screening - Phase 2	2013	2016 Food Court Service Elevator Replacement	2017
IT Data Center Facility - Phase 1 & 2	2013	2017 Automated Security Lanes (ASLs)	2017
Terminal 2-Humphrey Apron Expansion	2013	2017 Parking Structure Rehabilitation	2017

Note: Lindbergh=Terminal 1-Lindbergh HHH=Terminal 2-Humphrey

Activity/Operations Statistics

This section contains the historical and forecasted levels of activity for the period 2009 through 2018 in the MAC's system of airports.



The above chart illustrates passenger activity that occurred at MSP International Airport during the time period 2009 to 2018. The following highlights recent activity affecting passenger activity.

- 2009 - Worst recession since the Great Depression yielded 1.6 million fewer passengers
- 2013 - Increase in passengers due to a stronger economy
- 2018 - Budget projects an increase in passenger activity of 2% over 2017 based upon airline projections and a stronger economy

Passenger Type 2014 to 2018					
Passenger Type	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Budget
Enplaned	9,298,618	9,791,389	10,500,930	11,032,337	11,252,984
Connecting	15,818,190	15,878,034	15,319,644	14,705,634	14,999,747
Deplaned	8,972,640	9,825,002	11,684,947	12,296,370	12,542,297
Total Passengers	34,089,448	35,494,425	37,505,521	38,034,341	38,795,028

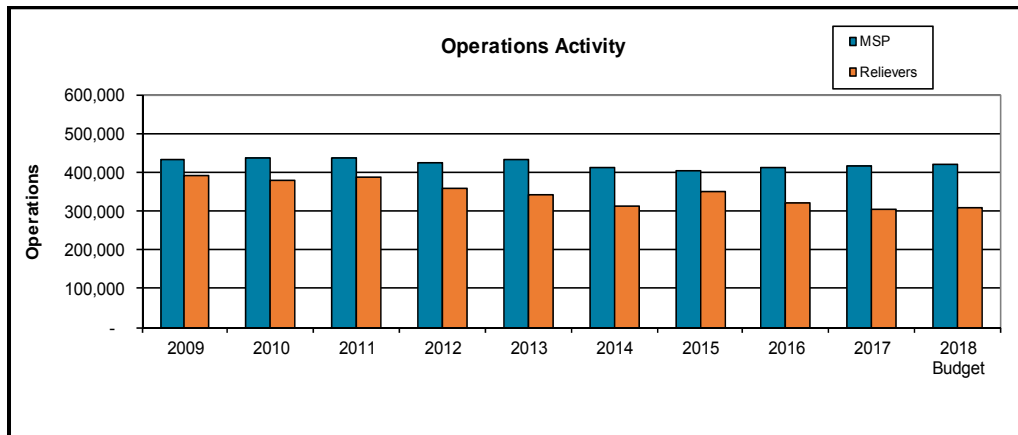
Estimates of passenger activity form an important element in forecasting revenue each year. The above chart represents actual passenger statistics for 2014 through 2017 with an estimate for the 2018 budget. The following categories are each used in a specific manner when calculating revenue:

- Enplaned (originating) passengers plus connecting passengers are used in forecasting most concession revenue.
- Deplaned (final destination) passengers are used in the process of estimating auto rental revenue.
- Enplaned (originating) passengers, excluding connecting, are used in estimating common use and carousel/conveyor, porter services and queue line management percentages for billing the airlines.

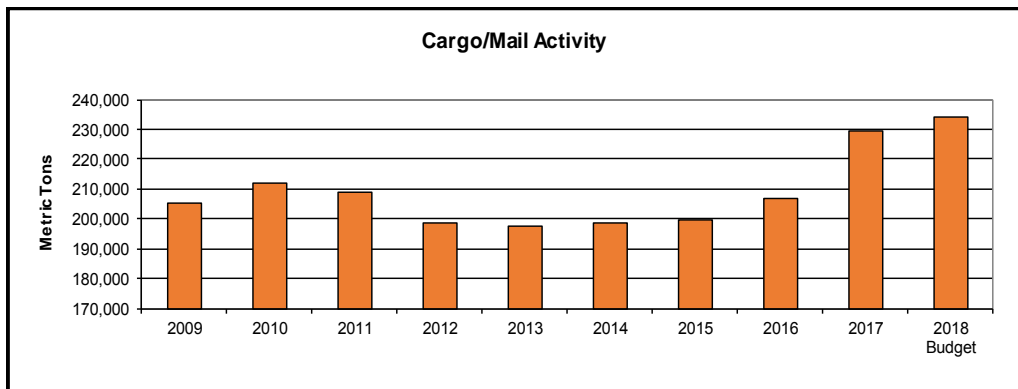


Delta Air Lines Operations at Terminal 1-Lindbergh

The following Operations Activity chart depicts the total operations activity for both the Reliever Airports and MSP International. An operation represents one takeoff or landing. MSP operations have declined steadily in past years as shown in the below chart due to airline bankruptcies, acquisitions, the recession and aircraft size. The 2018 budget is optimistic and is based upon prior year operations as airlines are flying larger aircraft with greater seating capacity.



The Cargo/Mail Activity Chart shows a decrease in activity from 2010 to 2013 as a result of shipments made via truck or rail due to costs and security, airline bankruptcy issues, and the economy. Cargo and mail delivery has risen since 2014 and experienced an even greater increase in 2017 as a result of increased shipping from consumer online shopping. The 2018 budget assumes an increase in this activity.



Visitor Planes Parked at Reliever Airports During Super Bowl LII

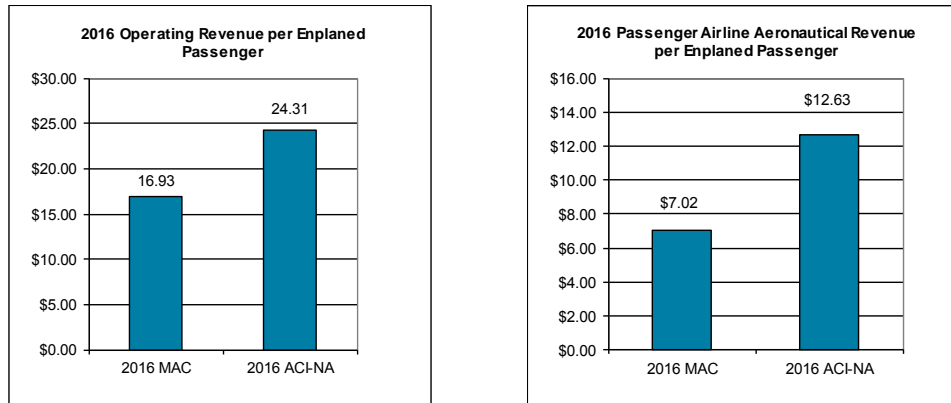


National Comparisons

The below national comparisons will be in revenue and other areas. The information presented was obtained from the National Airport Survey prepared by Airports Council International-North America (ACI-NA) dated October 2017. This survey grouped hub airports into three categories: large, medium, and small. MSP is considered a large hub airport.

Industry Revenue Comparisons

Revenue per Enplaned Passenger and Concessions Revenue are shown below. The following charts compare the MAC's revenue with ACI-NA survey results for 2016:

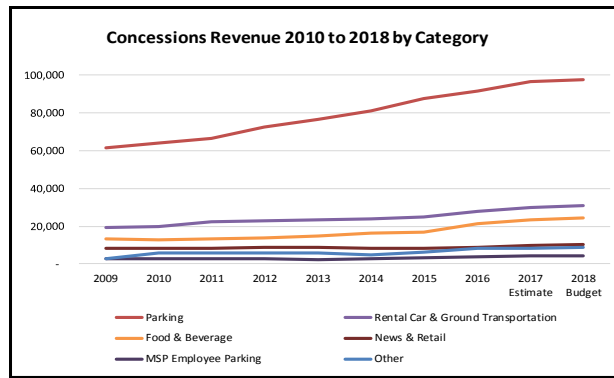


Operating Revenue per Enplaned Passenger compares the MAC's revenue of \$16.93 per enplaned passenger to other large hub airports of \$24.31. The difference is primarily attributable to the MAC's lower operating costs as these costs are used to calculate airline rates and charges.

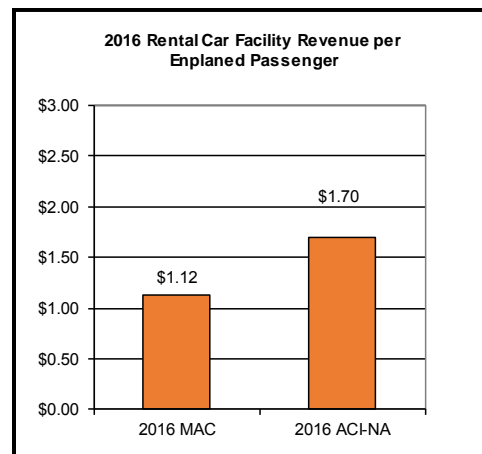
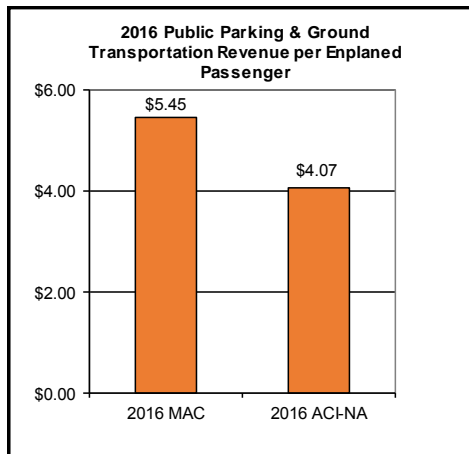
Passenger Airline Aeronautical Revenue per Enplaned Passenger in the above chart measures how much airlines pay the airport on a per enplaned passenger basis. Cargo revenue is not included. The MAC's ratio is below the median by \$5.61/enplanement. The primary reason for this difference is the MAC's lower operating costs. In addition, the Third Amendment for the airlines established a concessions credit which also lowers the airline cost. The amended Airline Use Agreement, due to airline bankruptcies, allows for a change in rate methodology, lease adjustments, etc. See Operating Budget Revenue section for further details.

