

# Strategic Plan for Aviation



July 31, 2002

Puget Sound Regional Council  
PSRC

This report was prepared to provide direction to the Regional Council's ongoing Regional Airport System Planning process. The 2001 Regional Airport System Plan is a Modal Component of **DESTINATION 2030**

**Puget Sound Regional Council**

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This report was prepared by  
Puget Sound Regional Council Staff  
with input from the  
Strategic Plan Interagency Committee

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is a Modal Component of  
*Destination 2030*  
the Metropolitan Transportation Plan for the  
Central Puget Sound Region

### ***Disclaimer***

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This document can also be viewed and/or downloaded from the PSRC web site at the following address:

<http://www.psrc.org/projects/air/strategicplan.htm>

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## ***Chapter 1 - Introduction / Background***

In 1988 the Regional Council adopted a *Regional Airport System Plan (RASP)*. The RASP forecast strong demand for commercial air service and called for the region to begin planning to meet the capacity needs of the Central Puget Sound region. Between 1988 and 1996 the Regional Council was engaged in a series of studies to evaluate options and reach consensus on a plan to meet the region's commercial air transportation needs. In 1996 the council adopted Resolution A-96-02, which amended the Metropolitan Transportation Plan (MTP) to include plans for the third runway at Sea-Tac Airport as the preferred plan for meeting the region's long range commercial air service needs.

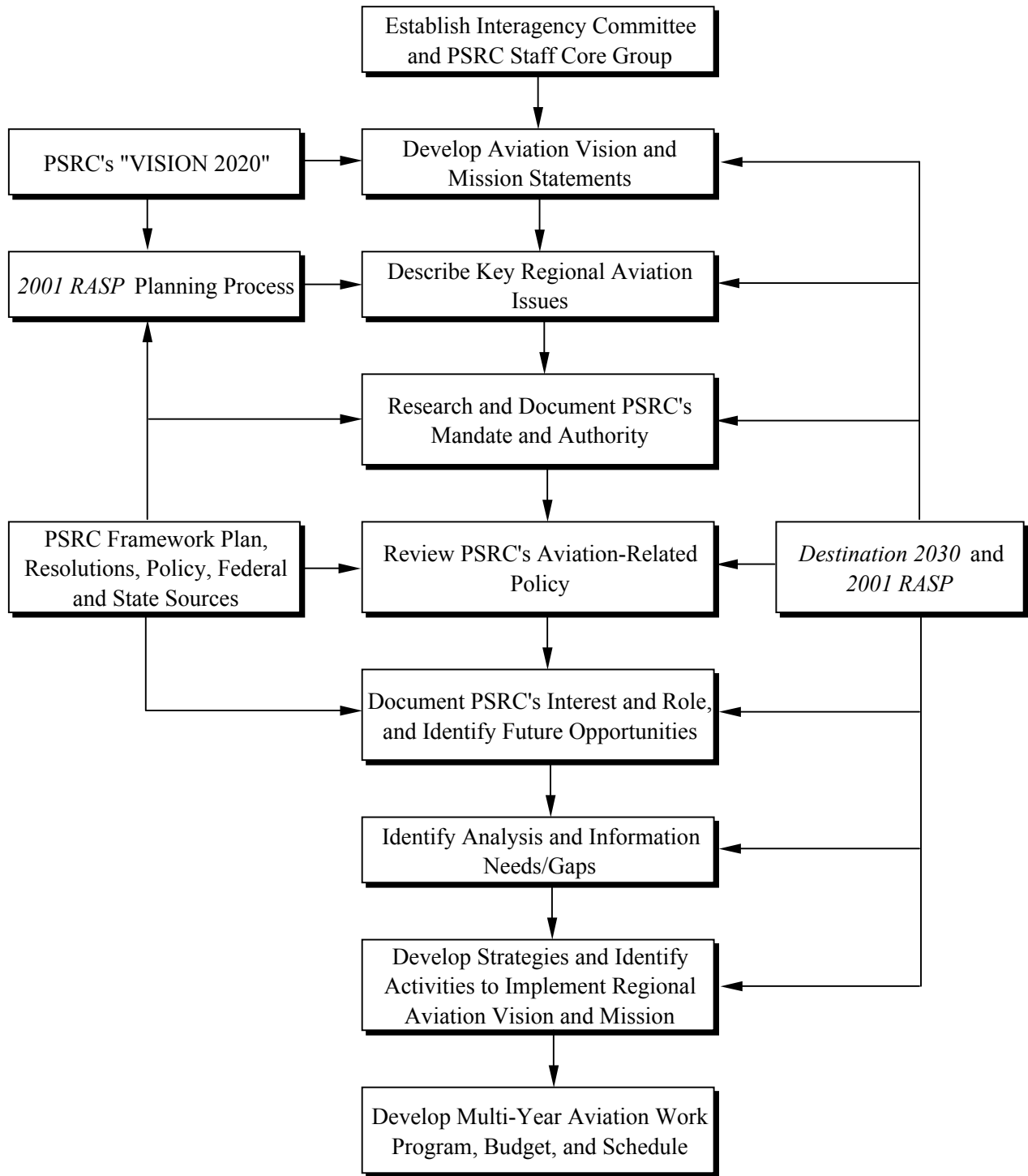
In 1998, the Regional Council began a two year effort to update the *1988 Regional Airport System Plan*, which focused on addressing the 20-year improvement needs of the region's 25 general aviation airports. In May 2001 the Regional Council adopted its updated Metropolitan Transportation Plan (MTP), called *Destination 2030*, which includes the Regional Airport System Plan as a modal component. The adoption of the new MTP confirmed the region's current policy and long range plans for the region's commercial and general aviation airports, and provides the foundation for additional aviation-related planning projects.

