

# CHAPTER NINE: IMPLEMENTATION AND FINANCIAL



## **NEWPORT MUNICIPAL AIRPORT**

**AIRPORT MASTER PLAN UPDATE**

**FINAL REPORT – FEBRUARY 2018**

## INTRODUCTION

The preceding chapters have identified the projects necessary for the Airport to accommodate the forecast levels of demand, provide for economic development opportunities in the future and satisfy federal design standards. As discussed in Chapter Four, *Facility Requirements* and Chapter Five, *Airport Development Alternatives*, specific improvements to both airside and landside elements of the Airport are recommended for implementation over the 20-year planning period. The development plan includes projects that form the basis of the Airport's capital improvement program (CIP).

The purpose of Chapter Nine is to establish an implementation strategy that meets the following objectives:

1. Itemizes the individual development projects, or development related projects, required to fulfill the preferred alternative for the Airport as depicted in the Airport Layout Plan (ALP);
2. Establishes a phasing plan for the development projects that meet the forecasted needs;
3. Reviews available funding sources and make assumptions as to the probable funding structure for projects;
4. Presents a financially feasible CIP for each development phase;
5. Summarizes recent and future potential cash flows for the airport.

The CIP and financial analysis includes projects that meet the Airport's planned growth over the next 20 years. Each phase reflects strategic development initiatives intended to maximize safety and utilization of the Airport. Facility improvements are depicted in the following phases:

- Phase I (2017-2021)
- Phase II (2022-2026)\*
- Phase III (2027 – 2036)

\*Indicates the anticipated phase in which the Runway Design Code (RDC) for the Airport will be triggered by meeting the C-I threshold of aircraft operations.

As part of the development process, project phasing and cost estimates are determined and included in the CIP to manage and plan implementation requirements associated with each project.

## SOURCES OF CAPITAL FUNDING

Capital funding is critical to airport development and essential for project success. There are several options available for ONP to partner with state and federal agencies to fund the capital development requirements needed to continue operating safely, efficiently, and economically. This section describes those funding resources.

### Federal Funding

There are several Federal funding programs available for airport capital improvements. A description of these programs is provided below.

#### Federal AIP Entitlement Grants

The current program, known as the Airport Improvement Program (AIP), was established by the Airport and Airway Improvement Act of 1982 (Public Law 97-248). Since then, the AIP has been amended several

times, most recently with the passage of the FAA Modernization and Reform Act of 2012. Funds obligated for the AIP are drawn from the Airport and Airway Trust fund, which is supported by user fees, fuel taxes, and other similar revenue sources. For small primary, reliever, and general aviation airports (such as Newport), the grant covers a range of 90 percent of eligible costs.

The Wendell H. Ford Aviation Investment and Reform Act for the 21st Century (AIR-21), enacted in April 2000, established the first-ever Non-Primary Airports Entitlement Program. AIR-21 sets aside grant funding for general aviation airports listed in the National Plan of Integrated Airport Systems (NPIAS) for pavement maintenance work. General aviation airports can each receive up to \$150,000 per year based on the FAA's assessment of maintenance needs over a five-year period.

The funding set-aside is available for each federal fiscal year when Congress appropriates at least \$3.2 billion for the FAA's AIP grant program. For the convenience of the Airport Sponsor, if a project is anticipated to cost in excess of \$150,000, participating airports can rollover the Non-Primary Entitlement funds for up to three years, at which time the accumulated total of rolled-over funds can be used for larger projects. For the purposes of this chapter, it is assumed that these entitlement funds will continue to be available throughout the 20-year planning period.

#### Federal AIP Discretionary Grants

The FAA also provides discretionary grants on a 90/10% basis to airports similar to ONP. This source of funding is over and above entitlement funding. AIP grants are provided to airports for projects that have a high federal priority for enhancing safety, security, and capacity of the Airport and would be difficult to fund otherwise. The dollar amounts of individual grants vary and can be significant in comparison to entitlement funding. Discretionary grants are awarded at the FAA's sole prerogative. Discretionary grant applications are evaluated based on airport need, an FAA project priority ranking system, and the FAA's assessment of a project's significance within the national airport and airway system. For the purposes of this chapter it is assumed that discretionary funds will be available for high priority projects that are needed to meet FAA design criteria. However, just because a project is eligible for FAA discretionary funding, the funding may not be available in the amounts shown in this plan – or perhaps not at all. Such projects would be deferred until sufficient funds are available, sized back to match available funds, or phased over a longer period of time.

#### Federal AIP State Apportionment Grants

Another way in which the federal government provides funding is through state apportionment grants. Under the statutory restrictions, State apportionment grants may be used at qualifying airports subject to a requirement that FAA has consulted with the pertinent State and the State supports the project as part of its State airport capital plan. In 2017, the State of Oregon will receive \$2,686,017.00 from the FAA for state apportionment.

#### State Funding

There are several State funding programs available to support Airport development. State funding availability varies from year to year and is highly coveted as a resource by many agencies throughout the state; as such, the City can compete on an annual basis for a grant to reduce the local match required on federally funded projects. A description of the available programs is provided below.

### ConnectOregon

In 2005, the Oregon Legislature authorized funding for air, marine, rail, and transit infrastructure, known as ConnectOregon. The purpose of this program is to improve commerce, reduce delay, and enhance safety for the state's multi-modal transportation system. The Oregon Transportation Commission (OTC) recently approved 39 multimodal projects from around the state for \$49,518,726 in funding, provided by the sixth installment of the program.

ConnectOregon projects are eligible for grants that cover up to 70 percent of project costs with a minimum 30 percent cash match being required from the recipient for all grant funded projects.

### Aviation System Action Program (ASAP) Grants

In 2015, the Oregon State Legislature passed House Bill 2075 to increase the fuel tax on Aviation Gas and Jet Fuel by .02 cents per gallon to invest in aviation for specific purposes, resulting in the Aviation System Action Program (ASAP) Fund. The fuel tax increase became effective January 1, 2016 and currently has a sunset date of January 1, 2022.

The program allocates funds into three programs: the Critical Oregon Airport Relief Program (COAR), the Rural Oregon Aviation Relief Program (ROAR), and the (SOAR) State Owned Airports Reserve Program. The COAR distributes fifty percent of the amounts from the fuel tax increase while the ROAR and SOAR distribute 25 percent respectively.