The following table and chart presents historical concession revenues from 2010 to 2016, estimate for 2017 and the 2018 budget. The largest groups of concession revenue are Parking and Rental Car and Ground Transportation. See Operating Budget Revenue for additional details.

2018 Budget Concession Revenues (\$ = 000)							
Year	Parking	Rental Car & Ground Transportation	Food & Beverage	News & Retail	MSP Employee Parking	Other	Total
2010	63,682	19,616	12,957	8,028	2,469	5,752	112,504
2011	66,612	22,246	13,398	8,373	2,578	5,585	118,792
2012	72,621	22,574	13,808	8,607	2,929	5,860	126,399
2013	76,569	23,133	14,743	8,489	2,414	5,973	131,321
2014	80,658	23,751	16,128	8,245	2,917	4,745	136,444
2015	87,578	24,694	16,836	8,191	3,328	6,266	146,893
2016	91,235	27,783	21,044	8,702	3,653	8,274	160,691
2017 Estimate	96,300	29,740	23,037	9,969	4,158	8,300	171,504
2018 Budget	97,469	30,968	24,023	10,286	4,158	8,591	175,495

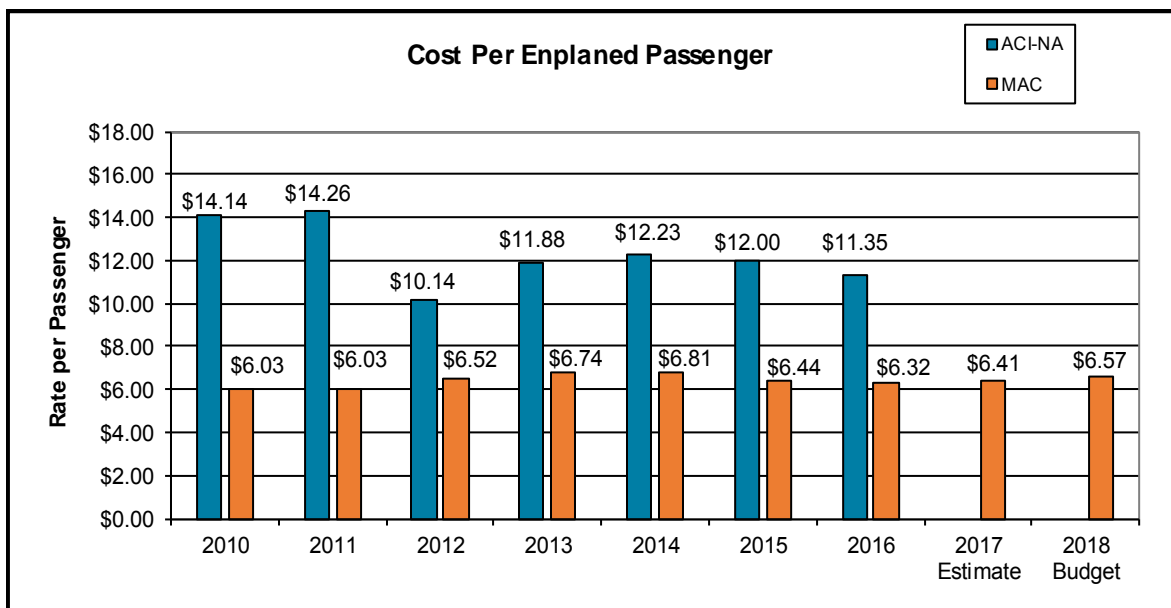


The following two charts represent MSP's comparison with other large hub airports for Parking and Ground Transportation and Rental Car Facility per Enplaned Passenger. MSP, in 2016, was higher than the national average for parking and ground transportation by \$1.38. However, MSP is lower in generating revenue from rental car facilities by \$0.58.



Industry Comparisons - Other

The following section compares the MAC to industry performance ratios. These ratios are based on 2016 financial and operating data (the most recent available) and have been used for purposes of comparison. All MAC data are based upon actual 2016 information.

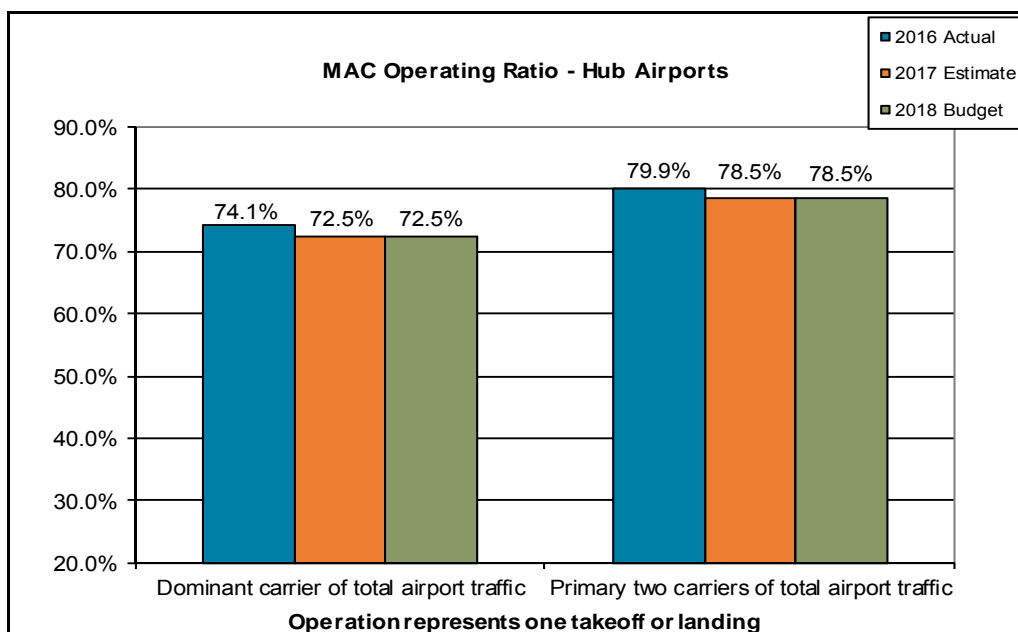
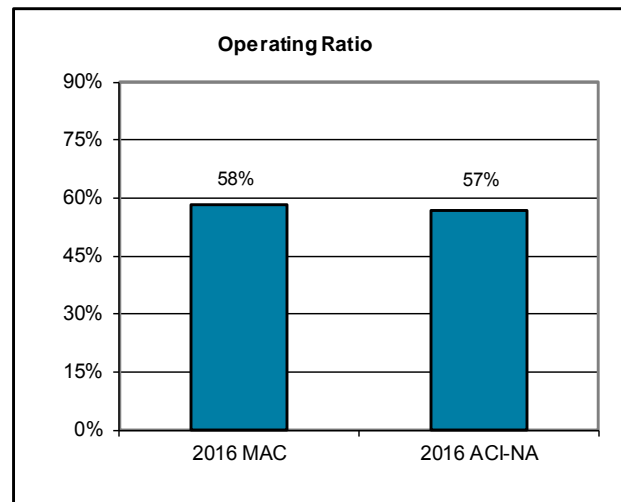
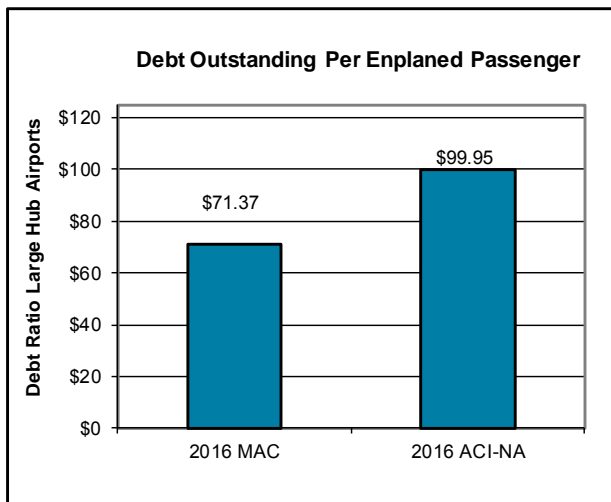


The previous chart, Cost per Enplaned Passenger, historically compares MSP's operating expenses for airlines in the airfield, ramp, terminal buildings and international facilities per enplaned passenger to the average cost per enplaned passenger as indicated in the ACI-NA report. In 2016, the MAC's expense of \$6.32 per passenger, which is in the lower third of large hub airports, is less than the 2016 national average of \$11.35 for large hub airports and is attributable to the MAC's lower operating costs.

