

# EXECUTIVE SUMMARY



## **Newport Municipal Airport**

**AIRPORT MASTER PLAN UPDATE**

**FINAL DRAFT – JUNE 2017**

## PURPOSE AND GOALS

The purpose of the 2017 Master Plan Update is to provide a 20-year strategic plan that identifies the necessary airport improvements to serve current and projected aviation demand, comply with Federal Aviation Administration (FAA) design standards, and address airport issues identified by the City of Newport (the Airport Sponsor), airport users, and other stakeholders. Specific project goals identified early in the planning process include:

- Attain recognition by the Oregon Department of Aviation (ODA), as the coastal lifeline in emergency / disaster situations.
- Develop a plan to finance strategies for airport improvements.
- Gain a clear understanding of the impact on land use adjacent to Airport.
- Complete a commercial service trend analysis and cost/benefit analysis of maintaining the 139 Certification.
- Commercial Air Service preparedness – including apron redesign and load bearing capacities of Taxiway A.
- Show Newport citizens (taxpayers) the importance of the Airport.

## OVERVIEW OF ECONOMIC BENEFIT AND ROLE

Newport Municipal Airport (ONP) plays a vital General Aviation (GA) role that benefits the City of Newport. Further, the airport is a vital facility in the State of Oregon Aviation Plan and National Plan of Integrated Airport Systems. In the past, ONP's role included scheduled airline service utilizing commuter aircraft. Although there is not currently a scheduled passenger airline serving the local market, the Airport holds and maintains a certificate called the FAR Part 139 Operating Certificate. This demonstrates that the City of Newport conducts regular inspections and maintains airport facilities to the same safety standards as commercial service airports.

Airline passenger service is just one of the roles an airport can fulfil. As a General Aviation (GA) airport, ONP's primary role is as a facility capable of providing services to recreational and corporate pilots and aircraft. ONP has excellent facilities that safely and efficiently handle the needs of the GA segment of the aviation market. Simultaneously, ONP provides facilities for the US Coast Guard that allow their helicopters to respond much more quickly to maritime emergencies than if rescue crews were dispatched from the Coast Guard base in North Bend. Additionally, air ambulance flights are accommodated that provide a critical link to trauma facilities in more distant cities. Finally, ONP is recognized by the Oregon Department of Aviation (ODA) as a critical coastal resource for emergency response in the event of a major earthquake and tsunami event. Evidence of this recognition is a seismic resilience study funded in part by ODA that is currently underway, which will provide recommendations on how ONP can be more resilient to a major earthquake event.

## Economic Benefit

The local economy benefits from the Newport Municipal Airport in many ways, as reported in the *Oregon Aviation Plan 2014 Update* conducted by the Oregon Department of Aviation. Using the IMPLAN<sup>1</sup> model with 2012 data inputs, the report concludes that the direct and indirect economic impact from ONP activity, and the average 15,750 visitors that arrive in Newport by air, is approximately \$14.6 million annually and this activity supports 134 area jobs. This report demonstrates that the Airport is an essential economic generator for the local region.

## National System Role

The Airport is identified by the FAA as one of 2,553 General Aviation (GA) facilities nationwide and is included within the National Plan of Integrated Airport Systems (NPIAS). NPIAS airports are part of the U.S. inventory of aviation infrastructure assets developed and maintained by the Federal Aviation Administration. There are several criteria allowing an airport to be included in the NPIAS; however, the primary criteria is that the airport has at least 10 based aircraft and is located at least 20 miles (30 minute drive time) from another NPIAS airport. With 28 based aircraft, and the closest NPIAS airport approximately 59 road miles to the east (the Corvallis Municipal Airport), both primary NPIAS criteria are met. As significant FAA transportation assets airports in the NPIAS are eligible to receive up to \$150,000 in entitlement funds annually from the FAA's Airport Improvement Program (AIP). NPIAS airports may also receive additional AIP project funding through discretionary grant funds.

## State System Role

The Oregon Aviation Plan incorporates and classifies 97 public-use airports, which include 85 publicly-owned and 12 privately owned airports, located within the State of Oregon. There are five categories, also known as functional roles, classifying these airports according to various performance criteria. Minimum facility standards are applied to each category in order to have individual airfields fulfill their intended role in the system.

