

A Key Facility Requirement

Upgrade Runway 16-34 to Accommodate Business Jet Activity and Emergency Preparedness

In the Forecast prepared for this master plan, the one segment of General Aviation that is projected to grow during the planning period is aircraft with turbine engines. These aircraft are most often flown for business purposes. Newport Municipal Airport is currently able to accommodate a portion of this growth market, but upgrades to Runway 16-34 will be necessary for some larger and/or faster aircraft that are expected to be making regular use of the airport by the second half of the 20-year planning period.

In addition, it is an objective for this study that Newport Municipal Airport be recognized for its ability to survive a major earthquake/tsunami event and play a critical role in recovery operations along the affected coastal regions. Both of these future conditions dictate that we plan for greater capability for jet aircraft and seismic resiliency.

The specific requirements to meet the higher design standards are discussed and depicted below and in the accompanying display boards. In broad terms, while the runway has sufficient length, the graded and protected areas around the runway need to be larger and the runway needs to be brought within tolerances for longitudinal grades along its length. Considering the steep slopes on all sides of the airfield, the implementation method chosen could involve significant costs. The Alternatives analysis conducted in Chapter 5 of this study will examine the various methods to achieve these requirements.

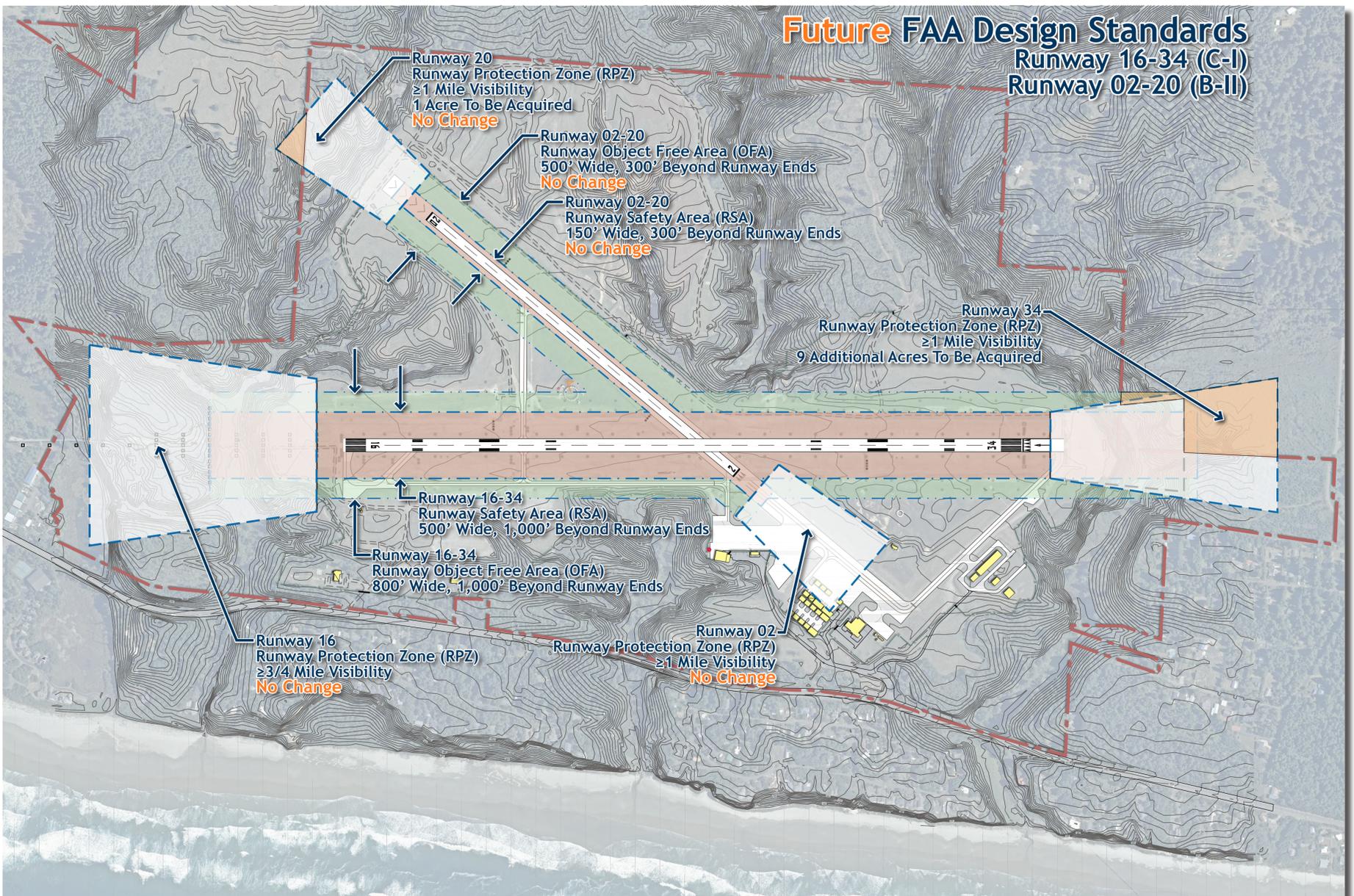
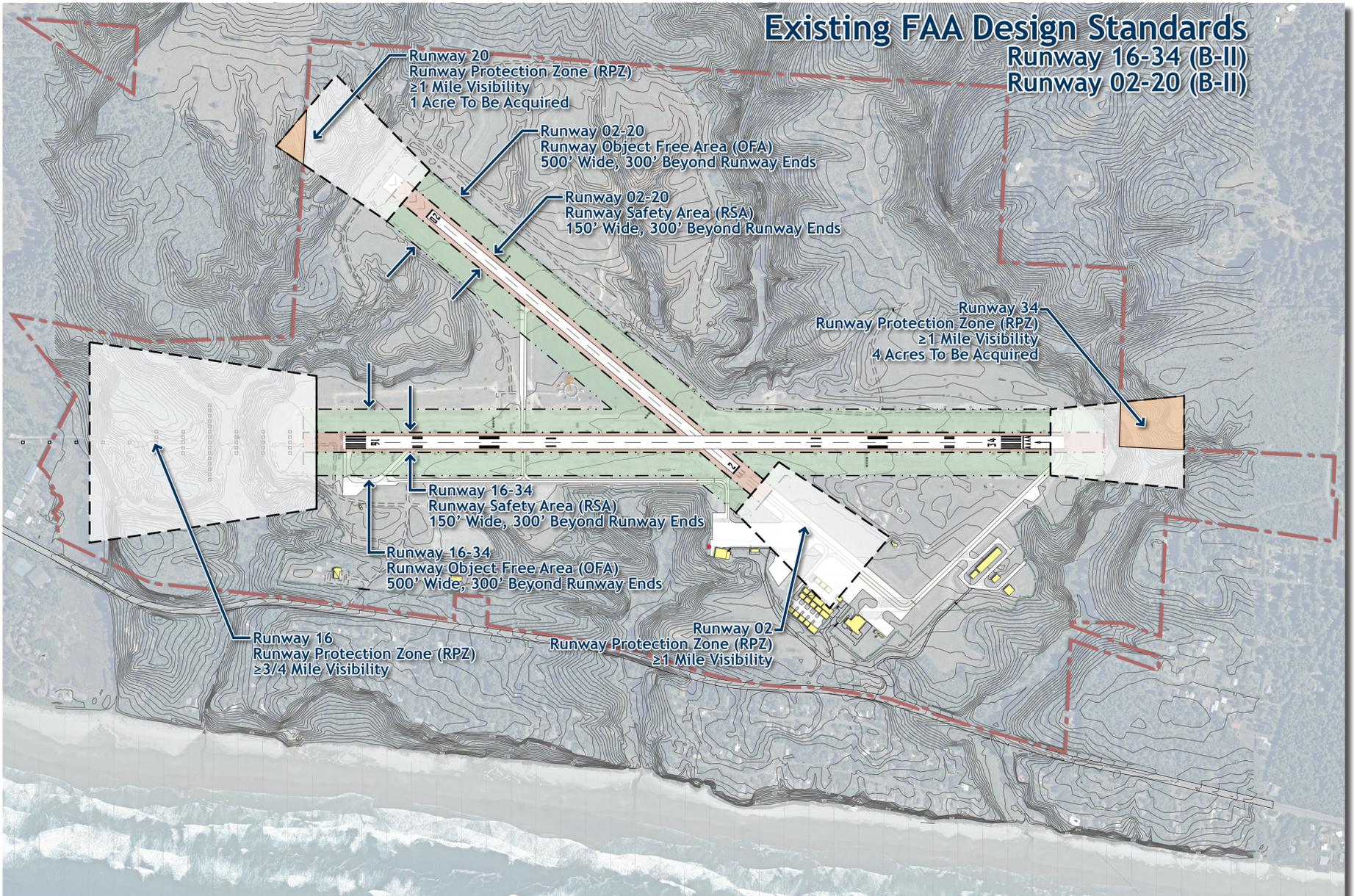
Below is a summary of the most important required facilities along with the needed increases to facilities that currently are in place at the airport.

