# Chapter 6
# Implementation Plan

## 6.1 Introduction

Keeping a current Capital Improvement Plan (CIP) that accurately reflects the anticipated expense and timing of upcoming projects is crucial for any publicly funded airport. Projects must be listed on the CIP in order to be eligible for funding. The CIP allows projects to be reviewed and funding distributed to airports based on priority. As local sources will account for at least some of nearly every anticipated project, it is also important to consider the current and anticipated financial condition of the Airport as well. This chapter will first explore the CIP outline before a more detailed examination of Airport financials.

## 6.2 CIP General Outline

**Table 6-1** shows many of the conceptual projects discussed in the previous chapter in addition to their potential funding sources. This serves to demonstrate not only the priority of these projects but how they can fit together over the long-term vison of the Airport. For instance, while correcting issues or building hangars as the need arises can be a tempting avenue, it can lead to long-term congestion or an inefficient use of space. Therefore, this Chapter attempts to group these conceptual projects in a logical order to aid policy makers in their discussion of project prioritization.

It is important to note that these projects are not yet approved projects, and any project would need to be approved by the City of Middleton Common Council before any work could begin on any of these projects. Therefore, the projects listed below are just conceptual at this time, and the grouping is not intended to constrain policy makers in any way. For instance, individual conceptual projects could be approved in different groupings, or disapproved entirely. Likewise, estimated costs are provided to aid policy makers in their discussion of project prioritization.

The order of projects below is intended to meet immediate needs while also adhering to the Airport's long-term vision. The CIP priorities at the Middleton Municipal Airport are shown in Table 6-1 and explained in greater detail later in this section.

**Table 6-1: Airport Project Priorities**

| Project Description | Estimated Cost |
|---|---|
| **Priority A** | |
| Venture Avenue Extension (to cul-de-sac) Design | $144,221 |
| Taxiway B Design | $167,873 |
| Taxiway B Construction | $1,678,727 |
| Venture Avenue Extension (to cul-de-sac) Construction | $1,442,205 |
| Taxiway B Hangar Development Area Site Design | $261,667 |
| **Priority A Total** | **$3,694,693** |
| **Priority B** | |
| Taxiway B Hangar Development Area Site Construction | $2,616,673 |
| **Priority B Total** | **$2,616,673** |
| **Priority C** | |
| Runway 10/28 440' Extension Design | $138,971 |
| Road extension from cul-de-sac to Schneider Road Design | $220,904 |
| Land Acquisition for Runway 2/20 and Surrounding Infrastructure | $4,400,000 |
| **Priority C Total** | **$4,759,875** |
| **Priority D** | |
| Taxiway C Hangar Development and Connecting Taxilanes Area Design | $595,174 |
| Runway 10/28 440' Extension Construction | $1,389,709 |
| Schneider Road and Springton Drive Modification with connection to Perimeter Street Design | $281,027 |
| Road extension from cul-de-sac to Schneider Road Construction | $2,209,040 |
| **Priority D Total** | **$4,474,950** |
| **Priority E** | |
| Taxiway C Hangar Development and connecting Taxilanes Area Construction | $5,951,743 |
| Remaining Taxiway C Site Design | $285,280 |
| Schneider Road and Springton Drive Modification with connection to Perimeter Street Construction | $2,810,266 |
| Runway 2/20 Design | $1,203,445 |
| **Priority E Total** | **$10,250,734** |
| **Priority F** | |
| Runway 2/20 Site Construction | $12,034,454 |
| Remaining Taxiway C Site Construction | $2,852,802 |
| **Priority F Total** | **$14,887,256** |

### 6.2.1 Priority A

This stage focuses on the design and development of the area northeast of the Runway 28 threshold. Access to this area is the first element of this priority via an extension of Venture Avenue and the addition of Taxiway B connecting to the Runway 28 threshold. The road extension would allow vehicle access to the hangars planned for this area while the addition of Taxiway B would allow aircraft to transit through the area and to the existing runway. Concurrent with these efforts is the site design for the hangar area near Taxiway B but construction of this area does not fall under this priority category.