Newport Municipal Airport is one of 10 airports included in **Category II – Urban General Aviation Airports**, and one of two airports (along with Astoria) on the coast. Key facilities within Category II Airports include:

• Airport Reference Code:	C-II	Not Met <sup>2</sup>
• Primary Runway Length:	5,000 feet	Met
• Primary Runway Width:	100 feet	Met
• Taxiways:	Full Parallel	Partially Met <sup>3</sup>
• Approach Type:	Precision	Met

*Source: Oregon Aviation Plan, 2014.<sup>2</sup>ONP's current Airport Reference Code is B-II. <sup>3</sup>Main taxiway is not parallel for entire length but the taxiway system serves each runway end.*

All of these criteria, among many more, are defined in the full Airport Master Plan Narrative Report. The only criterion that is not currently met at ONP is the Airport Reference Code of C-II. In general, C-II is a

<sup>1</sup> The IMPLAN company provides economic impact data and modeling to governments, universities, public and private sector organizations for assessing the economic impacts of project decisions.

code that represents most midsized corporate jets along with all aircraft that have less demanding characteristics for weight, speed, and physical dimensions. If upgraded to C-II, these jets and occasional operations by larger business jets can be accommodated with full safety margins. At the present time, most business jets are still able to operate on an occasional basis until demand by aircraft in this category increases.

As the master plan narrative will show, the need to meet C-II criteria has not been reached based on observed aviation activity, but ONP is expected to achieve at least 500 annual takeoffs and landings of C-I or C-II aircraft by the end of the planning period in 2035. Alternatives to upgrade the Airport to C-II standards were examined and a preferred alternative will be implemented only after that activity level has been sustained, necessary approvals are received, and sufficient funds are available. A C-II upgrade could only occur with substantial grant assistance from FAA.

## STUDY PROCESS

The study process and documentation follows **FAA Advisory Circular 150/5070-6B, Airport Master Plans**. As this is a technical-style study, a list of FAA terms and acronyms is included in the Narrative Report, **Appendix A** for reference. The Master Plan Update study involves several phases, each with study tasks that are documented in separate chapters of the report. The process typically takes 18-24 months to complete.

### Investigation Phase

*Inventory* – A detailed examination of existing facilities and activity levels.

*Forecast* – A projection of future activity levels to be expected during the study period.

*Facility Requirements* – An analysis of facilities that will be needed to meet demand.

### Solutions Phase

*Alternative Concepts* – A series of concepts showing facilities in alternative arrangements.

*Selection of Preferred Alternative* – The alternative concept that best meets identified criteria.

### Documentation Phase

*Financial Plan* – An evaluation of how the airport will fund the development included in the plan.

*Implementation Plan (CIP)* – A detailed list of sequenced and prioritized projects to be implemented.

*Narrative Report* – The full technical report containing all analysis and appendices.

*Airport Layout Plan* – The set of drawings that depicts existing and future facilities.

## PUBLIC PARTICIPATION

One of the most important elements to Airport Master Plans is sharing project progress and receiving feedback from the public. Several methods were employed while preparing the master plan update.

### Planning Advisory Committee

A Planning Advisory Committee (PAC) was established to receive study materials and analysis, attend meetings where members of the study team would present findings, and provide feedback. The PAC was comprised of many airport stakeholders and others in the community that were invited to participate based on their roles in various organizations and agencies.

## Airport Committee

The Airport Committee is comprised of engaged users of the airport who provide specific feedback on the adequacy of existing facilities and the effect that proposed facilities may have on normal operations.

## City Council Briefings

Two presentations were made to the Newport City Council. They will be charged with approving adoption of the master plan once presented for their consideration in final form.

## Public Open Houses

Each meeting of the Planning Advisory Committee was followed by a Public Open House where study team members were available to discuss key presentation topics with the general public. Comments from these open houses were documented and considered during subsequent study tasks.