These aviation-related planning efforts have produced valuable products and guided the region to critical decisions. Looking ahead, the region will need to address a multitude of aviation issues, including system capacity, funding, maintenance and preservation, encroachment, system enhancements, environmental impacts and mitigation, and many others. Before embarking on specific planning programs to tackle these complex issues, the Regional Council has decided to pause, and undertake a strategic plan for its Aviation Program. The purpose of the strategic planning process is fourfold: (1) to set forth our vision and mission for the aviation program; (2) to identify and describe the critical issues facing the region; (3) in response to those issues, to document our roles, mandates, authority, and policy; and (4) to develop a multi-year action plan for the aviation program. The process is designed to establish a context and framework for future actions, programs, and projects to be undertaken by the Regional Council.

### **Strategic Planning Process**

This strategic plan for aviation was prepared with the help of an Interagency Committee, which included representatives from the Regional Council, Federal Aviation Administration (FAA), U.S. Air Force, Washington State Department of Transportation (WSDOT), Washington State Office of Community Development (OCD), Port of Seattle, University of Washington, airport user groups, several airport sponsors, and city and county staff. The Interagency Committee was instrumental in providing on-going discussion, information, advice, and product review during the preparation of the strategic plan. Key information was obtained from a variety of sources as identified in Exhibit 1 (Strategic Planning Process) and Appendix A (Mandates and Authority for PSRC Aviation Program). Primary information sources included *Destination 2030* (the Metropolitan Transportation Plan for the Central Puget Sound region), the *2001 Regional Airport System Plan (RASP)*, and *VISION 2020* (the region's long range growth management, economic, and transportation strategy). As displayed in Exhibit 1, the process included visioning, identification of key issues, documenting mandates, authority, and policy, discussion of PSRC's role in addressing key aviation issues, identifying analysis and information gaps and needs, defining strategies to implement the region's aviation vision, and preparing a multi-year work program.

### Exhibit 1 Strategic Planning Process



## **Organization of this Report**

Chapter 2 presents the Regional Council's overall vision for the region ("VISION 2020"), our mission as defined in 1991, and the region's vision and mission for aviation as developed during the strategic planning process. Chapter 2 also includes a brief description of how the aviation vision fits into the region's larger vision.

Chapters 3 through 7 of this report present information organized around the key aviation issues facing the region. Chapter 3 contains a discussion of these issues and their importance to the future of the regional airport system. Chapter 4 is a summary of the authority and mandates supporting the Regional Council's aviation program. This chapter is supported by additional information in Appendix A. Chapter 5 summarizes PSRC's adopted aviation-related policy as contained in *Destination 2030* and the *2001 Regional Airport System Plan*. Chapter 6 contains a discussion of the Regional Council's interest and role in addressing aviation issues, and identifies future opportunities for further work on these issues. Chapter 7 outlines additional analysis and information that will be needed in the region's future aviation work program. Chapter 8 presents a set of strategies which might implement the region's aviation vision, and connect it with the future air transportation work program. Finally, chapter 9 contains the multi-year aviation work program, including a proposed budget and schedule.