The COAR provides funding to assist airports with FAA match requirements, to make grants for emergency preparedness and infrastructure projects, and to make grants for airport development such as essential services and aviation related business.<sup>1</sup>

### Pavement Maintenance Program (PMP)

Developed by the Oregon Department of Aviation this program works to protect Oregon's airport investments by preserving airport pavement. The PMP provides airports the opportunity to complete preventative maintenance which extends the life of pavement and ultimately reduces costs to airport sponsors, the state, and the federal government. Airports pay a small part of this program through their non-primary entitlement funds.

### Private Funding

Many airports use private third-party financing when the planned improvements will be primarily used by a private business or other organization. Such projects are not ordinarily eligible for federal funding. Projects of this kind typically include hangars, fixed base operator (FBO) facilities, private use fuel storage, non-public aircraft parking aprons, industrial aviation-use facilities, and non-aviation office/commercial/industrial developments. Private development proposals are considered on a case-by-case basis by the funding party. If not already available, airport funds for infrastructure, preliminary site work, and site access projects may be needed to attract or facilitate privately developed projects on airport property.

### Airport Generated Revenue Financing

Typically, any operating surplus revenues generated by airports are used to support the local match of

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<sup>1</sup> Oregon Department of Aviation, [http://www.oregon.gov/aviation/Pages/Aviation\\_System\\_Action\\_Program.aspx](http://www.oregon.gov/aviation/Pages/Aviation_System_Action_Program.aspx)

eligible state and federal projects. The Airport sponsor may also need to contribute additional funds to match grant funding if operational revenues do not cover the matching requirements. A discussion of airport revenues is provided in the following section. However, some projects are either not eligible for state or federal funding participation or do not compete well for eligible grant funding. In these cases, the City of Newport would be responsible for 100% of the project cost to implement the proposed development.

## FINANCIAL FORECAST

This section builds upon the information gathered in the Financial Inventory section in Chapter 2 – Inventory. Presented is a forecast of revenues and expenses, which provides an assessment of ONP’s financial condition. The Airport’s rates and charges are analyzed, including an evaluation of revenue enhancement opportunities.

Before presenting these evaluations, it is useful to summarize certain assumptions and simplifications that were made in this estimate of financial performance.

- This analysis assumes that the Newport Municipal Airport will continue to function as an airport during the forecast period without major changes or uncertainties in its operations. This assumption provides the foundation for the City and businesses at the airport to operate and make decisions in a more certain business environment. Without this assumption, future investment by the City or airport businesses is less likely. For example, if an airport business believes that there is a chance the airport could be sold or closed in the next year, the business has no incentive to invest in commercial improvements or marketing efforts that need a year or more to achieve a return on that investment.
- Financial projections that appear in this document are estimated revenues, expenses, and capital costs based on data provided by the airport, research by CDM Smith and WHPacific, and assumptions discussed throughout this document. Expected revenues, expenses, and capital costs for projected periods are subject to uncertainty resulting from variability in demand for services, economic conditions, and other unknowns. No guarantee is presented or implied as to the accuracy of the financial projections or predicative statements in this document.
- Financial calculations were carried out using exact numbers, but results were rounded to the nearest hundreds of dollars to avoid implying a level of precision that does not apply to these forecasts.
- All dollar figures are expressed in current (2016) dollars. No adjustments have been made to express dollar figures in a base year.
- Unless otherwise noted, all financial figures are expressed on an accrual basis.
- Inflation was estimated using the average annual percentage change from 2005 to 2015 in the Portland-Salem, OR-WA Consumer Price Index for all urban consumers as reported by the Bureau of Labor Statistics (not seasonally adjusted).

## Airport Operating Revenue and Expenses Forecast

The forecast of airport operating revenues and expenses uses the same categories of revenues and expenses identified in the Financial Inventory chapter. In general, the forecast of revenues and expenses used the FY15-16 budget amounts (shown in the Financial Inventory Chapter) as a starting point for future estimates. Assumptions used in developing the forecast are outlined below for each category. **Table 9A** lists the operating revenues and expenses by category for FY14-15, and the forecasts by category for FY19-20, FY24-25, and FY34-35.

### Revenues

The major categories of revenue generation and the underlying assumptions for each are described in the following section.

- Fuel Sales** – Fuel is the largest contributor to the Airport’s revenues and is expected to grow in influence over the forecast period. Jet fuel sales comprise approximately 70 percent of revenues, while avgas sales account for 10 percent. By FY34-35, jet fuel sales are expected to generate 75 percent of all revenues and avgas sales are expected to grow to 15 percent of revenues. Fuel volumes sold are tracked in three categories at the airport – jet A fuel, self-service avgas, and full-service avgas. To forecast future fuel sales, historic fuel sales were compared with various aviation activity indicators to see which ones correlated best.

For self-service avgas, itinerant operations had a correlation coefficient of 0.80, so the forecast of itinerant operations was used to forecast self-service avgas sold. For full-service avgas, the number of aircraft tracked well with a correlation coefficient of 0.95. By extrapolating the number of aircraft, future full-service avgas sales were estimated. The gallons of jet A sold did not correlate well with any aviation activity, so the forecast of jet A was based upon a best fit trend line for the historic data available. This resulted in a growth rate slightly higher than that of avgas, a reasonable result since future growth in both based aircraft and fuel consumption is expected to be driven more by turbine powered aircraft than piston powered aircraft.

Fuel revenues were estimated for FY 15-16 by applying the average price of a gallon of fuel as reported by Airnav.com for the Northwest Mountain region to the volume sold in FY15-16. Self-service avgas<sup>2</sup> was discounted by \$0.10. The price of fuel was inflated at 2.2 percent per year based on the 10-year average of the Portland-Salem consumer price index (CPI). These prices were then multiplied by the forecast of their respective fuel volumes sold. Additionally, starting in FY17-18, it was assumed that a Lifeflight air ambulance operation would purchase 1,000 gallons of jet fuel from ONP monthly. It was assumed ONP would provide a \$0.40 per gallon discount on this fuel sold.