## ISSUES IDENTIFIED

One of the key steps in a master plan is to identify any known issues or characteristics that the study may consider specific to the facility. The issues identified may or may not be good topics for master plans to address through investments in capital projects, but the aim is to gather impressions and see what recommendations are appropriate. At the first meeting with the Planning Advisory Committee, the following list of issues was identified:

- US Coast Guard views the Airport as asset but has few facilities there
- Utility upgrades and expansion are needed for any potential airport development
- Negative cash flow
- The Airport should be fully evaluated for regional emergency response
- Wolf Tree Resort, future land use needs and development near the Airport
- Environmental considerations

All of these issues were addressed in the course of preparing this master plan. The ability of the master plan to effect changes leading to desired outcomes will vary based on the availability of funding from the various sources necessary. Two funding sources this study will pinpoint with precision will be entitlement grants from FAA's Airport Improvement Program and local funds needed to match federal grants. Private development funds and funds from military budgets cannot be reliably tied to a schedule.

Also, demand for aviation services will vary according to factors such as the overall economy, the price of fuel, and many other factors. Because of this, the master plan concurs with the FAA policy to conservatively recommend that major capacity or upgrade projects be tied to observed activity levels and not programmed only according to the years identified in this plan.

## MAJOR CONCLUSIONS AND RECOMMENDATIONS

The Airport Master Plan Narrative Report provides a complete list of projects and costs throughout the planning period that, if properly timed, will allow the Airport to meet the City's goals and objectives. In broad terms, the Airport Master Plan calls for the following strategic direction:

### **Near Term – B-II, Airfield Modifications for Enhancing Safety for Existing Traffic**

Although the State Role for **Category II – Urban General Aviation Airports** establishes a minimum criteria of Airport Reference Code C-II, not enough of the C-I/C-II business jet activity has been observed in order to meet the FAA’s definition of “regular use” (at least 500 takeoffs and landings annually). Nonetheless, Master Plan forecasts approved by FAA conclude that the amount of C-I/C-II traffic that would satisfy the regular use definition could occur by or around 2025 thus meeting the final **Category II – Urban General Aviation Airports** criteria. However, implementing these upgrades is not recommended until regular use by C-I/C-II aircraft has been sustained and is growing; a use demonstrated by repeated annual operations of 500 or more C-I/C-II aircraft sustained for at least three years. An additional master plan study once regular use is established should be conducted to decide how the C-I/C-II upgrades will be implemented based on user needs, AIP grant opportunities, and local funding potential.

Until annual C-I/C-II operations increase, the airport should maintain the existing B-II Airport Reference Code. In addition, there are a number of projects tied to FAA design criteria changes since the last master plan was conducted that would enhance the safety for all aircraft operations. These projects include separation of the two runways. The phasing of this work will take place during the next ten to twelve years as the City waits for the anticipated growth forecasted in C-I/C-II operations.

Planners considered the best locations on the airport to expect interest in non-aeronautical commercial/industrial development. Consistent with the conclusions of the Airport’s previous master plan, the suitable undeveloped land nearest to US Highway 101 still has the highest potential. Other land on the airport remains available, however costs for providing City of Newport utilities and related infrastructure are much higher the further away from existing infrastructure adjacent to Highway 101 any development occurs. Nothing reasonably anticipated at the time that this master plan was completed had been identified for development. Consequently, no major extensions of City utilities are warranted based solely on airport needs.

### **Long Term – C-II, Upgrade to Meet Corporate Jet Safety Standards and State System Role**

In order to meet the Oregon Aviation Plan’s role of *Category II - Urban General Aviation*, especially considering that ONP is one of just two airports along the Oregon coast identified as able to meet the performance criteria, forecasts call for investment in upgraded safety margins for business jet aircraft through ARC C-II. As the alternatives process developed, planners drafted designs to meet the C-II safety needs. The master plan shows an arrangement of upgraded facilities that could meet C-II that the Planning Advisory Committee and City leaders felt best achieved the various selection criteria established for the project. As City staff considered the financial commitment involved in the C-II upgrades, they concluded that fiscal investment for the C-II upgrades was outside the City’s current anticipated revenue potential. However, understanding the future needs of the Airport, City staff determined to use the selected C-II upgrade alternative to direct land use and zoning code development moving into the future. In this way, the long-term needs, any potential land use needs and required zoning changes, will be supported and protected for future airfield development when local funding matches may be more in-line with design needs.