The work scope, budget, and schedule are more detailed for early tasks (particularly tasks 1-4), and will provide the ground work for FAA planning grants to complete those work tasks. We estimate these first four tasks will be completed in late 2004. Work tasks 5 through 13 are described in general terms in this strategic plan. More detailed work scopes, schedules, and budgets for these future tasks will be prepared as needed.

## ***Chapter 2 - Vision and Mission Statements***

### ***VISION 2020 (adopted in 1990 and reaffirmed in 1995 in the “Metropolitan Transportation Plan”)***

VISION 2020 is the long range growth management, economic and transportation strategy for the central Puget Sound region. The vision is for diverse, economically and environmentally healthy communities framed by open space and connected by a high-quality, multi-modal transportation system that provides effective mobility for people and goods.

### ***Mission of the Regional Council (adopted in 1991 as part of the “PSRC Framework Plan”)***

The mission of the new regional planning agency is to preserve and enhance the quality of life in the central Puget Sound area. In so doing, it shall prepare, adopt, and maintain goals, policy, and standards for regional transportation and regional growth management in the central Puget Sound area, in accordance with federal and state law and based on local comprehensive plans of jurisdictions within the region. The agency shall ensure implementation in the region of the provisions of state and federal law which pertain to regional transportation planning and regional growth management.

### ***Vision for the Central Puget Sound Regional Airport System***

The Central Puget Sound regional airport system is safe and secure, efficient, sustainable, responsive to the natural and human environments, and meets the region’s aviation needs. The region’s airports in 2030 serve twice as many users as they did in the year 2000, congestion and delay have been minimized, and the environmental impacts of the airport system are being effectively managed. The airport system is well connected to the region’s other major transportation modes, and is complemented by efficient passenger and freight rail service linking markets in Oregon, Washington, British Columbia, and beyond. The airports are protected from incompatible land uses, and their value to the communities they serve is well known. The system reflects a positive partnership between public infrastructure, private service providers, the business community, and the traveling public, and is a national leader in providing emergency response.

### ***Mission for the Puget Sound Regional Council’s Aviation Program***

To provide a forum and leadership role to support regional airport system improvements which enhance safety, security, capacity, efficiency, access, and environmental sensitivity, while balancing the needs of the region’s communities and aviation interests.

## Linking the Aviation Vision with VISION 2020

Before developing the multi-year work program the strategic planning committee asked staff to prepare a brief summary that described the relationships between the region's growth management, transportation, and economic strategy (VISION 2020) and the regional aviation system vision. The relationship between VISION 2020 and the aviation system vision is displayed graphically in Exhibit 2 and summarized below.

### Diverse Communities

- **The region is diverse**, and the **regional airport system provides a wide range** of facilities and services to meet the diverse aviation needs of the region: passengers, air cargo, aerospace, business and corporate aviation, military, medivac, police and traffic, forest service, training, recreation, search and rescue, and emergency response.

### Healthy Economy

- **Airports make a significant contribution to our state and regional economies**, which are among the most trade dependent in the nation. The combined economic impact of Sea-Tac Airport and Boeing Field totaled over \$8 Billion in 1999. The remaining general aviation airports in the Central Puget Sound Region generate annual wage and output impacts of \$409 million, according to the WSDOT Aviation Division's November 2001 Economic Analysis Study.
- **In addition, the region has a higher use of air transportation** than the nation as a whole, with 63% more pilots, 60% more GA aircraft, and 50% more GA flights per capita. The PSRC region is home to over half the state's based aircraft.

### Healthy Environment

- **While they contribute to our region's economic health, airports have impacts** on the human and natural environment. To achieve a balance between the economic and environmental goals of the vision, the Regional Council is actively involved in supporting cooperative efforts to address airport system impacts.