### 6.2.2 Priority B

The primary item under this priority category is the construction of the previously planned hangar site. This is the first phase of hangar construction in the priority categories and would take place on existing Airport property. These hangars would connect to the new Venture Avenue extension on the landside and Taxiway B on the airside. This stage does not include construction of the hangars themselves, as that will be dependent on tenant requirements, but would provide grading for the area and bring in utilities such as electrical, sanitary and water service.

### 6.2.3 Priority C

The master planning process identified an extension of Runway 10/28 by up to 440 feet to the west, entirely on existing airport property. The initial stage of this effort includes the design of this extension. These include the design of the road extension from the new termination point of the extended Venture Avenue up to a realigned Schneider Road. Also in this category is the land acquisition where the future Runway 2/20, supporting infrastructure and roadway modifications would be positioned.

### 6.2.4 Priority D

The Taxiway C Hangar Development Area and Connecting Taxilanes Design would begin under this priority after the land required is acquired under the previous priority category. The road extension between Venture Avenue and Schneider Road would be constructed under this priority category to access the future hangar area. The hangars in this area are the second phase of hangar development but, due to the large area, could be further broken up into additional phases based on future demand. The only other design item for this priority category is the modification of Schneider Road and Springton Drive to allow for the addition of Runway 2/20.

### 6.2.5 Priority E

This priority category includes the construction of the Taxiway C hangar development area and taxilanes and the design for the remainder of Taxiway C that is intended to serve as a parallel taxiway for Runway 2/20. This is a natural pairing for the design of Runway 2/20, also to occur. To prepare for the construction of Runway 2/20, the alteration of Schneider Road and Springton Drive, planned in the previous priority category, would occur.

### 6.2.6 Priority F

The final priority category includes the construction of Runway 2/20, positioned parallel to the developed hangars and Taxiway C, and placed south of the new alignment of the altered Schneider Road. The remainder of Taxiway C, necessary to make it a complete parallel taxiway, would also be completed under this priority category.

## 6.3 C29 Operating Revenues and Expenses

This section presents a forecast of operating revenues and expenses for purposes of estimating what surplus funds, if any, C29 may generate over the 20-year planning period that can be invested in capital projects. These conditions apply to this forecast as follows:

- Financial figures are expressed in nominal dollars.
- Financial results were projected annually out to 2041, starting from actual results of 2021.
- Financial projections use an accrual basis.
- Financial projections are rounded to the nearest $100.
- These financial projections are not guarantees of future performance and undue reliance should not be placed on them. Such forward-looking statements necessarily involve known and unknown risks and uncertainties, which may cause actual performance and financial results in future periods to differ materially from any projections of future performance or result expressed or implied by such forward-looking statements.

For each forecasted year, total operating revenues are compared to total operating expenses to determine the operating surplus or deficit for that year. This amount is then added or subtracted, as appropriate, to the accumulated surpluses and deficits from previous years. For 2022, the surplus or deficit is added to $120,363, the surplus from 2021. The Accumulated Surplus/Deficit shows the funds up to that year available for investing in capital projects, assuming that the surplus funds are not used elsewhere.

The forecast of operating revenues and expenses is based on multiple factors. Most line items are expected to increase with inflation. However, a few have projections tied to other criteria, such as the forecast of the Fuel Flowage Fee relying on the forecast of aircraft operations. These details are explained below in Section 6.3.1 and 6.3.2.

Historically, annual inflation rates, based on the All Urban Consumers Consumer Price Index (CPI), have fluctuated around 2 percent. However, U.S. government policies, starting in 2020, resulted in increases in the money supply that substantially exceeded gross domestic product growth. The effects of these policies are now being felt in the form of greatly increased inflation for 2022. The beginning months of 2022 have already exhibited higher than average inflation, and some economists are projecting inflation as high as 10 percent for 2022.[1] For this forecast of operating revenues and expenses, inflation rates were developed and are shown in **Table 6-2**.