## CAPITAL IMPROVEMENT AND PHASING PLAN

In traditional master plans, the Airport Layout Plans show development on the airport over the twenty-year planning period covered in the master plan. Those developments translate into dollars on the Capital Improvement Plan (CIP) where upgrades are broken out by project. Since the City of Newport has accepted the forecasted change and future upgrade to ARC C-II but recognized the fiscal limitations of a small community, the City has chosen to plan separate approaches to the near- and long-term needs of the airport. Instead of showing and planning for all projects shown on the Airport Layout plan on the CIP, the CIP will show only those projects designed to meet the near-term needs of the airport. These projects address both the NPIAS needs funded in part by the Airport Improvement Grant program as well as local needs funded by municipal funds only.

By the time near-term projects are completed, and the next master plan update is finished, the airport will be in the final planning stage of the 2017 Master Plan (2032 to 2035) and ready to address the next stage in airport growth. Since the FAA historically places the Sponsor's CIP on hold during a master plan process since needs have often changed from forecasted fifteen years earlier, completion of the next master plan falls near the end of this planning period and after forecast period changes are expected; a new view of the airport will be needed. To that end, the CIP for the 2017 has dated projects with anticipated funding requirements through 2032 then stops in anticipation of updated project needs based on the 2032 Master Plan.