Debt Outstanding per Enplaned Passenger is calculated by dividing total outstanding General Airport Revenue Bond (GARB) debt by the number of enplaned passengers. The chart below uses the average for Debt per Enplaned Passenger as published by the ACI-NA for large hub airports. The MAC's ratio of debt/enplaned passenger is below the industry average due to bond refundings.

The 2016 Operating Ratio is calculated by dividing total operating expenses, excluding depreciation, by total operating revenues. As shown below, the MAC's operating ratio indicates that operating expenses are a slightly higher percentage of the total operating revenue than the national average. The Commission strives to keep costs low.

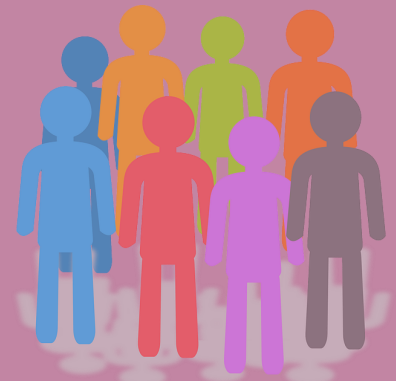
The dominant carrier at MSP is Delta Air Lines. As shown below, the 2018 budget is projecting no change in the Delta percentages from the 2017 estimate. The second largest carrier in 2016 was American Airlines with 5.9% of total airport traffic.



Minnesota

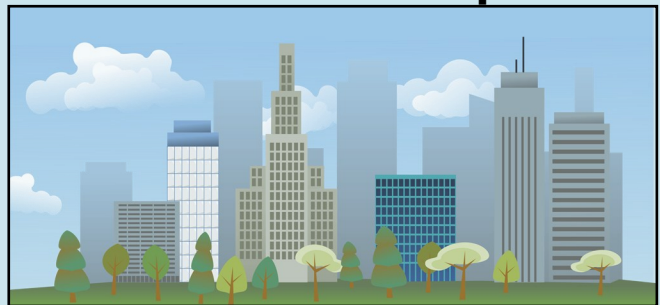
at a glance

Population



5.6 Million

18 Fortune 500 Companies



**Generating \$510.1 Million
in Revenue**

74,500



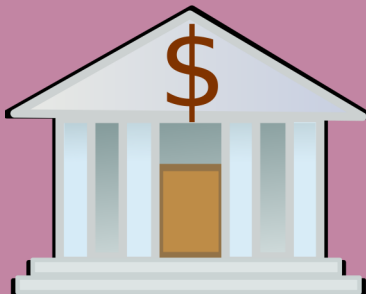
Family Farms

500K



**Small
Businesses**

\$52,038



Per Capita Income



32%

**of Adults Hold a Bachelors
Degree or Higher**

92%

**of Adults Hold a High
School Diploma or Higher**

Informative Facts about Minnesota

Minnesota is a dynamic and flourishing state for a variety of reasons. A number of Fortune 500 companies are located within the state as Minnesota's culture promotes financial prosperity. The Minnesota education rates exceed the national average which, in turn, reduces the state unemployment rate, increases per capita income and provides the opportunity to choose from many large employers for employment. In addition, the Minneapolis-St. Paul International Airport is ranked among the top airports in a number of areas. Minneapolis-St. Paul International Airport is the only large hub airport in the Metropolitan Statistical Area (MSA) serving scheduled air commerce.

To gain a better understanding of Minnesota, the following information is presented in this section.

- Population
- Employers
- Employment
- Income and Education
- Tourism and Attractions
- Interesting Facts about Minneapolis-St Paul International Airport

Population

Despite the sometimes frigid weather, Minnesota's population continues to grow each year. The table below presents the population for the U.S., Minnesota, and the Metropolitan Statistical Area (MSA). The MSA is composed of 11 counties located in the east-central region of the state and two counties in the western portion of Wisconsin. According to the U.S. Census Bureau, Minnesota is the 22nd most populous state in the nation, with a 5.1% increase since 2010. The Minnesota Department of Natural Resources website states a population density of 66.6 persons per square mile. Much of the recent population growth is attributed to immigration, births, and new residents. According to the Minnesota State Demographic Center, the state population is made up of 81.0% White Non-Hispanic, 5.8% African American, 5.2% Hispanic, and 4.8% Asian Non-Hispanic people, with the remaining 3.2% of the population representing a variety of other races. Approximately 64% of Minnesota's population lives in the MSA, as shown in the table below.

POPULATION As of December 31, 2017 (In thousands)					
Calendar Year	United States	Minnesota	Minneapolis St. Paul MSA	MSA** as % of US	MSA as % of Minnesota
2004	293,046	5,079	3,112	1.1%	61.3%
2005	295,753	5,127	3,141	1.1%	61.3%
2006	298,593	5,167	3,172	1.1%	61.4%
2007	301,580	5,198	3,208	1.1%	61.7%
2008	304,375	5,231	3,238	1.1%	61.9%
2009	307,007	5,266	3,270	1.1%	62.1%
2010	309,326	5,303	3,349	1.1%	63.2%
2011	311,583	5,347	3,389	1.1%	63.4%
2012	313,874	5,380	3,422	1.1%	63.6%
2013	316,129	5,420	3,459	1.1%	63.8%
2014	318,857	5,457	3,428	1.1%	62.8%
2015	322,871	5,490	3,495	1.1%	63.7%
2016	324,304	5,520	3551	1.1%	64.3%
2017	326,971	5,577	TBD	TBD	TBD

Sources: US Department of Commerce, Bureau of the Census accessed 1/9/2018

**MSA=Metropolitan Statistical Area

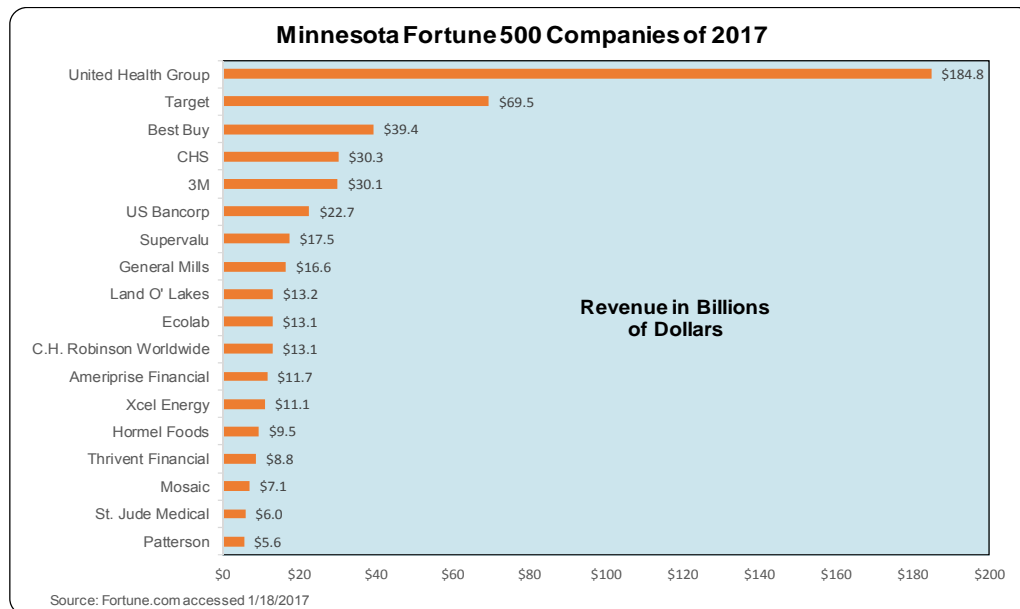
Employers

Many large, prominent companies are based in Minnesota and reap the benefits of the state's talent, innovation, and trade. In 2017, Mayo Clinic was at the top of the Largest Minnesota Employer listing with almost 42,000 employees, when ranked by number of in-state employees. State and Federal Governments are close behind in the ranking with 41,200 and 31,900 employees, respectively. Target Corporation is still holding strong as one of the top employers, and Delta Air lines is a big player with 7,800 in-state employees.

Minnesota Top 20 largest Employers Ranked by instate employees		
Employer	Number of Minnesota Employees	Industry
Mayo Clinic	41,620	Health Services
State of Minnesota	41,200	Governmental Services
US Federal Government	31,900	Governmental Services
Allina Health	27,635	Health Services
University of Minnesota	26,436	Education
Target Corporation	26,271	Retail
Fairview Health Services	24,000	Health Services
HealthPartners	23,000	Health Services
Wells Fargo Minnesota	20,000	Financial Services
UnitedHealth Group	17,000	Health Services
Minnesota State Colleges & Universities	16,190	Education
3M Company	15,000	Manufacturing
US Bancorp	13,000	Financial Services
Essentia Health	11,817	Health Services
United States Postal Service	11,528	Postal Services
CentraCare Health	9,758	Health Services
Supervalu Inc	9,310	Retail
Medtronic	9,000	Medical Technology
Hormel Foods Corp.	8,867	Food Manufacturing
HealthEast Care System	8,350	Health Services

Source: Minneapolis/St. Paul Business Journal

The companies on the Fortune 500 list total \$12 trillion in revenues and 28.2 million worldwide employees. Minnesota is home to 18 Fortune 500 companies, representing a wide variety of industries including health services, financial services, retail sales, manufacturing, and food processing. These companies brought in \$510.1 billion in revenue in 2017. The following chart recognizes the Minnesota Fortune 500 Companies of 2017 ranked by revenue. United Health Group tops the chart with \$184.8 billion in revenue, followed by Target Corporation with \$69.5 billion. Best Buy and CHS are next in line with \$39.4 and \$30.3 billion, respectively. Minnesota is also home to more than 500,000 small businesses and 74,500 farms.