- Rents & Leases** – Lease revenues were estimated based on lease agreements in effect for Airport properties. The Airport has approximately two dozen ground leases, on which are built privately-owned hangars; the Airport owns 10 T-hangars available for leasing. For leases that reach their expiration date during the forecast period, planners assumed any options were exercised with

<sup>2</sup> The Airport offers a 10 percent discount on self-service avgas if prepaid in amounts of \$200 or more. This discount was ignored since it accounts for a small volume of fuel sold.

changes in lease rates to market levels, if needed. As stipulated in lease agreements, lease rates are escalated annually using the Portland-Salem Consumer Price Index (CPI). For conservative purposes, this increase was estimated at 50 percent of the average increase in the CPI for the past 10 years, or 1.1 percent. Based on discussions with airport management and anticipated future aircraft storage needs, an additional dozen hangar ground leases are assumed to take place during the planning period. Additionally, a Lifeflight medical ambulance operation is assumed to commence operations at the airport in mid-2017. Lifeflight is assumed to lease space in the FBO building starting in FY17-18 and continue to do so for three years, after which it leases 15,000 square feet from ONP to build its own hangar and moves out of the FBO building. The shift from leasing space in the FBO building to a ground lease results in a slight drop in lease revenue to the Airport.

- **Tie Down Fees** – This revenue source was projected to increase at an annual average rate of 1.1 percent per year as rate adjustments are made to keep in line with inflation. This is the same rate used in the escalation of leasing rates.
- **Service Provided for Sewer Fund** – These payments to the Airport from the Sewer Fund are for use of Airport land to spread effluent. Based on historical data, this payment is held constant through the forecast period.
- **Pilot Supplies and Oil** – Revenues from pilot supplies and oil were assumed to increase at half the rate of the Portland-Salem CPI increase, or approximately 1.1 percent annually.
- **Interest** – Interest revenue was assumed to increase at 1.1 percent annually, half the average increase in the Portland-Salem CPI over the past 10 years.
- **Miscellaneous Sales** – Miscellaneous sales revenue was increased 1.1 percent annually, half of the average Portland-Salem CPI increase in the past 10 years.

### Expenses

- **Payroll** – Payroll cost estimates were based on average payroll costs for workers from FY02-03 to FY13-14, which were then escalated by the average inflation rate as determined by the Portland-Salem consumer price index (CPI). These employees are responsible for operating the airport and the FBO. It was assumed that the current four employees would be supplemented by an additional part-time employee starting in FY16-17 that would transition to a full-time position once aviation activity increased 30 percent over the base year activity. This is forecast to occur in FY24-25.
- **Health Insurance** – The Office of the Actuary in the Centers for Medicare & Medicaid Services projected health care costs would increase at an average annual rate of 5.4 percent through FY23-24. In FY24-25, there is a step up in health insurance costs due to the added employee. From FY24-25 out to FY34-35, health insurance cost increases are assumed to slow to the rate of inflation as determined by the Portland-Salem CPI.
- **FICA** – This expense, from the Federal Insurance Contributions Act (FICA), is the portion of Social Security and Medicare taxes that are paid by the employer. In 2016, the employer is responsible

for 6.2 percent of the Social Security tax and 1.45 percent of the Medicare tax for a combined total of 7.65 percent. It is assumed that this rate remains constant through the forecast period.

- **Worker's Compensation** – These costs have historically average around 2.6 percent of payroll costs. This ratio is held constant through the forecast period, resulting in worker's compensation costs rising at the same rate as payroll.
- **Unemployment Insurance** – Costs for unemployment insurance are tied to salary costs, estimated at 1.1 percent of total payroll. This ratio is maintained throughout the planning period so unemployment insurance costs increase proportionally with payroll.
- **Professional Services** – The costs of professional services increased at 2.2 percent per year, matching the average increase in Portland-Salem's CPI over the past 10 years.
- **Utilities** – Utility costs projections were based on the forecasts of wholesale electricity prices from The Sixth Northwest Conservation and Electric Power Plan, published by the Northwest Power and Conservation Council. The forecast calls for utility costs to increase between 1.5 percent and 3.5 percent each year until FY23-24 and then moderate to 1.4 percent increases annually.
- **Fuel** – The cost of fuel in FY15-16 was estimated by subtracting an estimated \$1.50 gross profit per gallon for jet A, \$0.90 gross profit per gallon for full-service avgas, and \$0.80 gross profit per gallon for self-service avgas (to account for the \$0.10 discount for self-serve avgas). The gross profits for each fuel were based on research of industry literature. The cost of fuel was inflated at 2.2 percent per year based on the 10-year average of the Portland-Salem CPI. These costs were then multiplied by the forecast of their respective fuel volumes sold.
- **Other Fuel Expenses** – The costs of other fuel increased at 2.2 percent per year, matching the average increase in Portland-Salem's CPI over the past 10 years.
- **General Fund Services** – The costs of general fund services increased at 2.2 percent per year, matching the average increase in Portland-Salem's CPI over the past 10 years.
- **Building & Ground Expenses** – Costs for facility maintenance were projected to increase 3.2 percent annually, based upon costs of capital projects and their maintenance by ECONorthwest in the July 2011 publication of Fiscal Challenges for Oregon's Cities.
- **Vehicle Expenses** – The costs of maintaining airport vehicles increased at 2.2 percent per year, matching the average increase in Portland-Salem's CPI over the past 10 years.
- **Equipment Expenses** – The costs of equipment expenses increased at 2.2 percent per year, matching the average increase in Portland-Salem's CPI over the past 10 years.
- **Maintenance & Upkeep** – Maintenance and upkeep increased at 2.2 percent per year, matching the average increase in Portland-Salem's CPI over the past 10 years.
- **Leasing & Rental Expenses** – Leasing and rental expenses increased at 2.2 percent per year, matching the average increase in Portland-Salem's CPI over the past 10 years.



- **Property Insurance** –Property insurance increased at 2.2 percent per year, matching the average increase in Portland-Salem’s CPI over the past 10 years.
- **Marketing** –Marketing costs increased at 2.2 percent per year, matching the average increase in Portland-Salem’s CPI over the past 10 years.
- **Training** –Training cost increased at 2.2 percent per year, matching the average increase in Portland-Salem’s CPI over the past 10 years.
- **Other Expenses** –Other expenses increased at 2.2 percent per year, matching the average increase in Portland-Salem’s CPI over the past 10 years.

As shown in **Table 9A**, the operating subsidy from the city is projected to increase from approximately \$194,000 in FY14-15, to slightly over \$381,000 in FY34-35. This is largely driven by increased payroll (due in part to additional employees), and associated benefits. Health care, in particular, is projected to increase substantially over the next 20 years. The increase in fuel sales helps to mitigate the increase in the operating subsidy. Other sources of revenue are not significantly large enough to have much impact on the size of the operating subsidy.