	Requirement for C-I Runway 16-34	Existing	Additional Required
Runway Width	100 feet	100 feet	None
Runway Length	At least 5,400 feet	5,400 feet	None
Runway Longitudinal Grade	No greater than 0.8% slope within first/last quarter of runway	Slope of the south quarter is 1.2%	Reconstruct approximately 1,500 feet of Runway 16 to lower the south end by about 6 feet
Runway Safety Area Width	500 feet	Varies, but >400 feet	>100 feet along existing RSA length
Runway Safety Area Length beyond each end	1,000 feet beyond runway ends	300 feet beyond runway ends	700 feet beyond each runway end, which could entail extensive fills
Runway Object Free Area Width	800 feet	At least 500 feet	Up to 300 feet
Runway Object Free Area Length beyond each end	1,000 feet beyond runway ends	300 feet beyond runway ends	700 feet beyond each runway end, easy to incorporate into RSA design
Runway Protection Zones (RPZ) per runway end	Depends on the planned instrument approaches, but with no other changes, the Runway 16 RPZ will increase in size to 29.465 acres	The Runway 16 RPZ is 13.770 acres	If no other changes, the Runway 16 RPZ will increase in size by 15.695 acres
Acquire Land beneath RPZs	RPZs need to be owned by the airport sponsor or acquire an easement that allows for control of land uses and hazards	Of the required 13.770 acres the airport owns 9.7 acres.	Acquisition of a total of 5.995 acres

There are a number of variables that can be altered to prepare individual concepts. In order to develop the best concepts for consideration, the next display boards pose a series of statements aimed at determining which will guide the process and provide a framework for scoring/evaluating each concept.

Your collective responses to these statements will assist in the weighting and or inclusion of various elements into each concept developed for study.

Facility Upgrade Requirements

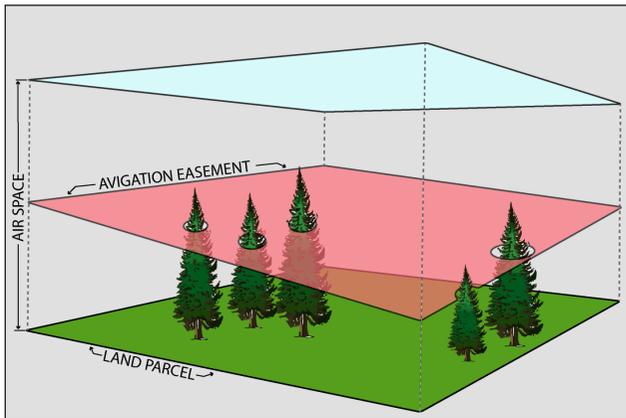


Operational Criteria

As a means to judge an alternative that meets a set of facility requirements, operational performance criteria will consider the ability of the airport to safely and efficiently handle aircraft and people. Specifically, this means that the better alternative will be able to meet the existing and future needs of users while also meeting other objectives the city has for the airport. Each alternative will approach solutions differently and may have different tradeoffs. In some cases, reducing runway capability may be considered as a means to saving money or reducing environmental mitigation. Operation performance criteria will weigh the importance of airport capacity, capability and efficiency against other criteria as planners develop and analyze alternative concepts.