Employment

The civilian unemployment table reveals that Minnesota and the Minneapolis-St. Paul Metropolitan Statistical Area have historically low unemployment rates. The Minnesota rate has been below the national rate for all years shown except for 2007 and 2008. During those years, a recession from poor housing, credit, and financial markets led to the highest unemployment rate in Minnesota in 22 years. However, the unemployment rate for the MSA was lower than the national unemployment rate in every year shown. According to the Bureau of Labor Statistics, Minnesota's current 3.1% unemployment rate was the 9th lowest in the nation in November of 2017. In 2010, the unemployment rate began to decline in Minnesota and the MSA, but it did not decline for the United States until the following year. Unemployment continues to remain low for the United States, Minnesota, and the MSA.

Calendar Year	United States	Minnesota	Minneapolis-St Paul MSA**
2003	6.0%	4.9%	4.7%
2004	5.5%	4.4%	4.4%
2005	5.1%	4.2%	3.9%
2006	4.6%	4.4%	3.8%
*2007	4.6%	4.8%	4.0%
*2008	5.8%	6.5%	5.1%
2009	9.3%	7.7%	7.9%
2010	9.6%	7.0%	7.3%
2011	8.9%	5.8%	6.3%
2012	8.1%	5.4%	5.5%
2013	7.4%	4.7%	4.8%
2014	6.2%	3.6%	3.0%
2015	5.0%	3.5%	2.7%
2016	4.7%	3.8%	3.0%
2017	4.1%	3.1%	2.4%

*Indicates national recession during all or part of the year
 **The MSA consists of 13 surrounding counties.
 Sources: US Department of Labor, Bureau of Labor Statistics accessed 1/9/17, Minnesota Department of Employment and Economic Development accessed 1/9/17

According to the Department of Employment and Economic Development (DEED), Minnesota is projected to continue adding jobs annually and will reach 3.1 million jobs by 2022. With the Fortune 500 companies, the large number of employers in the state, and new jobs added annually, Minnesota remains economically strong and vibrant.

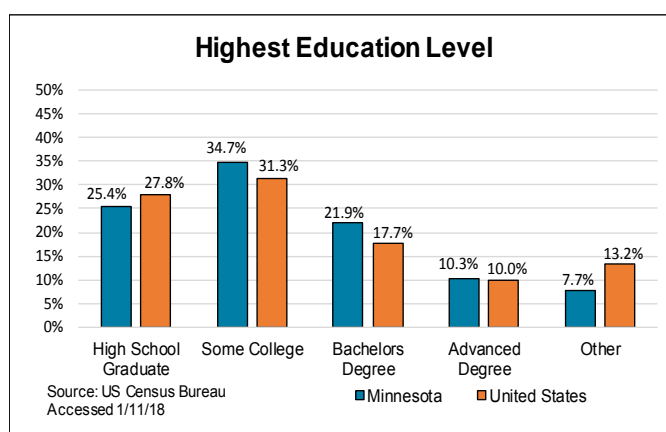
Income and Education

In 2016, Minnesota ranked 13th in the U.S. for per capita personal income. The Minnesota rate increased 3.0% from 2015 to 2016, compared to the national average of 2.4 percent. Minnesota's \$52,038 per capita personal income was 105.7% of the national average of \$49,246 per the Bureau of Economic Analysis. For every year listed in the following personal income chart, the MSA's per capita personal income has been higher than the per capita personal income amount for both the nation and the state. This higher per capita personal income leads to an average higher discretionary disposable income than others throughout Minnesota and the nation. This relates positively to the demand for air travel.

The following two charts depict comparisons of per capita personal income and the highest attained education levels.

Year	Minnesota	United States	MSA
2007	\$ 41,764	\$ 39,430	\$ 46,853
2008	\$ 43,037	\$ 40,208	\$ 48,207
2009	\$ 41,223	\$ 38,846	\$ 44,977
2010	\$ 42,847	\$ 39,945	\$ 46,498
2011	\$ 44,560	\$ 41,560	\$ 48,657
2012	\$ 46,925	\$ 43,735	\$ 50,260
2013	\$ 47,500	\$ 44,765	\$ 51,183
2014	\$ 48,998	\$ 46,049	\$ 53,166
2015	\$ 50,541	\$ 48,112	\$ 55,599
2016	\$ 52,038	\$ 49,246	\$ 56,723

Source: Bureau of Economic Analysis, US Department of Commerce accessed 1/11/18



Education is important to Minnesotans. As depicted in the education chart above, the state has a well-educated workforce. For adults 25 years of age and over, the percentage of Minnesotans with bachelor and advanced degrees is 6.6% greater than the percentage of the United States population as a whole. Including high school graduates and people with some college education, Minnesota exceeds the nation by 5.5%. Post-secondary education opportunities in the MSA include a variety of institutions: public universities, private colleges and universities, community colleges, technical colleges, and post-graduate schools. In addition, several proprietary schools offer trade and technical training in the MSA. These educational opportunities help situate Minnesota in a competitive economic position.

Tourism and Attractions

The Minneapolis-St Paul area has numerous tourist attractions and local activities:

- The nation's largest shopping center and entertainment complex, the Mall of America (MOA) receives over 40 million visitors per year, 40% of whom are tourists. The MOA generates \$2 billion of annual economic activity.
- Nationally renowned cultural organizations include the Guthrie Theater, Children's Theater Company, Minnesota Orchestra, St. Paul Chamber Orchestra, Minnesota Opera, Walker Art Center, Minneapolis Institute of Arts, and Minnesota Museum of Art.
- Broadway shows and other cultural events are hosted by the State Theater, Orpheum Theatre and Ordway Theatre.
- Six major teams play professional sports in the Twin Cities: the Minnesota Twins (baseball), Minnesota Vikings (football), Minnesota Timberwolves (men's basketball), Minnesota Lynx (women's basketball), Minnesota United (men's soccer) and Minnesota Wild (hockey). In 2016, the brand new U.S. Bank Stadium in downtown Minneapolis hosted its first Minnesota Vikings game. It also hosted the NFL's Super Bowl LII game in 2018. The Saint Paul Saints (American Association of Independent Professional Baseball) opened CHS Field in downtown Saint Paul in 2015.
- University of Minnesota Gophers participate in the Big Ten Conference in a number of sports including basketball, hockey, football and soccer.
- Minnesota, with its more than 10,000 lakes and 136,000 acres of parks, trails and wildlife management areas, is known for its wide variety of outdoor activities such as sailing, fishing, skiing, and hunting.
- Popular local activities in Minnesota include the following annual events: Minnesota State Fair, Minneapolis Aquatennial, and St. Paul Winter Carnival.



U.S. Bank Stadium, Downtown Minneapolis

Source: Architectural Digest Online

Interesting Facts about the Metropolitan Airports Commission

Historical Facts



Arial View of Snelling Speedway

The Snelling Speedway auto racing venue was an unsuccessful venture. In 1914, the Minneapolis Aero Club acquired the property, which is now home to the Minneapolis-St. Paul International Airport.

The first hangar was built on the speedway property in 1920. The wooden structure was constructed to accommodate airmail service. The 160-acre property became known as Speedway Field.

In 1926, Northwest Airways won the government's airmail contract and acquired the hangar.



First U.S. Air Mail Building on Speedway Field

In 1923, Speedway Field was re-named Wold-Chamberlain Field in honor of two local pilots, Ernest Wold and Cyrus Chamberlain, who lost their lives in combat during World War I.



Dedication of Wold-Chamberlain Field on July 10, 1923



St. Paul Downtown Airport Terminal Building – Year 1939

The St. Paul Downtown Airport remains one of the six reliever airports in the Metropolitan Airports Commission's system. Formerly known as Holman Field, the airport is now the metro area's primary facility for private business aviation. To protect the facility against river flooding, a floodwall was installed in 2008.

**Filming in the Airport Terminal**Source: www.imdb.com & Getty Images © 2012

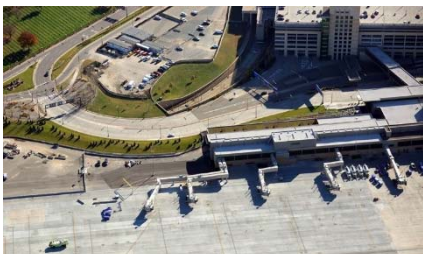
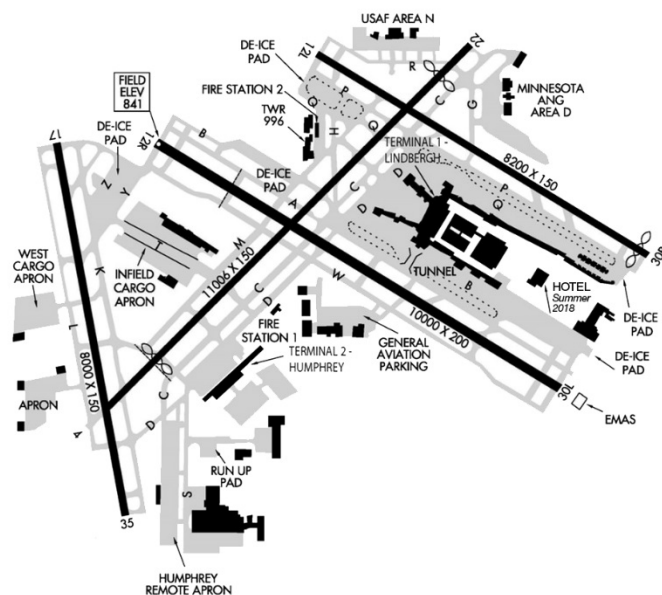
In 1970, the movie “Airport” was filmed partially at MSP. Burt Lancaster, Dean Martin, Jean Seberg, and Jacqueline Bisset starred in the movie.