The next section considers various options available to the city that would help reduce the operating subsidy for the Airport by examining its rates and charges to find opportunities to increase revenues.

Table 9A: Newport Municipal Forecast of Airport Revenues and Expenses

Operating Revenues and Expenses	FY14-15 (actual)	FY19-20	FY24-25	FY34-35
<b>Revenues</b>				
Jet Fuel Sales	\$339,782	\$437,100	\$587,800	\$980,200
Avgas Sales	\$50,123	\$89,000	\$116,000	\$185,700
Rents & Leases	\$57,943	\$63,300	\$61,800	\$72,900
Tie Down Fees	\$122	\$100	\$100	\$100
Service Provided for Sewer Fund	\$30,704	\$30,700	\$30,700	\$30,700
Pilot Supplies and Oil	\$10,957	\$8,200	\$8,600	\$9,600
Interest	\$1,036	\$600	\$600	\$700
<u>Miscellaneous</u>	<u>\$4,743</u>	<u>\$2,100</u>	<u>\$2,200</u>	<u>\$2,500</u>
<b>Total Revenues</b>	<b>\$495,410</b>	<b>\$631,100</b>	<b>\$807,800</b>	<b>\$1,282,400</b>
<b>Expenses</b>				
Payroll	\$96,294	\$154,100	\$225,900	\$280,800
Health Insurance	\$14,711	\$46,700	\$66,900	\$83,200
FICA	\$8,028	\$11,800	\$17,300	\$21,500
Retirement	\$14,356	\$15,900	\$20,900	\$26,000
Worker's Comp	\$2,852	\$3,900	\$5,800	\$7,200
Unemployment Insurance	\$1,498	\$1,600	\$2,400	\$3,000
Professional Services	\$59,791	\$54,500	\$60,800	\$75,600
Utilities	\$15,442	\$23,100	\$25,600	\$29,100
Jet Fuel Expenses	\$193,236	\$270,000	\$364,700	\$606,100
Avgas Expenses	\$77,108	\$73,100	\$95,200	\$152,300
Other Fuel Expenses	\$6,103	\$7,100	\$7,900	\$9,800
General Fund Services	\$54,679	\$72,300	\$80,600	\$100,200
Building & Ground Expenses	\$27,394	\$43,600	\$51,000	\$69,900
Vehicle Expenses	\$6,090	\$14,200	\$15,800	\$19,700
Equipment Expenses	\$39,960	\$33,800	\$37,700	\$46,900
Maintenance & Upkeep	\$10,222	\$21,800	\$24,300	\$30,200
Leasing & Rental Expenses	\$3,985	\$6,000	\$6,700	\$8,300
Property Insurance	\$18,383	\$22,600	\$25,200	\$31,300
Marketing	\$9,112	\$9,600	\$10,700	\$13,200
Training	\$3,752	\$4,700	\$5,200	\$6,500
<u>Other Expenses</u>	<u>\$26,316</u>	<u>\$31,000</u>	<u>\$34,500</u>	<u>\$42,900</u>
<b>Total Expenses</b>	<b>\$ 689,312</b>	<b>\$923,400</b>	<b>\$1,185,300</b>	<b>\$1,663,700</b>
<b>Operating Subsidy</b>	<b><u>\$(193,902)</u></b>	<b><u>\$(292,300)</u></b>	<b><u>\$(377,300)</u></b>	<b><u>\$(381,300)</u></b>

Source: City of Newport, Oregon, Airport Fund, Schedule of Revenues and Expenditures. Request for Proposals for the Operation of the Newport, Oregon Municipal Airport, Attachment G-1.0, p. 16, and CDM Smith.

## Rates and Charges

One management strategy for addressing the operating subsidy is to evaluate the airport's rates and charges to determine if there are any sensible changes that could be undertaken that would increase airport revenues. This section examines the airport's major revenue streams and compares the relevant rates and charges to statewide averages with data from the most recent rates and charges survey completed by the Oregon Department of Aviation (ODA) and supplemented by the rates and charges imposed at selected airports located in the region of Newport.

### Tie Down Fees

The Airport charges tie down fees for transient aircraft storage. The cost for aircraft tie down is \$3 per night. This matches the average reported in the ODA rates and charges study. Furthermore, tie down fees comprise less than 1 percent of ONP's total revenues, so any management effort spent on trying to maximize revenue from tie down fees will have minimal impact on the operating subsidy. **Therefore, the recommendation is for airport management to focus their efforts on other revenue sources.**

### Rents & Leases

ONP's second largest source of income is from rents and leases, which are largely driven by the rates and charges set by the airport and the demand for aircraft storage.

ONP's annual ground lease rate of \$0.22 per square foot was adjusted upward by 22 percent from \$0.18 per square foot when the airport recently reviewed and updated their leases. This puts ONP's ground lease rate well above the statewide average of approximately \$0.13 per square foot, according to the ODA's rates and charges study.

In comparison to other airports in the region, ONP's rate falls towards the middle of the range. **Table 9B** shows a selection of airports within 50 nautical miles of Newport in order of increasing distance from ONP.

Table 9B: Comparison of Ground Lease Rates

Airport	City	Ground Lease Rate	Distance from Newport Municipal (nm)
<b>Newport Municipal</b>	<b>Newport</b>	<b>\$0.22</b>	<b>0</b>
Toledo State	Toledo	\$0.09	5
Siletz Bay State	Gleneden Beach	\$0.15	18
Corvallis Municipal	Corvallis	\$0.25	33
Florence Municipal	Florence	\$0.23	36
McNary Field	Salem	\$0.33	49

Source: City of Newport, Oregon, Oregon Department of Aviation Rates and Charges Study, Redmond Airport Rent Study, and CDM Smith.

Ground lease rates range from a low of \$0.09 per square foot at Toledo State Airport to as high as \$0.33 per square foot at McNary Field. It should be noted that McNary Field is the only airport in **Table 9B** with an air traffic control tower, which typically drives up real estate values. Based on the data in **Table 9B**, it stands to reason that ONP's rate of \$0.22 could be raised a few cents and remain competitive with nearby airports. However, it must be kept in mind that ONP recently raised its ground rental rate by 22 percent,

and existing leases have annual escalation clauses, so the marginal revenue increase gained by a rate raise may not be worth the expected loss of goodwill.