**Table 6-2: Inflation Table**

| Period | Annual Inflation Rate | Basis |
|---|---|---|
| Short-Term | 10.0% | Maximum inflation rate expected. |
| Medium-Term | 5.0% | Half of short-term rate. |
| Long-Term | 2.1% | Historic average from 2000 to 2020. Also used for long-term contractual agreements. |

[1] Jongrim Ha, M. Ayhan Kose, and Franziska Ohnsorge, *Today's Inflation and the Great Inflation of the 1970s: Similarities and Differences*, March 30, 2022. Retrieved from https://voxeu.org/article/today-s-inflation-and-great-inflation-1970s on April 1, 2022.

*Source: Mead & Hunt*

For the short-term, an annual inflation rate of 10 percent is assumed. This assumption is used to provide conservative projections of short-term expenses, since the actual short-term inflation is not expected to exceed this level. The medium-term annual inflation rate of 5 percent was judged to be an appropriate rate that reflects an easing of inflation as the economy recovers from its period of high inflation. The long-term annual inflation rate of 2.1 percent was based on the 20-year average from 2000 to 2020 and deemed applicable once the period of high inflation has passed. It was also used for many of the revenue categories that rely on long-term contracts that do not allow for immediate changes to lease payments.

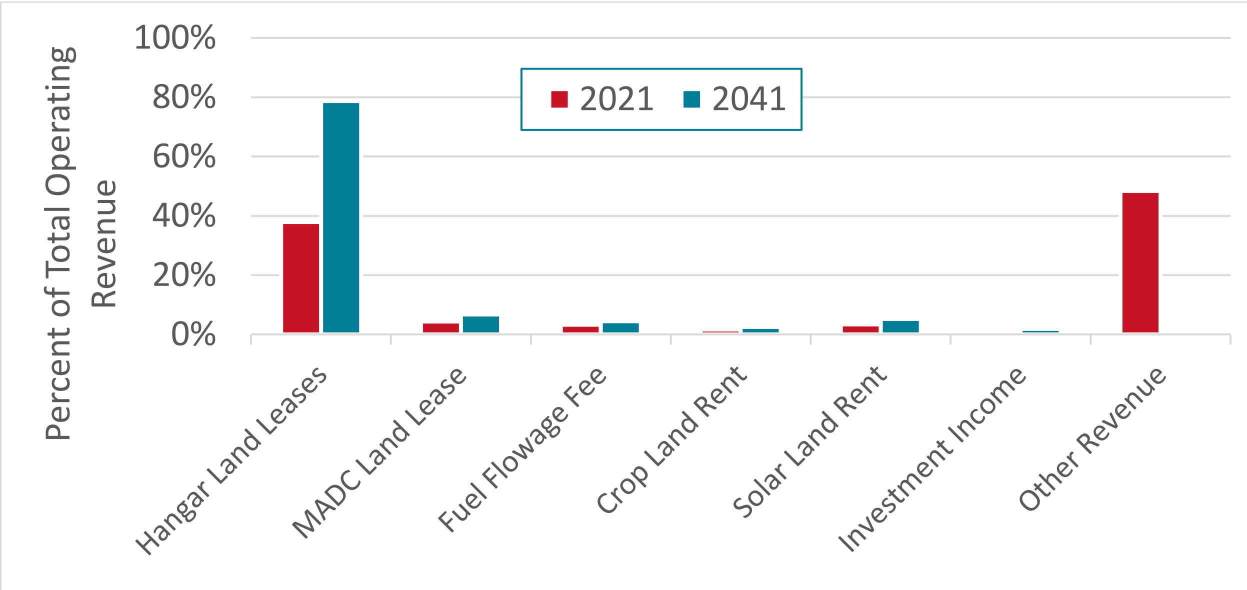
### 6.3.1 Revenue Categories

The operating revenues for C29 are organized into one of the seven categories that are described below in more detail. These categories only deal with C29's operating revenues – capital funding is not included. Each revenue category is explained and the basis for forecasting future revenues is described.