Current MSP Information

- The MSP Airport Surveillance radar sweeps the sky once every 4.8 seconds.
- Runway 17-35 and its taxiways contain enough concrete to build a sidewalk from Minneapolis to New Orleans.
- Runway 12R-30L is 10,000 feet long by 200 feet wide, which equates to two million square feet of concrete. The MAC runway snow removal team can clear the runway of snow in less than 10 minutes.
- MSP operates one of the nation’s most extensive airport noise mitigation programs. Since 1992, the Commission has spent approximately \$480 million on noise mitigation programs, including insulating 17,969 single-family homes and multi-family units and 19 schools.
- The 53,000 kilometers of fiber cable installed on the property of the Commission could circle the world just over two times.
- MSP encompasses approximately 3,300 acres. Turf areas, accounting for more than one-third of the campus, require extensive maintenance by the Field Maintenance crew.

MSP Airport Activity

The passenger traffic at MSP is affected by the region’s economic profile. For example, the amount and type of commerce in the region may affect the level of business travel to and from MSP or the average regional personal income may affect the level of discretionary travel from MSP.

**Terminal 2 Gate Expansion****MSP Runway Map**

2016 Ranking of US Airports (For the 12 Months ended December 31, 2016)					
Total Passengers ¹ (in thousands)			Total Cargo ² (Freight and mail, in thousands of metric tons)		
Rank	Airport	Passengers	Rank	Airport	Cargo
1	Atlanta (ATL)	104,172	1	Memphis (MEM)	4,322
2	Los Angeles (LAX)	80,922	2	Anchorage (ANC)	2,543
3	Chicago (ORD)	77,961	3	Louisville (SDF)	2,437
4	Dallas/Fort Worth (DFW)	65,671	4	Miami (MIA)	2,014
5	New York (JFK)	59,106	5	Los Angeles (LAX)	1,993
6	Denver (DEN)	58,267	6	Chicago (ORD)	1,528
15	Houston (IAH)	41,623	25	Denver (DEN)	250
16	Newark (EWR)	40,563	26	Portland (PDX)	219
17	Minneapolis (MSP)	37,414	27	Orlando (MCO)	209
18	Boston (BOS)	36,357	28	Detroit (DTW)	205
19	Detroit (DTW)	34,401	29	Minneapolis (MSP)	191
20	Philadelphia (PHL)	30,155	30	Salt Lake City (SLC)	174

¹ arriving and departing passengers and direct transit passengers counted once
² loaded and unloaded freight and mail in metric ton
Source: ACI 2016 North American Traffic Summary

MSP is one of the highest activity airports in the United States. Approximately 40% of the passengers are connecting while the other 60% are origin-destination. In 2002, MSP held 9th place for U.S. airport passenger activity. Several airline bankruptcies and mergers subsequently occurred, as well as a general decline in air travel. This resulted in a drop in rank to 17th place, where MSP has held steady for several years.

When ranked by total cargo, MSP placed 29th in the U.S. for 2016. MSP fell from the 2015 ranking of 27th place. This is generally attributable to significant increases in total metric tons of cargo for Detroit and Orlando. The Amazon Fulfillment Center located in Minnesota was opened for a full year for the first time in 2017. It is anticipated that this will lead to a slight increase in 2017 cargo at MSP over 2016.

The following table indicates which air carriers provide service at MSP. As of January 1, 2018, the airport was served by 38 air carriers, including 22 U.S. Flag carriers providing scheduled service, nine all-cargo service carriers, and seven foreign-flag carriers.

Minneapolis St Paul International Airport Air Carriers Serving the Airport ¹ As of January 1, 2018		
U.S. Flag Carriers		
Air Wisconsin*	Envoy*	Sun Country*
Air Choice One*	ExpressJet*	Republic Airlines*
Alaska*	Frontier*	Shuttle America*
American*	Go Jet*	Sky West*
Boutique Air*	Horizon*	Southwest*
Compass*	Mesa*	Spirit*
Delta*	PSA*	United*
Endeavor*		
Foreign Flag Carriers		
Air Canada*	Condor*	KLM*
Air France*	Icelandair*	Sky Regional*
Air Georgian*		
All Cargo Service		
ABX Air*	CSA Air	Mountain Air Cargo
Atlas Air Cargo*	FedEx*	Suburban
Bemidji*	IFL	UPS*

* Denotes those air carriers that are signatory airlines to the Airline Lease Agreement.
¹ Excludes carriers reporting fewer than 1,000 enplaned passengers per annum.
Source: Metropolitan Airports Commission

In addition to the preceding air carriers, the Air Force Reserve 934th Tactical Airlift Group, the Marine Air Reserve Training Detachment, and the Naval Air Reserve-Twin Cities Center are three branches of the U.S. Armed Forces represented at MSP. The Minnesota Air National Guard 133rd Tactical Airlift Group is also located at MSP.

Glossary

21D – Lake Elmo Airport – An easy drive to the St. Paul business district or to scenic destinations along the St. Croix River, such as Stillwater, Minnesota and Hudson, Wisconsin. It is one of six reliever airports operated by the MAC.

AA – Affirmative Action

AAAE – American Association of Airport Executives – Founded in 1928, AAAE is the world's largest professional organization for airport executives, representing thousands of airport management personnel at public-use commercial and general aviation airports. AAAE's members represent some 850 airports and hundreds of companies and organizations that support airports. AAAE serves its membership through results-oriented representation in Washington, D.C. and delivers a wide range of industry services and professional development opportunities including training, meetings and conferences, and a highly respected accreditation program. http://www.aaae.org/about_aaa/

Accrual Basis – This basis of accounting attempts to record financial transactions during the period in which they occur, rather than recording them during the period in which they are paid.

ACI-NA – Airports Council International-North America – The Airports Council International – North America (ACI-NA) represents local, regional and state governing bodies that own and operate commercial airports in the United States and Canada. <http://www.aci-na.org/content/who-we-are>

ACRP 74 – Airport Cooperative Research Program Report 74 – A publication of the Transportation Research Board of the National Academies, entitled “Application of Enterprise Risk Management at Airports.” http://onlinepubs.trb.org/onlinepubs/acrp/acrp_rpt_074.pdf

Administrative Expenses – One of the main expense categories which includes the following: office supplies, computer supplies, postage, printing, memberships, and travel.

ADA – The Americans with Disabilities Act – The Americans with Disabilities Act prohibits discrimination against people with disabilities in employment, transportation, public accommodation, communications, and governmental activities. The ADA also establishes requirements for telecommunications relay services. <https://www.dol.gov/general/topic/disability/ada>

AFD – Airport Fire Department

Agreement (The) – The Airline Agreement which expires on 12/31/18 for most airlines (Delta, Compass, Endeavor Air, KLM, and Air Canada expires 12/31/20.) This Agreement is the basis for airline rates and charges primarily the landing fee, ramp fee, carousels and conveyors, terminal building rates and the noise surcharge.

Agreement (The) Third Amendment – This was an amendment to the Airline Agreement approved in 2007 by all carriers. Major components of this amendment include converting the rate methodology from Depreciation and Interest to Debt Service and incorporating a portion of the concessions (25% of Food & Beverage, Retail, News and On Airport Auto Rental revenues to the MAC up to a maximum of \$32.3 million escalated annually) as a rebate to Terminal 1 and Terminal 2 tenants.

AHU – Air Handling Unit

AIP Entitlements – Funding available under the FAA's Airport Improvement Program (AIP). Entitlement grants are based on the number of enplaning passengers and landed cargo weight.

AIP Grants – Noise – Funding available under the FAA's Airport Improvement Program (AIP). Environmental Mitigation Projects are discretionary grants that are approved on a project by project basis.

Airline Rates and Charges – One of the three main revenue categories. Includes all charges set by the Airline Agreement (landing fees, ramp fees, terminal rents, carousels and conveyors) plus other airline terminal rents.

Airline R & R (ALR&R) – Airline Repair and Replacement Surcharges – Part of the airline rates and charges

Amortization – The systematic allocation of a balance sheet item to expense (or revenue) on the income statement

ANE – Anoka County-Blaine Airport – Situated in the north metro near the National Sports Center, Anoka County-Blaine Airport is also known as Jane's Field. It is one of six reliever airports operated by the MAC.