ONP leases City owned T-hangars for \$180 per month. It is difficult to compare T-hangar rental rates due to differences in structure age, construction, size, door type, and other amenities. Additionally, with rents and leases comprising 12 percent of ONP's revenues, and expected to drop to only 6 percent by the end of the forecast period, there will be diminishing returns for airport management to focus on increasing this revenue stream. **Therefore, an increase in hangar or ground lease rates is not recommended at this time.**

ONP's implementation of new leases adheres to the best practices found in the Airport Cooperative Research Program's Report 47: Guidebook for Developing and Leasing Airport Property. Specifically, ONP's leases address the following key items:

- A process for adjusting lease rates.
- Mandatory insurance requirements.
- Obligations of lessee, covered in a Rules and Regulations document that the lessee is required to adhere to.
- Routine inspection provisions for safety and compliance of airport regulations.
- Construction and improvement standards that outline pre-approval by the airport sponsor.
- Reversion of leasehold improvements to ONP upon lease termination.
- Subletting policy.

One provision that ONP may want to consider removing from future ground leases is the obligation to negotiate a follow-on lease with the lessee after the original lease term expires (paragraph 3.6 of the lease). Without this provision, ONP has available an option that could increase hangar rent revenues. By enforcing the maintenance provisions in the lease, along with the right to assume ownership of the hangar at the end of the lease term, ONP could position itself to take control of well-maintained hangars that can be leased at fair market values. This option is not without downsides, however. This approach would entail a significant change in leasing policy, which has historically been to negotiate a new ground lease with lessees at the end of their lease term. Such a change could easily result in loss of goodwill for ONP, particularly if mismanaged. It would also mean that ONP would assume responsibility for the hangars, which would drive up maintenance and insurance costs for the airport.

### Fuel Sales

Fuel sales are the largest contributor to ONP's revenues and are expected to grow in influence as long as the city continues to be responsible for fuel sales at ONP. Jet fuel sales make up just under 70 percent of total revenues and are forecast to grow to 75 percent by FY34-35. Avgas revenue is expected to increase from 10 percent to 15 percent of total revenues during the same period. Since fuel is the largest component of the Airport's revenues, it stands to reason that changes in fuel pricing strategy would have the biggest impact on revenues and that any financial recommendations from this study should focus on fuel pricing strategies that maximize revenue.

Airport management has proposed three pricing strategies for managing fuel sales. Each involves tradeoffs between risk and reward. The gross profit on a gallon of fuel (the difference between retail price and purchasing cost) is influenced by a number of factors. The two most obvious ones are cost at time of purchase and set retail price. A Less obvious factor is the likelihood of that gallon of fuel being sold at the price set. This is known as “the elasticity of demand” and is influenced not only by the price the airport sets, but by the price and availability of fuel from competing airports. If a competing airport has a lower price for fuel, ONP will likely sell less fuel. If a competing airport has a higher price, ONP will likely sell more fuel. The three fuel pricing strategies proposed by ONP are:

- **Absolute gross profit** – This strategy establishes fuel pricing using a fixed gross profit per gallon, which is set between \$0.75 and \$2.00 per gallon. This is a typical gross profit for aviation fuel sales, with avgas being on the low end and jet fuel on the high end. The advantage of this strategy is that management can anticipate the gross profit for a known amount of fuel sold, which helps cover costs of fueling operations, such as equipment maintenance and labor expenses. The disadvantage is that a fixed gross profit per gallon may result in pricing that is less competitive with other nearby airports, leading to a decline in the volume of fuel sold due to the elasticity of demand.
- **Relative gross profit** – This strategy uses a specific percentage of the cost of fuel, set between 20 percent and 35 percent, to establish the gross profit and resulting fuel price. For example, using a 20 percent gross profit, ONP would set a price of \$4.80 on fuel that it purchased for \$4.00. The advantage of this strategy is that the gross profit increases as the cost of fuel increases (i.e., there is twice as much gross profit on a gallon of fuel that costs \$4 compared to a \$2 gallon), effectively providing an inflation adjustment. The disadvantage is the same as the absolute gross profit strategy since timing may result in pricing that is less competitive with other nearby airports. However, the 20 percent to 35 percent gross profit range selected by ONP management results in lower profit margins at current fuel prices as compared to the absolute gross profit strategy.
- **Competitive pricing** – With this strategy, airport management sets fuel prices to stay competitive with the local market. This is the strategy that is currently implemented. Airport management tracks jet fuel prices within 65 miles of Newport and avgas prices within 50 miles and reports this data monthly. Adjustments to fuel prices are made in response to the region’s average fuel price as deemed necessary by ONP management. The advantage of this strategy is that it allows ONP management the flexibility to respond to competitive pressure from other nearby airports, as well as the opportunity to experiment with pricing to observe how it affects demand for fuel. This should help in maximizing the volume of fuel sold. The disadvantage is that competitive pressure may push down prices to the point that they may not recoup the total cost of fuel, equipment maintenance, and labor. Another disadvantage is that this strategy has the potential to introduce the greatest variability in pricing, since there are no caps imposed.

Each of these strategies can be enhanced with additional options, such as offering discounts for large fuel orders, or for prepaying for fuel.

**It is recommended that the airport continue with its current strategy of using competitive pricing to maximize the volume of fuel sold and continuously monitor fuel prices at competing airports.** It is felt that over time the advantages of operating at ONP versus competing airports will allow for less elasticity of jet fuel pricing and higher net revenues toward the end of the planning period. This option provides ONP with the greatest flexibility in terms of remaining competitive, while still retaining the ability to adjust the price to obtain the largest profit on each gallon of fuel sold.

## IMPLEMENTATION PLAN

This section of the Airport's master plan report seeks to establish a tentative schedule for the various projects required to fulfill the future development goals of the Newport Municipal Airport. Essentially, the schedule represents a prioritized Airport development implementation plan to meet FAA design standards, regulatory requirements, forecast increases in aeronautical activity, and/or economic development initiatives of the City. Projects appearing in the first phase are of the greatest immediate importance to the Airport and have the least tolerance for delay. Additionally, some projects included in an early phase may be a prerequisite for other planned improvements in a later phase. As previously mentioned, the development phasing has been divided into three phases:

- Phase I Short-Term (2017-2021)
- Phase II Mid-Term (2022-2026)
- Phase III Long-Term (2027 – 2036)

The phasing of individual projects will undergo periodic review to determine the need for changes based upon variations in forecast demand, available funding, economic conditions, and/or other factors that may reasonably influence airport development. Additionally, other projects not foreseen in this report may be identified in the future and would, therefore, likely necessitate changes in the phasing of projects and the overall CIP. Further, the projects and overall development identified in the CIP, though tied to a time table, will only occur once the triggering demand and/or need is realized.