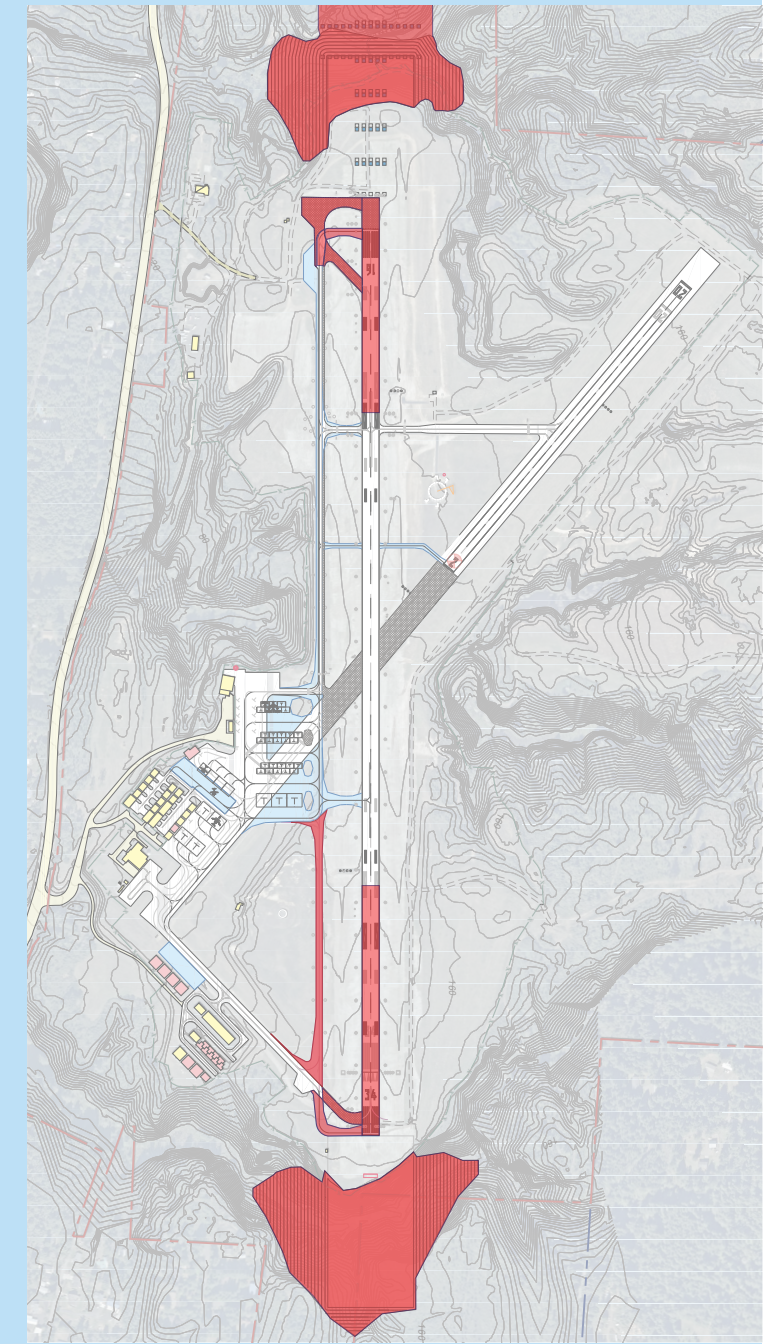
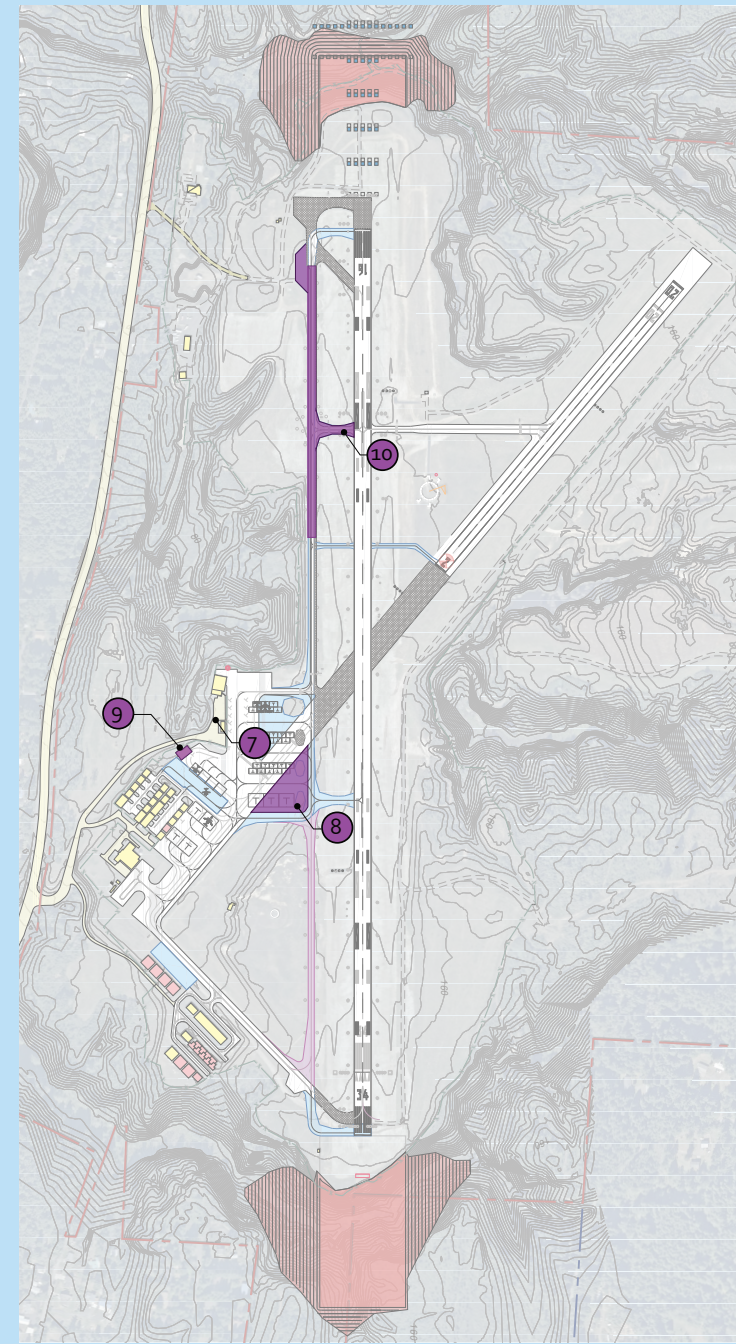
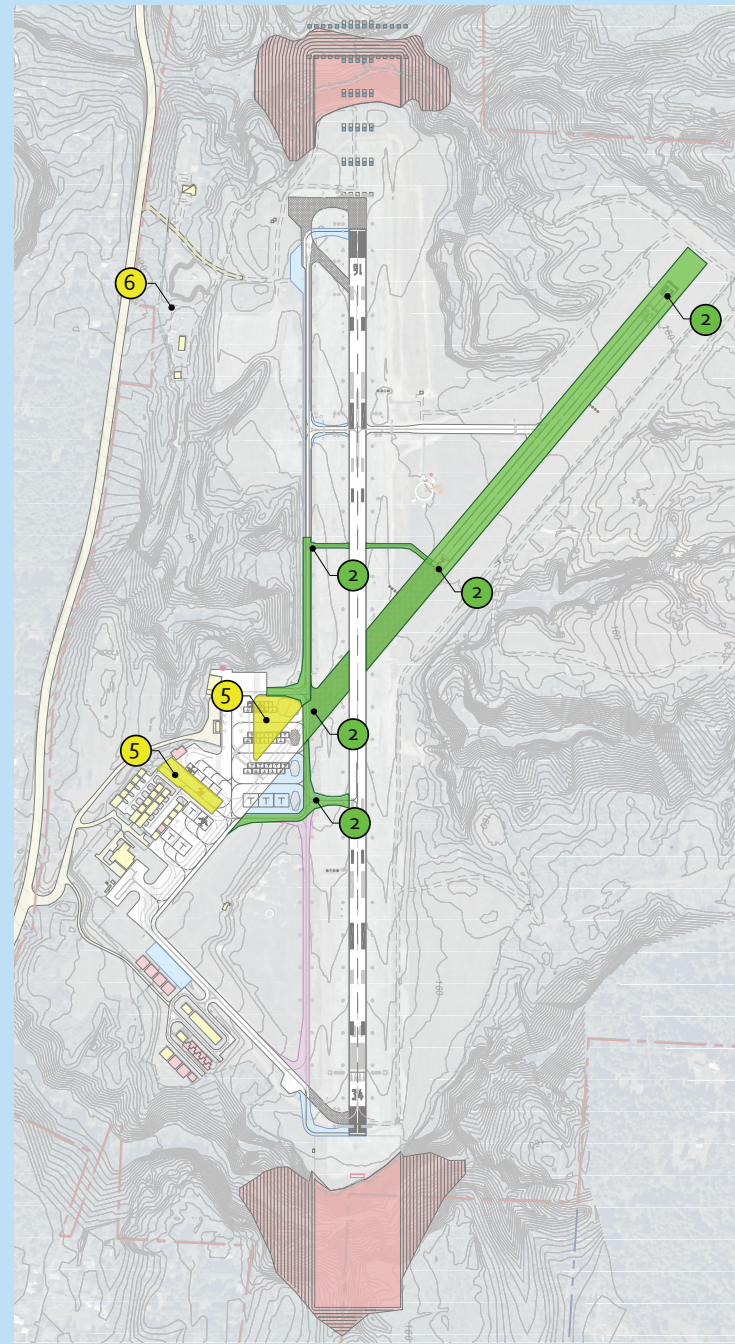