AOA – Airport Operations Area – Any area of an airport used or intended to be used for landing, takeoff, or surface maneuvering of aircraft. An air operations area includes such paved areas or unpaved areas that are used or intended to be used for the unobstructed movement of aircraft in addition to its associated runway, taxiways, or apron. <http://aviationglossary.com/air-operations-area-aoa/>

AOEE – Assessment of Environmental Effects

APC – Automated Passport Control – APC is a U.S. Customs and Border Protection (CBP) program that expedites the entry process for U.S., Canadian and eligible Visa Waiver Program international travelers by providing an automated process through CBP's Primary Inspection area. Travelers use self-service kiosks to submit their Customs declaration form and biographic information.

APD – Airport Police Department

APM – Automated People Mover – The MAC has three Automated People Movers, also known as trams, to transport the traveling public. The C Concourse Tram runs the length of the C Concourse, which has 28 gates. The two parallel hub trams connect Terminal 1 with various ground transportation options, rental cars, parking ramps, and the light rail to Terminal 2.

Apron – The extensive paved area immediately adjacent to the Terminal Building area and hangar area. Also referred to as the ramp

ARFF – Aircraft Rescue Fire Fighting – Operators of Part 139 airports must provide aircraft rescue and firefighting services during air carrier operations that require a Part 139 certificate.
http://www.faa.gov/airports/airport_safety/aircraft_rescue_fire_fighting/

ASQ – Airport Service Quality Program – Airports Council International's ASQ is the world-renowned and globally established global benchmarking program measuring passengers' satisfaction while they are travelling through an airport. <http://www.aci.aero/Airport-Service-Quality/ASQ-Home>

AST – Above Ground Storage Tank is a tank that stores liquid substances (e.g. jet fuel, glycol, diesel fuel) above ground

ATCT – Air Traffic Control Tower

AVI – Automated Vehicle Identification – A system which uses radio frequency identification to identify a vehicle by reading a small tag mounted on a vehicle windshield

BHS – Baggage Handling System

Balanced Budget – Refers to a budget approach in which budgeted operating revenue is equal to budgeted operating expense plus depreciation

BIDS – Baggage Information Display System

Bonds – A formal promise to pay a specified principal at a certain date in the future along with periodic interest on that principal at a specified rate per period

Budget – An itemized summary of expected income and expenditure of the Metropolitan Airports Commission over a specified period

CAFR – Comprehensive Audited Financial Report

Capital Equipment – Represents equipment with a cost of at least \$10,000, which will be capitalized and depreciated

Capital Expenditure – Refers to a project or piece of equipment with a cost of at least \$10,000; it will be capitalized and depreciated over its useful life

Capital Improvement Program (CIP) – This program covers projects which will be started during the next two years. Also, a Capital Improvement Plan is used to project an additional five years' worth of projects. These serve as a basis for determining funding requirements and other operational planning decisions.

Capitalized Interest – Interest costs incurred from date of capital project commencement through date of beneficial occupancy (substantial completion)

CBP – U.S. Customs and Border Protection

CCTV – Closed Circuit Television

CFC – Customer Facility Charge is an on-airport rental car assessment to recover the rental car portion of capital costs associated with construction of the auto rental/public parking garage located adjacent to Terminal 1 as well as to recover certain maintenance costs relating to the auto rental facilities.

CIP – Capital Improvement Plan – A 7-year plan relating to construction projects in the Commission's airport system. The current budget year includes projects that have been reasonably defined for implementation during that year. The next budget year includes projects that have been identified in that year of the program which have a need or potential need, but require further study in order to properly determine the scope, feasibility, and cost of the project. The final five years consists of projects that appear to be needed during that period. This portion assists in financial planning and meets the requirements of the Metropolitan Council's Investment Framework.

CMAA – Commercial Management and Airline Affairs – The Commercial Management and Airline Affairs Department oversees revenue generation from airline and airport concession agreements, MSP leases, and system-wide non-aeronautical leases. The department manages MAC property and real estate. It also works to maintain and enhance air service at MSP, including development and management of incentive programs and efforts to spur additional domestic and international route development.

CMMS – Computerized Maintenance Management System – A software system used to manage assets and to track asset maintenance; a database of information relative to an organization's maintenance operations including work orders, repair history and life-cycle costs

CMS – Content Management System is a computer program which allows publishing, editing and modifying content as well as maintenance from a central interface; the core function of content management systems is to present information on web sites.

COLA – Cost-of-Living Adjustment

Commission – Metropolitan Airports Commission

Commercial Paper – Short-term debt obligation sold with maturity dates of 270 days or less

Concessions – One of the three main revenue categories; this category includes: food and beverage, news & gifts, parking, auto rental, vending, ground transportation, telephones, and numerous other small leases.

Concourse – The long hallway-like structure where loading and unloading of passengers takes place

Connecting Passengers – Passengers who fly to MSP and transfer to another flight in order to reach their final destination

Construction Fund – A special account whose monies are used for capital project expenditures, including consulting fees, at all Commission facilities (See Construction Budget)

CSAC – The Customer Service Action Council was created in 1999 in response to the State of Minnesota “Quality” initiative. The MAC charged CSAC with leadership of its strategic effort to provide world-class, customer-oriented air transportation services at MSP.

CSPI – Customer Service Partnership Initiative is an inter-organizational approach to managing customer service throughout Minneapolis–St. Paul International Airport.

CUPPS – Common Use Passenger Processing System – CUPPS describes the range of services and specifications enacted to enable multiple airlines/handling agents, service providers, or other users to share physical areas on or off airport, whether simultaneously or consecutively. CUPPS is based on an open standards-based environment and has been specifically designed to easily incorporate new technologies as they become available. www.iata.org

CUSE – Common Use System Equipment – Ticketing and gate equipment used by multiple airlines or other entities

CUTE – Common Use Terminal Equipment – Ticketing and gate equipment used by multiple airlines or other entities

CUSS – Common Use Self-Service – CUSS describes the specifications and standards for multiple airlines sharing one physical self-service kiosk. <http://www.iata.org/whatwedo/workgroups/Pages/cuwg.aspx>

CWN – The Comprehensive Well Network is a network of wells (on the down-gradient perimeter of MSP) where groundwater quality and elevation data are collected

DAS – Distributed Antenna System – A DAS is a network of antenna nodes that are connected to a common source to provide wireless communication service in a specific locality or building. <https://www.techopedia.com/definition/6878/distributed-antenna-system-das>

DBE – Disadvantaged Business Enterprise

Debt Service – Represents issuer’s obligation to repay the principal and interest

Debt Service Account – An account which the MAC is required by law to maintain. The balance on hand on October 10th of each year must equal all principal and interest due on all Airport Improvement Bonds and General Obligation Revenue Bonds payable through the end of the second following year.

Debt Redemption Fund (Sinking Fund) – A special account whose monies are set aside to retire debt (See Debt Service Budget)

Defeased – Refers to bond refundings where the old debt is replaced by a new debt schedule. In most cases, this is done at a lower interest rate

Deficit – Represents the negative difference between operating revenues less operating expenses (including depreciation)

Department – Usually a combination of service centers but is sometimes used interchangeably with the term service center

Depreciation – Accounting process of allocating against periodic revenue the cost expiration of tangible plant, property and equipment over their useful lives

Derivative Financing Products – A transaction or contract whose value depends on or derives from the value of underlying assets such as stock, bonds, or mortgages. One party with exposure to unwanted risk can pass some or all of the risk to a second party. The first party can assume a different risk from a second party, pay the second party to assume the risk, or create a combination of these options. Derivatives are normally used to control exposure or risk.

DHS – Department of Homeland Security

DMR – Discharge Monitoring Report – DMRs are a set of self-monitoring report forms unique to the facility location and operation and based on currently effective permit requirements. Completing DMRs allows the facility to maintain compliance with the permit, verify that compliance, and identify pollutants from multiple sources that are entering a water body. www.pca.state.mn.us

DOT – Department of Transportation

DTC – Drivers Training Center

E1 – Enterprise One is a software product used by the MAC to handle administrative and financial functions ranging from accounting general ledger to personnel to purchasing to lease management.

EA – Environmental Assessment

EAW – Environmental Assessment Worksheet – EAWs are part of the Minnesota Pollution Control Agency's environmental review process. This review process is a standardized public process designed to disclose information about the potential negative environmental effects of a proposed development and ways to avoid or minimize them before the project is permitted and built. www.pca.state.mn.us

ECC – Emergency Communications Center

ECP – Environmental Compliance Program

EMC – Energy Management Center

EMS – Emergency Medical Services

Encumbered – Refers to the fact that funds have been committed for payment for goods or services

Enplaned Passengers – The number of passengers boarding an aircraft, including originating and stopover or on-line transfer passengers

Enterprise Fund – The cost (expenses including depreciation) of providing goods or services to the general public on a continuing basis is to be financed or recovered primarily through user charges; that is, operating and capital expenses are paid from revenues generated by users

EPA – Environmental Protection Agency – The EPA was established December 2, 1970 to consolidate into one agency a variety of federal research, monitoring, standard-setting and enforcement activities to ensure environmental protection. Since its inception, the EPA has been working for a cleaner, healthier environment for the American people. <https://www.epa.gov/aboutepa/epa-history>

EVIDs – Electronic Visual Information Display system includes various kinds of electronic displays operated by the Commission. Displays include MUFIDS displays, digital directories, LED signs over the ticket counters and the variable message displays which are programmed to show a message.