Some examples of operation performance analysis criteria include:

- Does the concept meet all FAA standards and recommendation for the critical aircraft throughout the planning period?
- Does the concept include facilities to enhance the seismic resiliency and capability to support recovery efforts following a natural disaster?
- Does the concept preserve crosswind runway capability?



Source: WHPacific

Safety/Efficiency - How well the design of the airport affectively addresses aircraft throughput, minimizes the possibility of runway crossings when taxiing, and assures a safe operating environment.



Source: City of Newport Airport Facebook Page

Capability - How well the airport accommodates the design aircraft, provides the required number of aircraft parking positions, or provides required space for the runway length. Includes preparedness for large earthquakes.



Source: City of Newport Airport Facebook Page

Capacity - How well the airport accommodates future activity levels applied to the airside, terminal, and ground access elements.

Operational Considerations	Strongly Agree or Very Important	Somewhat Agree or Somewhat Important	Do Not Agree or Not Very Important	No Opinion or Need More Information
It is important for the Master Plan to recommend additional facility investments that best prepare the airport for operational capability in the event of a natural disaster.				
The master plan should position ONP to capture growth in business jet activity expected during the planning period.				
Emphasis should be placed on maintaining all existing airfield capabilities in terms of runway length, strength, crosswind coverage, and instrument approaches.				
Preservation/potential expansion of the apron and terminal areas for commercial air service is vital to the airport's increased value to the region's economic growth and accessibility.				
Concepts that include closing the crosswind runway are ill-concieved and would diminish pilot safety and capability of the airport.				
It is okay to trade a shorter runway in an effort to meet more stringent FAA standards for business jets.				
Maintaining Airport Rescue and Fire Fighting (ARFF) capability is vital to airport and community safety.				
Operational capability is the most important factor when considering development alternatives.				
Plans should include getting the best possible instrument approaches on all runway ends, which might mean buying land and removing trees.				

Planning Principles/Land Use

Sometimes referred to as “best practices”, consideration of planning principles assembles a number of common sense criteria that good plans will employ. In general terms, this category verifies that the alternatives meet FAA safety criteria, meet the forecast, and satisfy the facility requirements. In addition to these basic performance criteria, this is the best place to include conformance to other plans, initiatives, and/or objectives that will establish political feasibility. Concepts that feature elements contrary to local plans will face political uncertainty.

The exercise provides a number of statements regarding planning principles and land use. Planners will be able to gauge the importance of planning principles in the development and analysis of alternative concepts. Many of these statements are geared toward approaches to land ownership and use. Better alternatives will do a better job in conforming to stated objectives for land use and economic benefit.

1. Conforms to best practices for safety and security.
2. Conforms to the intent of applicable FAA design standards and other appropriate planning guidelines.
3. Provides for the highest and best on- and off-airport land use.
4. Allows for forecast growth throughout the planning period.
5. Provides for growth beyond the planning horizon, as applicable.
6. Provides balance (typically capacity) between elements.
7. Provides the flexibility to adjust to unforeseen changes.
8. Conforms to the airport sponsor’s strategic vision.
9. Conforms to appropriate local, regional, and state transportation plans and other applicable plans.
10. Technically feasible (limited site constraints).
11. Socially and politically feasible.
12. Satisfies user needs.



Planning Principles/Land Use	Strongly Agree or Very Important	Somewhat Agree or Somewhat Important	Do Not Agree or Not Very Important	No Opinion or Need More Information
It is important for the Master Plan to recommend projects that are primarily aimed at improving the seismic resiliency of the airport.				
The acquisition of additional land to upgrade the airfield for jets is an appropriate use of airport funds.				
A development plan for the Airport that causes any impacts to adjacent owners/uses is flawed.				
The protection for potential developments similar to "Wolf Tree Resort" is just as important as protecting future airport growth to meet higher design standards.				
Private property rights are equally important to protecting land for future growth of the airport.				
Selling surplus airport property that FAA concurs will not be needed for aeronautical purposes in order to generate revenue and stimulate economic activity is probably a good idea.				
City funds should be used to make infrastructure investments and construct buildings for lease on airport property.				
The City should privatize the fixed base operation (FBO) and preserve land for a potential second FBO.				