## Cost Estimates

Cost estimates for individual projects, based on 2016 dollars, were prepared for improvements that have been identified for implementation during the 20-year planning period and beyond. These estimates have been categorized by the total cost for each project, that portion to be borne by the City of Newport as the Airport sponsor, and that part of the total cost anticipated to be paid by the FAA under the Airport Improvement Program (AIP) or similar programs. In addition to airport sponsor funds, the local share can include sources such as Oregon Department of Aviation (ODA) funding, State and/or local economic development funds, regional commissions and organizations, other units of local government, as well as funding from private individuals or businesses.

The estimates are intended to be used for planning purposes only and should not be construed as detailed construction cost estimates, which can only be compiled following the preparation of detailed design documentation.

## Process of Developing the CIP

The Airport's CIP is based on recommendations from the preferred alternative, developed in a previous chapter.

The significant costs associated with the full implementation and upgrade to a C-II facility during the 20-year planning period, which could total to more than \$60 million dollars, may be difficult for the Airport to obtain considering the number of NPIAS airports competing for the limited AIP discretionary dollars. Due to these financial conclusions, the City is choosing to scale back improvements to fit within potential available funds.

As planners had originally organized the CIP list and phasing plan, all MR2C project phasing showed in the long-term and beyond, without projected dates since they are dependent on change in airport operations. All short- and mid-term projects focused on leaving the Airport ARC B-II, separating the runways, rebuilding the apron, and waiting to see if business jet activity increases, and is sustained, by the year 2027.

The CR2 projects, as the immediate focus of the master plan, spread out over 10 to 12 years; the time anticipated by forecasts to see an increase in business jet traffic. By committing to the CR2 upgrades recommended by the master plan, the Airport will be ready to move into the next phase of airport operations when the time comes. Further, in 10 to 12 years, a new master plan will be needed to evaluate whether or not Airport operations have reached anticipated forecasts. At that point, the City and the FAA can evaluate the current needs of the Airport and potential funding mechanisms to meet those needs.

The next master planning project has been projected for 2030, and will take approximately two years to complete, moving the 2017 Master Plan into years 15 thru 20 where a crossover between plans is likely to occur naturally. The MR2C preferred alternative remains on the ALP for land use and zoning purposes. While correcting the airfield geometry, the Airport can work and prepare any zoning and land use requirements needed to upgrade to a C-II airfield in the future. With this division in place, the CIP and Phasing Plan were adjusted to represent the Airport's view and intention for the next 15 to 20 years.

## SUMMARY OF FINANCIAL AND CIP

The CIP projects and associated costs presented in this Master Plan are best projections made at the time of formulation, with the expectation that a more detailed estimate will be completed as the project nears design. The purpose is to provide a reasonable projection of capital needs, which can then be used in fiscal programming to test for financial feasibility.

This section details the projects in the CIP and establishes a tentative schedule for those projects. Further, the CIP includes projects not funded by the Airport Improvement Program but needed at the local level to maintain service and quality at the airport. This combined CIP shows the full financial investment the City of Newport is anticipating during the planning period (in addition to the operating subsidy the City provides annually to maintain airport operations).

The phasing schedule identified in the CIP are preliminary schedules; variance will occur, especially during the latter time periods. The first five years of projects contain the greatest level of detail. The timing and

sequence should be adhered to the arranged schedule as much as possible. Demand for certain facilities, especially in the latter time frame, and the economic feasibility of their development, are the prime factors influencing the timing of individual project implementation. Care must be taken to provide for adequate lead-time for detailed planning, environmental review, detailed design, and construction of facilities in order to meet aviation demands. Prudent timing is also important to minimize disruptive scheduling, where a portion of the facility may become inoperative due to construction, and to prevent extra costs resulting from improper project scheduling.

**Table 9C** shows approximately \$14 million of capital improvements resulting from this master plan. The sources for funding these improvements and associated assumptions are as follows:

- **FAA Non-Primary Entitlement (NPE) Grants** – It was assumed that the annual \$150,000 FAA NPE grants available to the Airport would continue to be available in the future without any changes. The Airport would rollover NPE amounts as necessary.
- **FAA Discretionary Grants** – The funds in this category represent FAA discretionary grants. In general, any project that was judged AIP eligible and was not fully funded by other sources, had its funding fulfilled with FAA discretionary money.
- **Local Funds** – These funds are assumed to be from the City of Newport. A further assumption is that the City will compete for state grant matching opportunities to reduce the local share when possible.
- **Other** – This funding source constitutes any capital provided from sources other than those listed previously. The most likely source of these funds is private capital.

If ONP is unable to secure these discretionary grants as planned, there are other options for the Airport to consider. The Airport may be able to employ a combination of these alternatives to achieve its objectives.

- Airport secured financing. Some airports finance their development programs by raising capital through debt instruments. Airport issued bonds, effectively a loan made by the airport sponsor to investors, are typically secured by airport revenues (airport revenue bonds), or by the taxing authority of the airport sponsor (general obligation bonds). Since the airport's operational budget is subsidized by the City of Newport, there typically are no excess revenues available, nor are any projected for the planning period, to fund debt service, so an airport revenue bond is not feasible. Prudent fiscal planning would not recommended the City of Newport take on debt to fund airport improvements with a general obligation bond unless the Airport can make a compelling case that such improvements benefit all taxpayers, and, therefore, should be paid for by all taxpayers. Unlike, for example, roads, which are used by nearly all taxpayers, the case for an airport tends to be more challenging.
- Request the City of Newport fund the improvements. This option faces its own set of challenges. While the plan calls for Newport to provide approximately \$1 million for the first 10 years of development, the City it is likely to get a nine-to-one return on those matching funds. Any additional funding provided by the City will not achieve that level of return, so the City may be



reluctant to commit additional funds to the Airport. If the Airport can combine this option with other grant funding, thereby leveraging City money, this may be the most feasible alternative.