Exclusive Use – Space rented to a specific airline

Exclusive Use-Janitored – With this space the Commission furnishes janitorial cleaning

FAA – Federal Aviation Administration – The FAA dates to the Federal Aviation Act, which was signed by President Dwight D. Eisenhower. The FAA's mission is to provide the safest, most efficient aerospace system in the world. This translates into a variety of roles, including regulating civil aviation, developing and operating a system of air traffic control and navigation, and developing and carrying out programs to control environmental effects of civil aviation. www.faa.gov

FAA Regulation Part 36 – This regulation deals with noise standards, aircraft type, worthiness, and certification.

FAA Regulation Part 150 – This regulation: a) establishes a uniform nationwide system of describing aircraft noise and noise exposure on different communities; b) describes land-use compatibility for the guidance of local communities; and c) provides technical assistance to airport operators and other governmental agencies to prepare and execute noise compatibility planning.

F&A Committee – Finance and Administration Committee – The F&A Committee is composed of Commissioners meeting on a monthly basis. This Committee is one of the three standing Committees of the Metropolitan Airports Commission. All financial information is reported to and acted upon at the F&A Committee.

F&A – Finance & Administration

FCM – Flying Cloud Airport – FCM is situated in the southwestern corner of the Twin Cities in Eden Prairie. It is home base for many corporate business jets and turbo-props. It is one of six reliever airports operated by the MAC.

FCMS – FlexiPark Central Management System

FIDS – Flight Information Display System

FAST – Fire Alarm System Transition

FIS – Federal Inspection Services

FOD – Foreign Objects/Debris

FTE – Full Time Equivalent – term referring to employee headcount

Fuel Storage Facility – Operated by Airline Consortium and used to provide fuel to the airlines

Funds – Refers to the Commission's three funds segregated for accounting purposes – Operating, Debt, and Construction

Fund Balance – A fund balance is equal to the assets less liabilities in a fund at a given point in time. A positive fund balance indicates that assets exceed liabilities; a negative fund balance indicates that liabilities exceed assets. Fund balance may also be designated as unreserved or reserved. Unreserved fund balances are free to be authorized for future expenditures; reserved balances may not be designated for future expenditures. Additionally, the fund balance is a residual amount and is not necessarily a cash amount.

Fund Equity – Fund equity is a generic term referring to what is left after all the liabilities have been taken care of or paid with all the assets. In government, the term fund balance is more often used. Fund equity, while conceptually the same as fund balance, is usually reserved for funds in government that are operated on a business or accrual basis.

GAAP (Generally Accepted Accounting Principles) – Conventions, rules, and procedures necessary to describe accepted accounting practices at a particular time

GASB 34 – Basis of Accounting – Effective January 1, 2002, the Commission adopted GASB Statement No. 34, Basic Financial Statements and Management's Discussion and Analysis for State and Local Governments; Statement No. 37, Basic Financial Statements – Management's Discussion and Analysis for State and Local Governments: Omnibus; and Statement No. 38, Certain Financial Statement Note Disclosures (GASB Statement No. 34). These statements establish comprehensive, new financial reporting requirements for governmental units. Under GASB Statement No. 34, the Commission is considered to be a special purpose government unit engaged primarily in Business Type Activities (BTA). As a BTA, the Commission prepares its financial statements using the accrual basis of accounting and the economic resources measurement focus.

GASB 68 – Basis of Accounting – GASB 68 revised and established new financial reporting requirements for most state and local governments that provide their employees with pension benefits. In compliance with GASB 68, MAC recognizes its long-term obligation for pension benefits as a liability and takes a more comprehensive measurement of the MAC's annual costs of pension benefits.

General Airport Revenue Bonds (GARBs) – These bonds are secured by the pledge of all operating revenues of the Commission subject to the prior pledges of such revenues for payment of General Obligation Revenue Bonds.

General Insurance – Part of the Other Expense category; this includes insurance covering property, casualty, liability, crime, auto, and equipment

General Obligation Bonds (GORBs) – General obligations of the Commission. Payments of these bonds are secured by the pledge of all operating revenues of the Commission. The Commission has the power to levy property taxes upon all taxable property in the seven-county Metropolitan Area in order to pay debt service on outstanding General Obligation Revenue Bonds.

GFOA – Government Finance Officers Association

GHG – Green House Gas – Gases that trap heat in the atmosphere. www.epa.gov

GIS – Geographic Information System

HQ – Headquarters

HR – Human Resources

HRD – Human Resource Development

HRIS – Human Resources Information Systems

HVAC – Heating/Ventilation/Air Conditioning

IAF – International Arrivals Facility

IATA – International Air Transport Association – The IATA is the trade association for the world's airlines, representing some 265 airlines or 83% of total air traffic. It supports many areas of aviation activity and helps formulate industry policy on critical aviation issues. <http://www.iata.org/about/Pages/index.aspx>

IMACS – Intelligent Monitoring and Control Systems

Imputed Interest – This rate is essentially a weighted average of all outstanding bond issue interest rates. It is used in the determination of various other rates.

Issuance Costs – Represents costs associated with issuing debt; these include, but are not limited to, underwriter fees, consultant fees, and bond insurance

IT – Information Technology

iViSN – Integrated Video and Information System Network – Enhanced situational awareness for the airport community. In general, this is a major upgrade of all CCTV (closed circuit television) network, cameras, and systems across MSP.

Landed Weight – Actual gross weight of a particular plane; the weights for all aircraft are published by the FAA.

Landing Fees – This fee is charged to all airplanes that land at MSP. The fees are calculated by dividing total field and runway costs by total landed weight. (See Revenue Assumptions section)

Line Items – Refers to specific accounts (line items) within the Commission's accounting system

Lobby Fees – These fees are a per passenger fee charged to airlines when they use Terminal 2.

LTCP – Long Term Comprehensive Plan – As the 20-year roadmap, the LTCP for each airport assesses facility improvements needed to accommodate projected demand from the traveling public in a safe, efficient, orderly, and cost-effective manner. Ultimately, our goal is to continue to provide a high level of service for all of our airport users through foresight and careful planning. Specifically, this process identifies when improvements will be needed, but does not authorize construction or serve as the basis for completing the environmental review process or determining noise mitigation program eligibility.

LVN – Airlake Airport – LVN is located south of the Twin Cities, near Lakeville and Farmington, Minnesota. It is one of six reliever airports operated by the MAC.

M&O Committee – Management and Operations Committee – The M&O Committee is composed of Commissioners meeting on a monthly basis. This Committee is one of the three standing Committees of the Metropolitan Airports Commission.

MAC – Metropolitan Airports Commission – Created in 1943 by Minnesota state law, the MAC is a public corporation providing coordinated aviation services throughout the Twin Cities metropolitan area. The MAC operates one of the largest airport systems in the nation, which includes MSP and six general aviation airports. A 15-member Board of Commissioners appointed by Minnesota's Governor and the Mayors of Minneapolis and Saint Paul establishes the Commission's policies. Those policies are implemented by the Commission's senior leadership and staff. <https://metroairports.org/Airport-Authority.aspx>

MAC Funds – Amounts generated from operations that the Commission intends to apply toward the cost of the Capital Plan after payment of all operating expenses, debt service, and other payment obligations

MACANOMS – Metropolitan Airports Commission Airport Noise and Operations Monitoring System

MACNet – MAC's Network which is the system of transmission of information across the MAC community

MACpas – Metropolitan Airports Commission public address system

MACpoint – The Metropolitan Airports Commission's intranet, which is the information, collaboration, and resource hub for its employees

Maintenance Expense – One of the main expense categories and includes five subdivisions: Trades, building, field, equipment, and cleaning

Major Carriers – Those airlines which participate in the Airline Agreement

MAVIS – MAC Automatic Vehicle Information System – This system controls access in and out of MSP Airport parking facilities, taxi and commercial vehicle lanes through the issuance of a valid AVI tag. The tag also records entrance and exit times for fee calculation.

MERF – Minneapolis Employees Retirement Fund

Metropolitan Council – Also known as the Met Council, it is the metropolitan regional planning agency

MIC – Crystal Airport – Located in Crystal, MIC is also adjacent to Brooklyn Park and Brooklyn Center. It is one of six reliever airports operated by the MAC.

Minor Equipment – Includes items whose cost is less than \$5,000; included in minor equipment are computers, computer accessories, and office furniture

MnDOT – Minnesota Department of Transportation – MnDOT is a state department whose mission is to plan, build, operate, and maintain a safe, accessible, efficient, and reliable multimodal transportation system that connects people to destinations and markets throughout the state, regionally, and around the world.
<http://www.dot.state.mn.us/vision/>

MNIT – Minnesota IT Services – MNIT is the Information Technology agency for Minnesota's executive branch, providing enterprise and local IT services to over 70 agencies, boards, and commissions. <http://mn.gov/mnit/>

MPC – Mobile Passport Control – MPC is the first authorized app to expedite a traveler's entry process into the United States. The app streamlines the traveler inspection process and enables U.S. Customs and Border Protection officers to focus more on the inspection and less on administrative functions.