### Framed by Open Space - Focus growth inside the Urban Growth Area (UGA) boundary

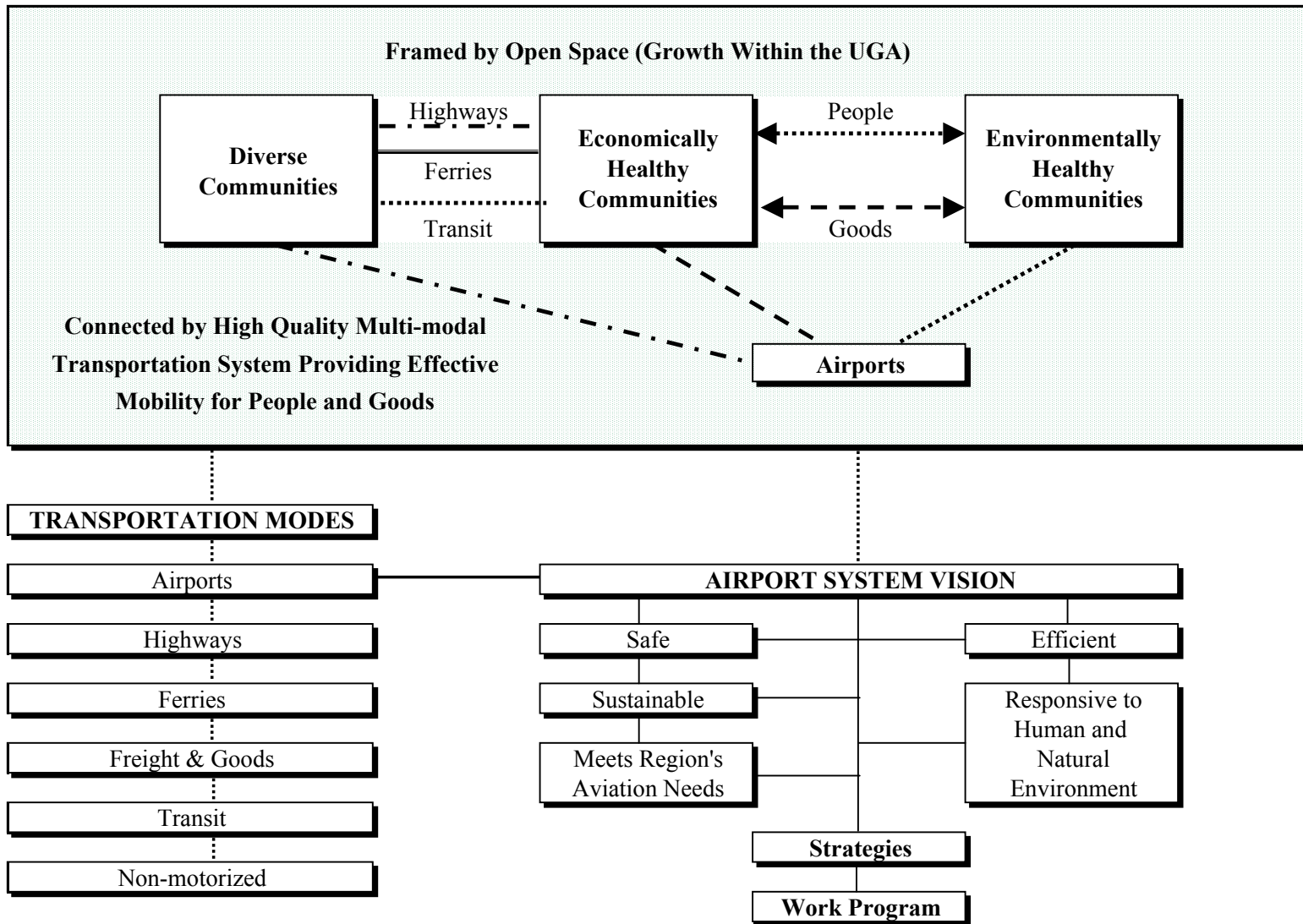
- Most of our **airports are contained within the urban growth area boundary**.
- Although this is consistent with goals of the Growth Management Act, it gives rise to one of our **greatest challenges: accommodating urban growth while preserving and enhancing the region's airports** (which are essential public facilities).

### Connected by a Multi-modal Transportation System

- **The regional transportation system includes several inter-connected modes:** airports, highways, ferries, freight and goods, transit, and non-motorized. Our goal is to keep people and goods flowing safely, securely, and efficiently within and between these modes.
- **Airports (like seaports) by their nature are inter-modal connectors** that help passengers and goods transfer between modes. But an airport is just one point along their journey.
- **To achieve the region's multi-modal vision**, we'll need to think, cooperate, plan, fund, build, and operate systems in a way that transcend modal boundaries to address our mobility needs.