- **Hangar Land Leases** – This is revenue from the ground leases the airport has with hangar owners. In 2021, Hangar Land Leases made up 38 percent of all operating revenues, second only to Other Revenue (see below). This revenue is forecasted to grow at its historic growth rate of 1.1 percent annually. Future hangar development is projected to result in revenue increases in 2025 (seven new hangar sites), 2030 (13 new hangar sites), and 2037 (12 new hangar sites). The increase in hangars, along with Other Revenue returning to normal levels, results in Hangar Land Leases accounting for nearly 80 percent of total operating revenues in 2041.
- **MADC Land Lease** – The Middleton Area Development Corporation (MADC) has a land lease with C29 where the airport terminal sits. This revenue is expected to increase at the long-term rate of CPI increase.
- **Fuel Flowage Fee** – This is revenue generated through a per gallon fee imposed on all fuel transactions at C29. The forecast for this revenue was based upon the growth in aircraft operations, weighted by turbine aircraft operations and the proportion of jet fuel typically sold each year.
- **Crop Land Rent** – C29 leases part of its land to local farmers for agricultural use. This arrangement is assumed to operate under a long-term lease, so it is projected to grow at the long-term inflation rate.
- **Solar Land Rent** – The City of Middleton leases airport land to Madison Gas and Electric for use of a solar farm. It was assumed that a long-term lease is in place and that standard inflation clauses are in effect, so that growth is forecast at the long-term rate.
- **Investment Income** – This income is based on surplus funds earning interest or dividends while invested. It was assumed that this revenue would benefit from rising interest rates, so the medium-term inflation rate was used for the initial increase in Investment Income, followed by the long-term rate for the remainder of the forecast period.
- **Other Revenue** – This category captures any operating revenue that doesn't fall into any of the previously described categories. Generally in the past, Other Revenue has not contributed significantly to operating revenues, often amounting to less than $1,000. However, in 2021 C29 received an insurance payment for flood damage, along with reimbursements from Wisconsin Bureau of Aeronautics that were classified as Other Revenue, resulting in a significant contribution to operating revenues. These anomalies are not expected to repeat in the future, so Other Revenue is forecast at $1,000 in 2022, with growth projected at the long-term inflation rate.

**Figure 6-1** shows each of the revenue categories described above and the portion of total operating revenue they comprise for 2021 and 2041.

**Figure 6-1: Percent of Total Operating Revenue by Revenue Category**




*Source: Middleton Municipal Airport – Morey Field and Mead & Hunt*

The growth in Hangar Land Leases is clearly illustrated and is attributed to both the drop in Other Revenue and the addition of more than 30 hangars over the planning period.

### 6.3.2 Operating Expense Categories

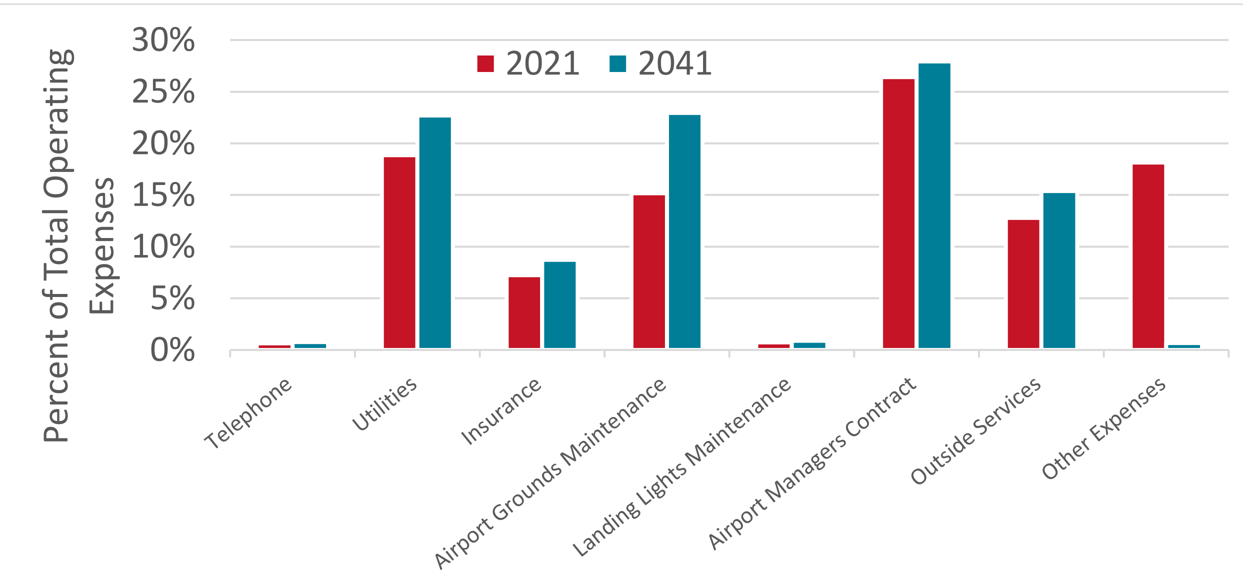
Operating expenses at C29 are accounted for in eight categories. Similar to the operating revenues described previously, the operating expenses account for the day-to-day costs of running C29 and do not include any expenditures for capital improvements. Each expense category is explained and the basis for forecasting future expenses is described.