MSA – Metropolitan Statistical Area – A core area, delineated by the United States Office of Management and Budget, containing a substantial population nucleus, together with adjacent communities having a high degree of economic and social integration with that core.
<https://www.census.gov/programs-surveys/metro-micro/about.html>

MSP – Minneapolis-St. Paul International Airport – Refers to the total airport facility

MUFIDs – Multi-User Flight Information Display systems

NOC – Noise Oversight Committee – The MAC established the NOC in August 2002 as an advisory board to bring industry and community representatives together to address aircraft noise issues at MSP and to bring policy recommendations to the Metropolitan Airports Commission.
<https://www.macnoise.com/our-neighbors/msp-noise-oversight-committee-noc>

NOTAMS – Notice to Airmen System – A notice containing information (not known sufficiently in advance to publicize by other means) concerning the establishment, condition, or change in any component (facility, service, or procedure of, or hazard in the National Airspace System) the timely knowledge of which is essential to personnel concerned with flight operations.

NPDES – National Pollutant Discharge Elimination System – The NPDES permit program, created in 1972 by the Clean Water Act, helps address water pollution by regulating point sources that discharge pollutants to waters of the United States. <https://www.epa.gov/npdes/about-npdes>

NTSB – National Transportation Safety Board – The NTSB is an independent Federal agency charged by Congress with investigating every civil aviation accident in the United States and significant accidents in other modes of transportation, including railroad, highway, marine, and pipeline accidents.
<http://www.nts.gov/about/pages/default.aspx>

NWA – Northwest Airlines; merged with Delta in 2008

O&D Passengers – Originating and final destination passengers – originating passengers initiate their travel from MSP. Destination passengers arrive at MSP and do not transfer to another flight.

O&M – Operating & Maintenance

OABA – Open Architecture Building Automation

Operating Fund – A special fund used to pay all operating expenses such as personnel, maintenance, utilities, supplies, insurance, miscellaneous, and equipment purchases (See discussion on Operating Budget)

Operating Services – One of the main expense categories; Operating Services includes the parking management and contract, shuttle bus, advertising costs, copy agreement, bank charges, pollution control, service contracts, loading dock fees, computer service contracts, storm water monitoring, and other charges

Operation – The aircraft operation which represents a takeoff or landing

OSHA – Occupational Safety and Health Administration – OSHA was created by Congress in 1970 to assure safe and healthful working conditions for working men and women by setting and enforcing standards and by providing training, outreach, education and assistance. <https://www.osha.gov/about.html>

Other Expenses – One of the main expense categories; Other Expenses includes general insurance, minor equipment, safety materials, and miscellaneous items

Other Revenue – One of the three revenue categories; Other Revenue includes other building rents, ground rents, utilities, and miscellaneous items

PAM – Public Affairs & Marketing – PAM builds public support for the MAC and its airports through media relations, public information, outreach programs, marketing, and advertising. The department enhances the airport experience by providing information to travelers and increases MAC revenues through marketing of MAC facilities, parking, and food, retail, and service concessions. In addition, the department provides paging services at MSP International Airport and responds to public inquiries about the MAC and its airports.

Passenger Facility Charge (PFC) – An authorization by Congress which allows proprietors of commercial service airports, such as the MAC, to impose a passenger facility charge upon revenue passengers enplaning at those airports. The charge can be set at \$1.00, \$2.00, or \$3.00, \$4.00, or \$4.50. There are exemptions for passengers flying on Essential Air Service flights. The basis for the PFC is to provide needed supplemental revenues to expedite the improvement of airport facilities used by passengers to mitigate noise impacts and to expand airport system capacity. MAC's initial application was approved with charges starting June 1, 1992.

PC Air – Pre-Conditioned Air

PCI – Payment Card Industry

PD&E Committee – Planning, Development & Environment Committee – The PD&E Committee is composed of Commissioners meeting on a monthly basis. This Committee is one of the three standing Committees of the Metropolitan Airports Commission.

PERA – Public Employees Retirement Association of Minnesota – PERA serves over 250,000 current and former public employees from over 2,000 local units of government throughout the State of Minnesota. PERA also provides monthly benefits to over 100,000 retirees and other benefit recipients. Established in 1931, PERA administers three statewide retirement plans to employees of local governments and school districts. All these programs are qualified retirement plans under Section 401(a) of the Internal Revenue Code.
www.mnpera.org

Personnel – One of the main expense categories; Personnel includes all wages, salaries and benefits

PIDS – Public Information Display Screens

Professional Services – This expense category refers to various types of professionals, such as architects, engineers, auditors, lawyers and other specialists hired during the year to perform studies or required work and make recommendations based upon their findings.

PSA – Passenger Service Assistant or Professional Services Authorization

Ramp Fees – A fee charged to a particular airline for exclusive use of a specific area of ramp, calculated by dividing the total estimated costs in the appropriate cost center by the number of lineal feet of ramp space; also referred to as Apron Area

RCS – Revenue Control System – A system which controls access in and out of MSP public parking facilities. This system also records entrance and exit times, calculates the fee due based on the applicable rate, and processes and records payment information.

Reimbursed Expense – Costs paid by the Commission initially and then billed back to tenants or paid to the MAC from other outside sources; reimbursement receipts are recorded in "Other Revenue"

Reliever Airports – Refers to St. Paul Downtown, Flying Cloud, Crystal, Anoka County-Blaine, Lake Elmo, and Airlake Airports; these airports provide facilities for general aviation activity and reduce traffic and congestion at MSP

RIM – Runway Incursion Mitigation

REILs – Runway End Identifier Lights

Revenue Bonds – Represent bonds which are paid with an entity's operating revenue generated from rents, fees, and charges (See GARBs)

RFP – Request for Proposals

RFQ – Request for Qualifications

RMS – Resource Management System

RMT – Remote Noise Monitoring Tower – RMT measures noise as part of the MAC Noise and Operations Monitoring System (MACNOMS). <https://www.macnoise.com/tools-reports/macnoms>

RNAV – Runway Area Navigation – RNAV is a method of navigation that permits aircraft operation on any desired course within the coverage of station-referenced navigation signals or within the limits of a self-contained system capability, or a combination of these. https://www.skybrary.aero/index.php/Area_Navigation_Systems

ROI – Return on Investment

SAAC – Secured Area Access Control System

Scope – Non-traditional or derivative financial products other than traditional long-term fixed rate debt obligations and traditional short-term variable rate products. Short-term variable rate products include variable rate demand obligations, commercial paper, and auction rate notes. Such non-traditional financial products include, but are not limited to, swaps, swaptions, municipal warrants, and interest rate caps.

Self-Liquidating Rents – Fees received for the rental of facilities constructed for a specific airline or tenant; leases or lease amendments are negotiated for each facility to assure that the payment of all associated costs of constructing, financing, and maintaining it are reimbursed to the Commission.

Service Center – The Commission's terminology for a specific department in order to keep track of costs

Seven County Metropolitan Area – The counties surrounding MSP and including the cities of Minneapolis and St. Paul: Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington Counties.

SIDA – Security Identification Display Area is the portion of the airport, specified in the airport security program, in which security measures specified in 49 CFR Part 1542 are carried out. At MSP this includes the Secured Area and the Air Operations Area.

Signatory Carriers/Airlines – Refers to those carriers/airlines who have signed the Airline Agreement; this includes carriers/airlines from the major, commuter, charter, and cargo/freight carrier categories

Sinking Fund – A special account whose monies are set aside to retire debt

SMP – Soil Management Plan or Sustainability Management Plan

Snow Removal – An expense account under the Maintenance Expense category. All costs associated with removal of snow, with the exception of labor, flow into this account. These costs include materials such as salt, urea, sand, and equipment rental used for both hauling and plowing snow.

STP – St. Paul Downtown Airport – STP is the metro area's primary facility for private business aviation. Also known as Holman Field, it is one of six reliever airports operated by the MAC.

Subledger – Commission terminology for grouping expenses from various service centers to determine rates and charges for tenants and users of the MAC facilities

Subordinated Debt – Debt that is paid after Senior Debt obligations have been met

Surplus – Represents the positive difference between operating revenues less operating expenses (including depreciation)

Taxiway – Paved areas on the airfield to be primarily used for ground movements of aircraft to, from and between runways, ramp/apron space, and storage areas

TBD – To be determined

Terminal 1-Lindbergh (T1) – The main terminal where most of the scheduled flights arrive and depart MSP. Originally named after Charles Lindbergh, the building has been designated Terminal 1 to provide further direction and information. It is also referred to as Terminal 1.

Terminal 2-Humphrey (T2) – The Commission's Common Use Terminal for scheduled and chartered flight activity at MSP. The Hubert H. Humphrey Terminal Building has been designated Terminal 2-Humphrey to provide further direction and information. It is also referred to as Terminal 2.

TNCs – Transportation Network Companies. Transportation network companies use apps or websites to pair drivers with passengers. Two common TNCs are Uber and Lyft.

TGB – Targeted Group Business

TSA – Transportation Security Administration

Unencumbered – Funds not yet committed for purchase of goods or services

UPS – Uninterruptible Power Supply

UST – Underground Storage Tank

Utilities Expense – One of the major expense categories; Utilities Expense includes electricity, telephone, water, sewer, and fuel. Fuel includes both natural gas and fuel oil

VMAT – Vehicle Movement Area Transponder

Wold-Chamberlain Field (WCF) – The MSP airfield, excluding the terminal buildings. The airfield is named after two local pilots, Ernest Wold and Cyrus Chamberlain, who lost their lives in combat during World War I.

Working Capital – Changes in current assets minus changes in current liabilities

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