- Seek alternative funding. The Airport may be able to secure funding from alternative sources or through some sort of public-private partnership.
- Delay the implementation of the improvements until funding is available. By pushing back when projects are scheduled to be accomplished, the Airport can save up its FAA AIP NPE grant money over several years until it has accumulated an amount (up to \$600,000) sufficient to fund the desired project. Delaying projects also gives the Airport the opportunity to apply again for any grant awards for which the project is eligible.
- Scale back the improvements to fit within the funds available. The Airport could take steps to reduce the scale of the improvements, either by discarding entire projects, or reducing the scope of individual projects, in order to reduce the overall cost.

## Capital Improvement Program (CIP) and Phasing Plan

The schedule shows the Airport's priorities intended to meet regulatory requirements, forecast increases in aeronautical activity, and economic development initiatives of the City of Newport.

The projects and their associated cost estimates are organized in three time horizons: short-, mid-, and long-term, as shown in **Table 9C and Exhibit 9E**. The projects required for the upgrade to C-II were those that exceeded ONP's 20-year allotment of NPE funding and would also require a considerable amount of discretionary money from the FAA. By assuming they are scheduled to take place after 2036, additional NPE funding may be available to finance these projects. If ONP is able to find sources of funding other than NPE, it would be financially feasible to implement these projects sooner if operational data warrants the code change upgrade.

These estimates are intended to be used for planning purposes only and should not be construed as detailed construction cost estimates, which can only be compiled following the preparation of detailed design documentation.

A listing of projects by phase is provided in the **Table 9C** below, followed by a brief description of these projects.

Table 9C: Newport Municipal Airport Capital Improvement Plan Schedule and Cost Estimates

Year	Map Key #	Project	FAA		Local	Other	Total
			Non-Primary Entitlement	Discretionary/ State Apportionment			
<b>Short-Term (2017 - 2021)</b>							
2017	1	Storm Pipe Rehab - Design	\$150,000	\$32,700	\$20,300		\$203,000
2017	-	Avigation Easements*			\$50,000		\$50,000
2018	-	Remove Obstacles in Approach & Departure Surfaces All Runways	\$150,000	\$75,000	\$25,000		\$250,000
2019	1	Storm Pipe Rehab – Construction	\$130,000	\$2,120,000	\$250,000		\$2,500,000
2019	-	PMP	\$20,000				\$20,000
2020	2	Non-Standard Geometry Improvements Pre-Design & Environmental Assessment	\$150,000	\$192,000	\$38,000		\$380,000
2020	3	Operation Building – Phase I – Design*			\$30,000		\$30,000
2021	3	Operation Building – Phase II – Construction/Removal of Quonset Hut*			\$200,000		\$200,000
2021	4	AWOS III P/T	\$150,000		\$17,000		\$167,000
		<b>Short-Term Subtotals</b>	<b>\$750,000</b>	<b>\$2,419,700</b>	<b>\$630,300</b>		<b>\$3,800,000</b>
<b>Mid-Term (2022 - 2026)</b>							
2022	2	Non-Standard Geometry Improvements – Design	\$130,000	\$225,550	\$39,450		\$395,000
2022	-	PMP	\$20,000				\$20,000
2023	2	Non-Standard Geometry Improvements - Construction	\$150,000	\$4,116,000	\$474,000		\$4,740,000
2024	5	Apron Expansion Predesign & Environmental	\$150,000		\$16,666		\$166,666
2024	6	Fuel Tank Refurbishment Phase I – Design / Environmental*			\$100,000		\$100,000
2025	5	Apron Expansion Phase 1 - Design	\$108,000		\$12,000		\$120,000
2025	-	PMP	\$20,000				\$20,000
2025	6	Fuel Tank Refurbishment Phase II – Construction/ Removal of Old Tanks*			\$100,000		\$100,000
2026	5	Apron Expansion Phase 1 - Construction	\$172,000	\$863,000	\$115,000		\$1,150,000
		<b>Mid-Term Subtotals</b>	<b>\$750,000</b>	<b>\$5,204,550</b>	<b>\$857,116</b>		<b>\$6,811,666</b>
<b>Long-Term (2027 - 2036)</b>							
2027	7	FBO Parking Lot – Design & Construction*			\$150,000		\$150,000
2028	-	PMP	\$20,000				\$20,000
2028	8	Design/Construct Apron Expansion - Phase 2	\$430,000	\$371,000	\$89,000		\$890,000
2030	-	Airport Master Plan	\$300,000	\$195,000	\$55,000		\$550,000
2031	9	Design and Construct New Aircraft Cargo Building/Facility				\$480,000	\$480,000
2032	10	Design/Construction - Taxiway A Reconstruction	\$150,000	\$1,056,000	\$134,000		\$1,340,000
		<b>Long-Term Subtotals</b>	<b>\$900,000</b>	<b>\$1,622,000</b>	<b>\$428,000</b>	<b>\$480,000</b>	<b>\$3,430,000</b>
		<b>CIP Totals</b>	<b>\$2,400,000</b>	<b>\$9,246,250</b>	<b>\$1,915,416</b>	<b>\$480,000</b>	<b>\$14,041,666</b>

Source: WHPacific.

\*City of Newport CIP List/Non-AIP Eligible Projects

## Phase I Short-Term (2017 – 2021)

The projects in phase one are the most detailed, and of the greatest importance to the Airport to meet existing federal design standards. These projects are listed on the Federal and State CIP program and are unlikely to change. The funding for these projects has been designed to closely match discretionary funding similar to past grants, helping to insure the necessary funds will be available.

**2017 – Storm Pipe Rehabilitation – Design:** The two original 48” concrete pipes installed in 1943 to channel Grant Creek underneath the airfield are reaching the end of their service life. The pipes will be lined to stabilize the pipes and ensure continued drainage. Phase I is design.

**2017 – Avigation Easements\*:** Update existing easements and negotiate new easements to support current navigation needs of the Airport.

**2018 – Removal of Obstacles in the Approach & Departure Surfaces All Runways:** Removal of trees extending into the approach and departure surfaces listed on the Obstruction Data Tables of the Airport Layout Plans.

**2018 – Carry Over:** Carry over placeholder of 2018 Non-Primary Entitlement funds from the FAA to provide adequate funding for Storm Pipe Rehabilitation construction project.

**2019 – Storm Pipe Rehabilitation – Construction:** Phase 2: Construction. Storm pipes will be lined and any environmental requirements updated.