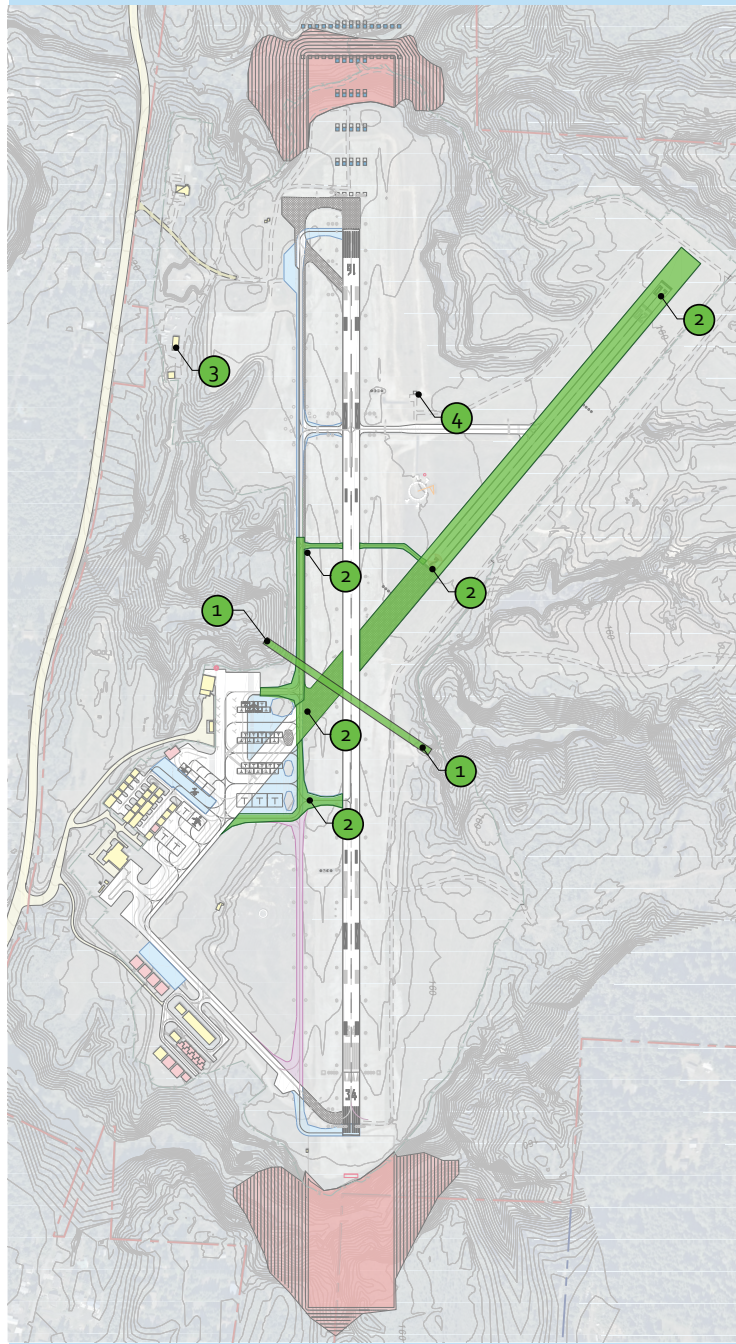
## Newport Municipal Airport Capital Improvement Plan Schedule and Cost Estimates