**EXHIBIT 2 RELATIONSHIPS BETWEEN THE REGIONAL AVIATION VISION AND VISION 2020**

**VISION 2020: The region's long range growth management, economic, and transportation strategy**



## ***Chapter 3 - Issues Discussion***

The following is a discussion of the most critical aviation issues facing the Central Puget Sound Region. The intent is not to resolve all such issues in this Strategic Plan process but rather to more clearly define the nature of the issues, identify roles and responsibilities for addressing them (especially defining the Regional Councils' role), and recommending a priority array in which these or additional issues should be addressed in a multi-year work program.

### **1. Regional air cargo demand and capacity planning**

With a national growth rate of over 6% per year, air cargo is the fastest growing segment of the aviation industry. The Central Puget Sound Region, with its growing population and strong economy, has seen even stronger growth in air cargo. Between 1985 and 2000 total combined air cargo volume at Sea-Tac Airport and Boeing Field grew by 180% (an average annual growth rate of 7%). Regional unconstrained air cargo forecasts prepared by the Port of Seattle for Sea-Tac Airport and by King County for Boeing Field predict total combined air cargo volumes will grow from 645,022 tons<sup>1</sup> in 2000 to 1,048,795 tons in 2010, an average annual growth rate of 4.8%. Sea-Tac cargo will grow from 502,000 tons in 2000 to 805,000 tons in 2010, and 968,000 tons in 2020. Boeing Field cargo is forecast to increase from 143,000 tons to 244,000 tons in 2010, and 305,000 tons in 2015. These regional cargo forecasts are consistent with national and global forecasts. According to Boeing's 2000-2001 *World Air Cargo Forecast*, the global air cargo market is expected to grow by an average annual rate of 6.4% per year between 2000 and 2020, while the international air cargo market between North America and Asia will grow by almost 8% per year. For comparison, world passenger volumes are predicted by Boeing to grow 4.8% per year for the same period.

The Port of Seattle and King County have identified the amount of air cargo facility expansion that would be required to accommodate their respective short and medium range air cargo demand. Boeing Field's Master Plan forecasts a need to increase air cargo space from 22 acres in 1998 to 43 acres in 2015 (the master plan's planning horizon) to accommodate a forecast 113% increase in air cargo demand. According to the master plan, the airport has no additional unused space to serve air cargo growth, and the plan does not propose to displace existing general aviation facilities to accommodate air cargo growth. Additional demand will need to be accommodated by increased efficiencies on existing cargo processing facilities. After operational efficiencies have been optimized, Boeing Field will have no ability to meet additional air cargo demand. Future demand beyond the airport's capacity will either not be met or will have to be accommodated at other airports in the region.

Sea-Tac Airport is also planning for significant growth in air cargo activity. According to the Master Plan Update for Sea-Tac Airport (1997) the airport will require significantly more air cargo space to accommodate forecast growth. As of 1993 the airport had approximately 81 acres of air cargo space. Of this, some 60 acres were developed and 21 acres were vacant. The airport master plan identified a total need for 176 acres of air cargo space by the year 2020, and recommended a two phase approach to meeting those needs. Between 1993 and 2010 air cargo needs were proposed to be met using a decentralized approach by expanding existing cargo areas north of the main passenger terminal and redeveloping the existing sites used for United Airlines aircraft maintenance and Port of Seattle airport maintenance functions.

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<sup>1</sup> *All cargo figures are in US tons*

After 2010 projected air cargo demand would be met by developing the South Aviation Support Area (SASA), located south of the main passenger terminal across south 188<sup>th</sup> street. Subsequent planning efforts identified the possible need for additional air cargo warehousing at remote north locations.

After the airport master plan was completed, the Port began more detailed planning for the proposed new air traffic control tower and the new north passenger terminal. Because these two proposed facilities will displace existing air cargo facilities, the Port undertook a new study (the 1999 *Air Cargo Facilities Development Study*) to identify the potential impacts the new control tower and passenger terminal would have on existing and planned air cargo facilities. The 1999 *Air Cargo Facilities Development Study* focused on the short and medium term (1999-2010) time frame and reaffirmed the air cargo forecasts contained in the 1997 master plan. Within these parameters, the study reached several important conclusions:

- Sea-Tac airport has limited land and financial resources, and may not be capable of accommodating all long range demand for both air cargo and passenger facilities.
- Given this constraint, Sea-Tac Airport may need to make choices as to which type of demand to accommodate.
- Two major projects which are planned to meet air passenger demand will have significant impacts on existing air cargo facilities. These projects are the new air traffic control tower and the north end aviation terminal (“NEAT”).
- These proposed projects will displace over 800,000 square feet of existing air cargo facilities including apron for parking four large air cargo jet aircraft.
- Apart from the displacement of existing cargo facilities, forecast air cargo growth will require significant new facilities, including air cargo and air mail aircraft parking positions and associated apron, air freight processing and warehousing, air freight ground service equipment storage areas, and air mail processing facilities.
- The combined effects of strong air cargo demand and the displacement of existing air cargo facilities will intensify the issue of how the airport will meet long term demand.
- The 1999 air cargo study identifies facilities to meet short and medium term demand (1999-2009). Since completing the study in 1999 the Port has been examining options for meeting long range air cargo demand (2010-2020).
- While the 1997 airport master plan identifies the South Aviation Support Area (SASA) project to meet the airport’s longer range needs, the Port has not yet committed project funding, design, or construction. It is therefore uncertain how air cargo demand will be accommodated beyond 2009.
- There is a need for further planning to review long range forecasts, identify facility needs, evaluate options for meeting those needs, and prepare a long range air cargo development plan for Sea-Tac.

In summary, both Sea-Tac Airport (2,500 acres) and Boeing Field (594 acres) are constrained airports. Both are nearly fully developed, and neither has significant undeveloped land area available to accommodate all potential long range demand by all users. Neither airport has the ability to easily accommodate significant spikes in air cargo demand caused by a fluctuating market or major shifts in regional air cargo market share between the two airports. Planning for the facility needs of each airport has been done within the context of each airport’s master plan process. There is a need for an integrated review of long range regional air cargo demand, examination of current air cargo facility improvement plans, an analysis of potential regional shortfalls, and development of options for addressing any shortfalls. Another critical issue related to regional air cargo is the need for adequate ground access to the region’s air cargo airports [see discussion below under “airport ground access”].

## 2. Airport ground access

Neither air passengers nor air cargo begin or end their trip at the airport. Both rely on the regional intermodal ground transportation system to complete their journeys. Recognizing these realities, planning for airport systems is increasingly using an approach which integrates airports with other transportation modes. State and Federal regulations now require an intermodal approach to planning for regional transportation systems, an approach that must include airports. Notwithstanding these rules, the Puget Sound region has been aware of a growing need to identify the intermodal ground access needs of the region's airports, integrate planning for those needs with ongoing planning for other modal components, such as highways, transit, and freight mobility, and incorporate regionally significant airport access projects into the regional TIP. Historically, the challenges to successful airport access planning have included:

- Lack of communication and coordinated planning, project development, and funding between airport sponsors and city, county, state and federal agencies and transit providers.
- The apparent “gulf” between FAA-sponsored planning for on-airport improvements and planning for off-airport facilities, such as ground access projects. Historically, there has been a planning and implementation gap at airport boundaries.
- Lack of comprehensive analysis and planning for the integrated access needs of airports, airport-related economic development (including aerospace employers such as Boeing), and the surrounding communities. Perhaps the best current example of coordinated transportation planning is the work being done by the Port of Seattle and the City of SeaTac as mandated in their 1997 Interlocal Agreement. There is a need for similar, broader cooperative planning for the region's airport access needs.
- Airport sponsors have historically built huge amounts of on-airport parking. While this parking is convenient for passengers and airport employees, it generates significant volumes of traffic, and encourages access by single occupant vehicles. On the up side, airport parking generates significant revenues for airport sponsors, money that can help pay for other needed airport improvements. In 2000 parking revenues at Sea-Tac Airport exceeded \$40 million.
- Historically, non-SOV airport access mode splits at U.S. airports have been extremely low, and there is low incentive for investment in alternative access modes. Many people may view construction of alternative airport access facilities as huge investments with low potential ridership and low return on public investment.
- A lack of adequate data and cooperative planning to address the movement of air cargo to and from the region's air cargo airports. On the one hand, there is reasonably good data to help airports plan for airside capacity to handle passenger and cargo flights, as well as to help them plan for on-airport cargo processing needs. However, there are limited useable data and planning analysis techniques to help define air cargo airport access needs. This, combined with the uncertainty related to how the region's medium to long range air cargo market will be accommodated (see air cargo issue above) highlights the multiple dimensions of the regional air cargo issue.