- **Telephone** – This expense is for communication services at C29. It is forecast to increase at the short-term inflation rate for 2022, followed by the medium-term inflation rate through 2024, after which it rises at the long-term inflation rate to the end of the forecast period.
- **Utilities** – This cost covers the various utilities, such as electricity, necessary to operate C29. It is forecast to increase at the short-term inflation rate for 2022, followed by the medium-term inflation rate through 2024, after which it rises at the long-term inflation rate to the end of the forecast period.
- **Insurance** – This is the cost of required insurance coverage for C29. It is forecast to increase at the short-term inflation rate for 2022, followed by the medium-term inflation rate through 2024, after which it rises at the long-term inflation rate to the end of the forecast period.
- **Airport Grounds Maintenance** – This is the cost associated with maintaining the airport facilities. It is forecast to increase at the short-term inflation rate for 2022, followed by the medium-term inflation rate through 2024, after which it rises at the long-term inflation rate to the end of the forecast period.

- **Landing Lights Maintenance** – This is the expense of maintaining the runway lights. It is forecast to increase at the short-term inflation rate for 2022, followed by the medium-term inflation rate through 2024, after which it rises at the long-term inflation rate to the end of the forecast period.
- **Airport Managers Contract** – C29 entered into an agreement with the owner of Morey Airplane Company, the airport fixed base operator (FBO), to manage the airport. This expense assumes a long-term contract is in effect, so the expense increases at the long-term rate of inflation for the entire forecast period.
- **Outside Services** – This is the expense associated with contracted services, such as engineers or consultants, that supplement the work done by Middleton or C29 staff. It is forecast to increase at the short-term inflation rate for 2022, followed by the medium-term inflation rate through 2024, after which it rises at the long-term inflation rate to the end of the forecast period.
- **Other Expenses** – The expenses in this category have historically not exceeded $1,000 in a given year. However, in 2021, the Common Council assigned a $28,500 contract for a survey to this line item. For 2022, it was assumed that Other Operating Expenses would return to more typical levels, and $1,000 was estimated. It is forecast to increase at the short-term inflation rate for 2022, followed by the medium-term inflation rate through 2024, after which it rises at the long-term inflation rate to the end of the forecast period.

**Figure 6-2** shows the percent distribution of C29 operating expenses for 2021 and 2041. It illustrates that the primary cost drivers for C29 are the Airport Managers Contract, Utilities, and Airport Grounds Maintenance. In 2021, Other Expenses also made up a large portion of costs, but, as explained previously, those costs are not expected in the future.

**Figure 6-2: Percent of Total Operating Expense by Expense Category**




Source: Middleton Municipal Airport – Morey Field and Mead & Hunt

### 6.3.3 Operating Surplus/Deficit and Accumulated Funds

With forecasts of operating revenues and operating expenses, estimates of operating surpluses or deficits can be developed. **Table 6-3** shows a summary of the forecast of operating revenues, operating expenses, and the expected surplus or deficit for selected forecast years. The selected forecast years are based on five-year, 10-year, and 20-year outlooks from the 2021 base year.