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





**Short-Term (2017 - 2021)**

- 1 - Storm Pipe Rehabilitation.
- 2 - Non-Standard Geometry Improvements - Pre-Design & Environmental
  - Relocate Runway 2-20 - Lights, markings, thresholds, and blast pad pavement reconstruction.
  - Removal of inline Taxiway "E" and remnant Runway 2-20 pavement.
  - Construction of Taxiway "A" relocation offset to 300' and necessary embankments.
  - Construction of a portion of Taxiway "A" extension to south to extents of Taxiway "E" replacement pavement.
  - Construction of new Runway 2 entrance taxiway.
- 3 - Operations Building Replacement
- 4 - AWOS III P/T Installation

**Mid-Term (2022 - 2026)**

- 2 - Non-Standard Geometry Improvements - Design & Construction
  - Relocate Runway 2-20 - Lights, markings, thresholds, and blast pad pavement reconstruction.
  - Removal of inline Taxiway "E" and remnant Runway 2-20 pavement.
  - Construction of Taxiway "A" relocation offset to 300' and necessary embankments.
  - Construction of a portion of Taxiway "A" extension to south to extents of Taxiway "E" replacement pavement.
  - Construction of new Runway 2 entrance taxiway.
- 5 - Phase I Apron Expansion - Design & Construction
- 6 - Fuel Tank Replacement - Design & Installation

**Long-Term (2027 - 2036)**

- 7 - FBO Parking Lot - Design & Construction
- 8 - Phase II Apron Expansion - Design & Construction
- 9 - Aircraft Cargo Building/Facility - Design & Construction
- 10 - Taxiway "A" Reconstruction - Design & Construction

**C-II Upgrade Projects\*\***

- Construction of Runway 34 Runway Safety Area
  - Reconstruction of Runway 34 end to include extension of 70' and lowering endpoint/longitudinal grade to meet standards.
  - Construction of new entry taxiway for Runway 34 and removal of old Taxiway "E" entry pavements.
  - Construction of Runway 16 Runway Safety Area
  - Reconstruction of Runway 16 end to include 178' relocation south and lowering endpoint/longitudinal grade to meet standards. Includes MALSR, ILS, etc.
  - Construction of new entry taxiway for Runway 16 and removal of old entry pavements.
  - Construction of ultimate full-parallel Taxiway "A"
- \*\*When justified and when federal and local funding is available\*\***