**2019 – Pavement Maintenance (PMP) – ODA:** Scheduled pavement maintenance as needed.

**2019 – ADS-B Ground Station:** With the FAA mandate for Automatic Dependent Surveillance-Broadcast (ADS-B) to be in all planes by January 1, 2020, the airport will need to install a ADS-B ground station to comply with the FAA mandate and for the airport to be ready to connect with NextGen surveillance.

**2020 – Non-Standard Geometry Improvements – Pre-Design & Environmental:** Conduct environmental assessment, preliminary engineering and design for threshold relocation of Runway 2-20; construction of new Runway 2 entrance taxiway; removal of inline Taxiway “E” and remnant Runway 2-20 pavement; construction of necessary Taxiway “A” embankments for future Taxiway “A” 300’ offset reconstruction; and construction of a portion of Taxiway “A” extension and Taxiway “E” replacement pavement.

**2020 – Operation Building – Phase I – Design\*:** The Quonset hut used for storage needs to be demolished and a new facility constructed. Phase I will design removal of Quonset hut and replacement office/shop/storage facility.

**2021 – Operation Building – Phase II – Construction & Demolition\*:** Demolition of Quonset hut and construction of new facility.

**2021 – AWOS III P/T :** The current AWOS is so old; replacement parts are difficult to find; the system needs to be replaced with a newer model that can be maintained.

### Phase II Mid-Term (2022 – 2026)

Similar to phase one, the projects in phase two are of significant importance to the Airport. These projects may be directly linked to projects in phase one, such as the non-standard geometry improvements which will be designed and constructed in this phase of the CIP. Project costs and funding amounts have been considered for this phase, and are reasonable when compared to past grant amounts.

**2022 – Non-Standard Geometry Improvements – Design:** Final design for the threshold relocation of Runway 2-20; construction of new Runway 2 entrance taxiway; removal of inline Taxiway “E” and remnant Runway 2-20 pavement; construction of necessary Taxiway “A” embankments for future Taxiway “A” 300’ offset reconstruction; and construction of a portion of Taxiway “A” extension and Taxiway “E” replacement pavement.

**2022 – Pavement Maintenance (PMP) – ODA:** Scheduled pavement maintenance as needed.

**2023 – Non-Standard Geometry Improvements – Construction:** Construction of the threshold relocation of Runway 2-20; construction of new Runway 2 entrance taxiway; removal of inline Taxiway “E” and remnant Runway 2-20 pavement; construction of necessary Taxiway “A” embankments for future Taxiway “A” 300’ offset reconstruction; and construction of a portion of Taxiway “A” extension and Taxiway “E” replacement pavement.

**2024 – Apron Expansion Pre-Design & Environmental:** Conduct environmental, preliminary engineering and design for the apron reconfiguration and expansion areas to include approximately 6,250 SY adjacent to existing apron area and existing Taxiway D/Taxiway A intersection and 4,625 SY of pavement infill near existing aircraft cargo operations area.

**2024 – Fuel Tank Refurbishment Phase I – Design / Environmental\*:** The current fuel tanks were installed in 1996. The jet fuel tank will be refurbished, the av-gas and self-serve tanks removed, and a 5,000 gallon the self-serve tank installed. Phase I will design the project.

**2025 – Fuel Tank Refurbishment Phase II – Construction/ Removal of Old Tanks\*:** Construction, demolition, and refurbishment of fuel farm.

**2025 – Apron Expansion Phase 1 – Design:** Final design for the apron reconfiguration and expansion areas to include approximately 6,250 SY adjacent to existing apron area and existing

Taxiway D/Taxiway A intersection and 4,625 SY of pavement infill near existing aircraft cargo operations area.

**2025 – Pavement Maintenance (PMP) – ODA:** Scheduled pavement maintenance as needed.

**2026 – Apron Expansion Phase 1 – Construction:** Construction of the apron reconfiguration and expansion areas to include approximately 6,250 SY adjacent to existing apron area and existing Taxiway D/Taxiway A intersection and 4,625 SY of pavement infill near existing aircraft cargo operations area.

**2027 – FBO Parking Lot – Design & Construction\*:** The existing parking lot is limited in the number of cars it can hold. A new parking lot will be designed and constructed.

### Phase III Long-Term (2027 – 2036)

The projects in the long-term phase are the projects mostly likely to change over time. Projects suggested in phase will likely be re-evaluated in the next master plan to better determine if they suite the direction and demands of the Airport at that time.

**2028 – Pavement Maintenance (PMP) – ODA:** Scheduled pavement maintenance as needed.

**2028 – Apron Expansion Phase 2 – Design & Construction:** Design and construction of approximately 9,900 SY of apron infill area to complete apron reconfiguration and expansion project.

**2030 – Airport Master Plan Update:** Complete update of Airport Master Plan

**2031 – Design and Construct New Aircraft Cargo Building/Facility:** Design and construction of new 3,750 SF cargo processing facility adjacent to cargo operations area.

**2032 – Design and Construct Taxiway “A” Reconstruction:** Design and Construction.

In summary, **Table 9D** shows the funding necessary to support the improvements, grouped by term and funding source. This plan relies heavily on FAA AIP discretionary funding in outlying years. The CIP also depends upon financial support from the City of Newport in addition to the operating subsidy the City already provides the Airport. However, the discretionary funding of \$2.4 million for the short-term and \$5.2 million for the medium-term, and \$1.6 million for the long-term seem reasonable in light of ONP's past discretionary grants. This also represents a 10% match that the City can budget and work toward while maintaining the day-to-day operations of the Airport and meeting non-AIP funded project needs.

**Table 9D: Newport Municipal Airport Capital Improvement Financing Plan**

	Short Term (2017-2021)	Medium Term (2022-2026)	Long Term (2027-2036)
<b>Total Capital Improvement Expenditures</b>	<b>\$3,800,000</b>	<b>\$6,811,666</b>	<b>\$3,430,000</b>
Funding Sources			
Capital Carryover from Previous Term		\$0	\$0
FAA AIP Non-Primary Entitlement Funds	\$750,000	\$750,000	\$900,000
FAA AIP Discretionary Funds	\$2,419,700	\$5,204,550	\$1,622,000
Local Funds	\$630,300	\$857,116	\$428,000
Other	\$0	\$0	\$480,000
<b>Total Funding Sources</b>	<b>\$3,800,000</b>	<b>\$6,611,666</b>	<b>\$3,430,000</b>
Capital Carryover	\$0	\$0	\$0

Source: CDM Smith.



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