Most revenue and expenses show steady increases over the forecast period, with expenses accelerating more than revenues because many of C29's revenues are governed by leases that won't increase as quickly as expenses. One exemption is the Hangar Land Leases revenue, which has surges when new hangar development is expected. This is predicted to occur in 2025, 2030, and 2037. Since these are land leases where the lessee is responsible for the maintenance of the hangar, there is no corresponding increase in C29's expenses.

Table 6-3 also shows the anticipated operating surplus/deficit (operating revenues minus operating expenses), as well as the accumulated surplus/deficit. This is determined by adding or subtracting, as appropriate, the year's surplus/deficit to the previous year's accumulated surplus/deficit. For 2022, the surplus/deficit is added to the 2021 surplus of $120,363.

The table shows that in 2026, C29 operates at breakeven, with revenues and expenses balancing each other. By 2031, added revenue from new land leases for hangars results in a surplus of approximately $23,000. Additional hangars push that surplus to more than $39,000 by 2041.

With expenses exceeding revenues in the initial years of the forecast, the deficits eat into the 2021 funds, whittling it down to $97,000 by 2026. These annual deficits continue until 2030, when new hangar development push revenues far enough past expenses that C29 is expected to generate surpluses out until the end of the forecast period. This causes the accumulated surplus to exceed $137,000 in 2031, and surpass $443,000 by the end of the forecast in 2041.

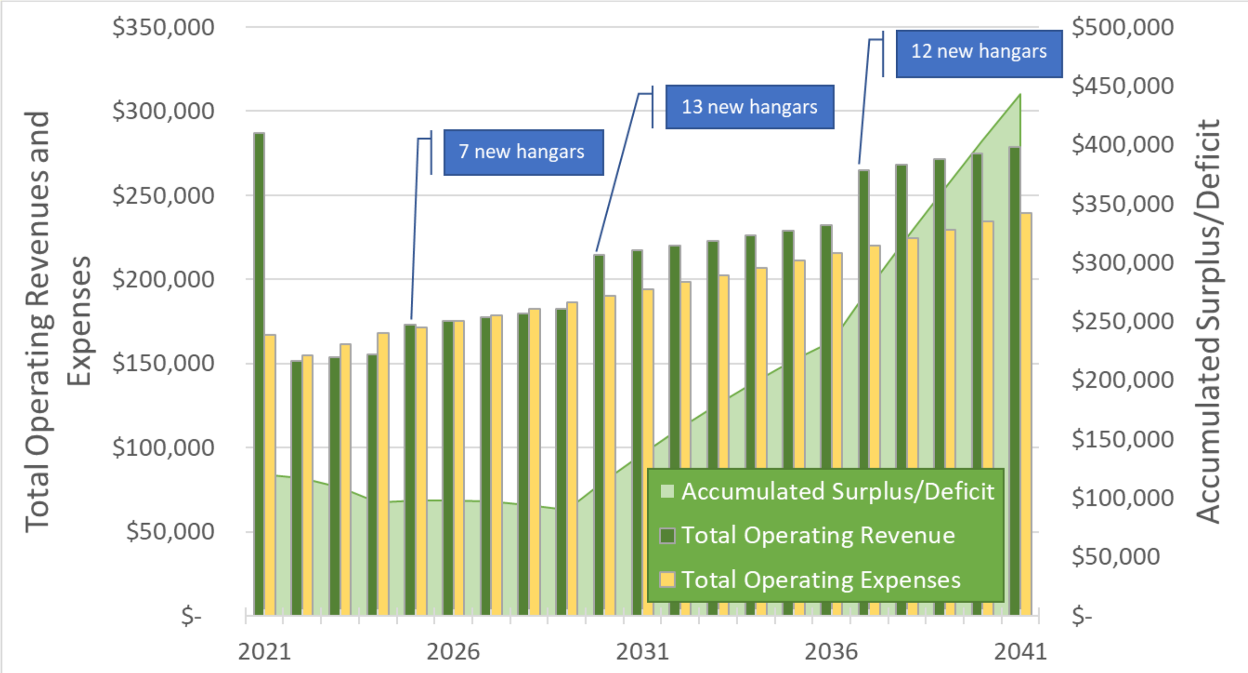
**Table 6-3: Summary of Forecast Operating Revenues, Operating Expenses, and Operating Surplus/Deficit**