Environmental Factors

In the evaluation of alternatives, environmental considerations will be used to determine the relative impacts to environmental resources. These resources are not just limited to natural resources but also include impacts to people, businesses, and the like that are caused by projects implemented at the airport using federal funds. Master planning methods should weigh, in general terms, the environmental consequences of all alternatives so that avoidance can be considered among all other criteria when choosing a preferred development plan.

This exercise will test the importance of environmental considerations as compared to other selection criteria. That said, the National Environmental Protection Act (NEPA) prescribes a strict process to follow prior to any plan's implementation. Projects or portions of projects that cannot be mitigated below "thresholds of significance" cannot be funded by FAA. Consequently, mitigation strategies are always included in projects. Better solutions will normally have less environmental impact and may have lower mitigation costs as a result.



Source: City of Newport Airport Facebook Page



Source: City of Newport Airport Facebook Page



Source: WHPacific

Environmental considerations for airports typically fall into two general categories: human environment and natural environment. Items likely to be relevant to the Newport Municipal Airport include:

Natural Factors

- Plants and Animals, Including Endangered and Threatened Species and Essential Fish Habitat - habitat protection
- Wetlands - preservation or mitigation of wetlands
- Water Quality - ensuring projects consider impacts to water quality (stormwater drainage, etc)
- Hazardous Materials - containment of sites that may present hazardous materials
- Construction Impacts - utilization of best management practices to reduce temporary, construction-related impacts

Human Factors

- Noise - unlikely to exceed regulated threshold, but may have local impacts
- Land Use and Social Impacts - compatibility with community
- Historic Properties and Cultural Resources (Section 106 Resources) - consideration to historic sites
- Light and Glare - ensuring no visual impairments to pilots

Environmental Considerations	Strongly Agree or Very Important	Somewhat Agree or Somewhat Important	Do Not Agree or Not Very Important	No Opinion or Need More Information
It is important to balance airfield expansion with the need to preserve the environment.				
Potential environmental impacts can be tolerated, if they are minimized and/or mitigated.				
Even if all potential environmental impacts were fully mitigated to the satisfaction of all federal agencies, I don't believe that airport projects should disturb environmental resources in the first place.				
Environmental concerns can be balanced with economic policy as we plan to meet forecasted growth in jet activity and associated FAA design standards.				
Environmental impact is the most important factor when considering development alternatives.				

Fiscal Factors

The most popular method for screening alternative development concepts is by comparing costs. Sometimes alternatives will perform similarly among a number of criteria and the decision is to choose the solution with the lowest cost. However, there are typically a wide array of features and methods that are considered very important and worth investing additional resources in order to capture those benefits. This exercise will test the importance of a number of fiscal factors as an aid to the development and analysis of alternatives.

When considering decisions on land use or airport operations, the long term sustainability of the airport must consider the ability to generate revenues that offset costs. Certain decisions will be made that affect, positively or negatively, the ability of the airport to generate and diversify revenues. Better alternatives will identify the ability to balance all of these factors to get the most benefits at the best value.

Fiscal Factors	Strongly Agree or Very Important	Somewhat Agree or Somewhat Important	Do Not Agree or Not Very Important	No Opinion or Need More Information
It is important to fully meet all FAA design standards and increase resiliency, even if the cost is higher than alternatives that reduce capability.				
It is important to use our limited resources to maintain FAR Part 139 certification even in the absence of commercial air service requiring it.				
It doesn't make sense to keep the FAR Part 139 Certificate because the most likely airline type that could be profitable in Newport doesn't require it.				
Maximizing economic growth opportunities on airport-owned land should be a priority to the City.				
The City should consider selling land it doesn't need for aeronautical purposes in order to fund development opportunities that diversify revenues.				
The City must manage and when necessary increase airport/aviation fees to support new development.				
The Airport is a regional asset and should be managed and financed regionally.				
I support investment to improve:				
Commercial Air Service				
Air Cargo				
Business Aviation				
Recreational Aviation				
Increased Resiliency				
Lowest cost is the most important factor when considering development alternatives.				