| C29 Airport Enterprise Fund | Base Year 2021 | Forecast Years 2026 | 2031 | 2041 |
|---|---|---|---|---|
| **Operating Revenue** | | | | |
| Hangar Land Leases | $108,797 | $130,400 | $168,100 | $219,200 |
| MADC Land Lease | $12,370 | $13,700 | $15,200 | $18,700 |
| Fuel Flowage Fee | $9,443 | $10,300 | $11,100 | $12,400 |
| Crop Land Rent | $4,626 | $5,100 | $5,700 | $7,000 |
| Solar Land Rent | $9,568 | $10,600 | $11,800 | $14,500 |
| Investment Income | $3,414 | $3,900 | $4,300 | $5,300 |
| Other Revenue | $138,934 | $1,100 | $1,200 | $1,500 |
| **Total Operating Revenue** | **$287,152** | **$175,100** | **$217,400** | **$278,600** |
| | | | | |
| **Operating Expenses** | **2021** | **2026** | **2031** | **2041** |
| Telephone | $1,046 | $1,300 | $1,500 | $1,800 |
| Utilities | $31,467 | $39,800 | $44,100 | $54,300 |
| Insurance | $12,093 | $15,300 | $17,000 | $20,900 |
| Airport Grounds Maintenance | $25,318 | $40,200 | $44,600 | $54,900 |
| Landing Lights Maintenance | $1,218 | $1,500 | $1,700 | $2,100 |
| Airport Managers Contract | $44,058 | $48,900 | $54,200 | $66,800 |
| Outside Services | $21,322 | $27,000 | $29,900 | $36,800 |
| Other Expenses | $30,266 | $1,100 | $1,300 | $1,600 |
| **Total Operating Expenses** | **$166,788** | **$175,100** | **$194,300** | **$239,200** |
| | | | | |
| **Operating Surplus/Deficit** | **$120,363** | **$0** | **$23,100** | **$39,400** |
| | | | | |
| **Accumulated Surplus/Deficit** | **$120,363** | **$97,563** | **$137,063** | **$443,163** |

*Source: Middleton Municipal Airport – Morey Field and Mead*

**Figure 6-3** depicts these results graphically, showing operating revenues and operating expenses side by side with bars, and the accumulated surplus as the area graph in the background. The years in which hangar development is expected to occur are called out with the number of new hangars planned. This indicates that in the near term, C29 is not expected to generate a substantial amount of excess revenues for funding capital projects. It isn't until the second set of hangars are leased out in 2030 that C29 starts to see a rise in the accumulated surplus that continues to the end of the forecast. Based on the assumptions and results of this forecast, C29 should plan for funds accumulating for capital projects no sooner than the medium-term, probably around 2030 or later.

**Figure 6-3: Total Operating Revenues, Expenses and Accumulated Surplus/Deficit**




Source: Middleton Municipal Airport – Morey Field and Mead & Hunt

## 6.4 Summary

This section provided a 20-year forecast of operating revenues and expenses, taking into account expected hangar development. Using these forecasts, estimated surplus/deficits were developed for each forecast year, and the accumulated funds available for capital investment estimated. With the high inflation environment, expenses are expected to exceed revenues until 2025 when new hangar development is expected to bring revenues to a breakeven point with expenses for the next few years. In 2030, additional hangar land leases are expected to raise operating revenues well above operating expenses, generating operating surpluses until the end of the forecast period. More hangars are planned for 2037, adding to the operating surpluses expected. Based on the assumptions in these forecasts, C29 is expected to have approximately $137,000 in accumulated surpluses by 2031, and more than $443,000 by 2041.