Based on the above-listed challenges, the following questions have emerged:

- How can the region identify and address the region's airport access needs, including passengers, employees, air cargo, general aviation users, other airport tenants, and related economic development adjoining airports (such as aerospace employers)?
- What critical information is required, what is available now, and what additional data is needed to help define the problem and provide the basis for future planning?

- How should airport access needs be integrated into the region’s transportation plan, as well as the plans of individual cities, counties, the state DOT, transit agencies, and others?
- Given that air cargo is a component of freight mobility, could the region’s airport ground access needs, especially related to moving air cargo, be addressed in cooperation with other existing efforts such as the Regional Freight Mobility Roundtable?

### **3. The regional benefits of aviation**

Numerous national, statewide, regional, and airport-specific studies have documented the benefits of aviation. The vast majority of these studies focus on economic impacts, producing impressive numbers on aviation-related employment, salaries, tax revenues, travel-related sales, and other indirect and induced economic impacts. The WSDOT recently completed a statewide study that quantifies the economic impacts of airports, including the benefits of airports to small rural communities. This information documents the economic benefits of airports across the state, from isolated rural communities to the largest airports in the Puget Sound region.

A second dimension to the issue of airport benefits is not captured in the traditional economic impact study. That dimension is information that tells the story about the real life ways that aviation affects and benefits the lives of Washington residents. There is a need to inform decision makers, local government planners, and the general public at a more personal level about the benefits of aviation. The combination of hard analytical numbers and the human side of the story have the potential to become compelling tools to inform decision-makers who engage in airport planning, who provide airport funding, and who are responsible for land use planning and development decisions adjoining airports. The importance of sharing the story of airport benefits is tied indirectly to several other issues discussed here, including airport compatible land use, mitigating impacts, airport funding, maintaining and preserving the airport system, and protecting endangered airports from closure.

Airport sponsors and local governments are asked to undertake a broad range of actions which support the airport system. These include planning and funding of airport improvements, planning and zoning of properties adjoining airports, working with state and federal officials to address existing and potential obstructions, and others. Small communities who sponsor airports must decide how to use scarce funds, and often must choose between airport maintenance projects and other uses of public funds. Local land use agencies may be asked to plan for compatible land uses around an airport that they don’t control. And a typical city council may not have the information it needs to accurately balance the relative costs and benefits between a new apartment complex and the long term interests of the local airport. Such decisions, which are made every day in communities around the region and the state, could be improved if they were informed by clear and accurate information about airport benefits. Another issue is the potential loss of tax revenues which occurs when airport sponsors acquire and develop private property for public use. In many cases, private property which previously generated local tax revenues is taken off the tax rolls, and the leasehold or other tax revenues from the new development do not cover that loss. This serves as a disincentive for local governments in supporting airport-sponsored development.

While the need for developing better and more effective information about airport benefits is clear, several questions remain: who should be responsible for preparing airport impact studies, what should be the scope of such studies, how often are they needed, and how should the results be used? Associated questions related to the cost effectiveness of such studies include: can an economic impact study for one airport be used by another, should the region or the state regularly prepare such studies, how should they be funded, and what is the most effective method for sharing the results?

#### **4. Closure of GA airports / sustainable airport system**

Closure of general aviation airports is a nationwide issue. When an airport is lost, regardless of how small, the rest of the system must take up the slack. Over the past 20 years the nation has lost an average of 40 public use GA airports each year, and the Central Puget Sound Region has lost its share. Over the past 30 years the following airports have closed or been removed from public use: Bellevue, Campbell, Canaday Field, Cedar Grove, Duvall, Enumclaw, Fromback Field, Frontier, Green Valley, Hewitt, Issaquah Skyport, Sand Point Naval Air Station, South Tacoma, Tacoma, and Wax Orchards. In the past 2 years alone we saw Lester State Airport and Martha Lake Airport close. While the runway at Lester State Airport was washed out by flooding from the Green River, Martha Lake Airport succumbed to a combination of economic pressure, land use encroachment, and other factors.

Between the late 1970s and the early 1990s, an era when the general aviation industry was in a steep decline, the issue of airport preservation was not seen as critical to the airport system. The lack of growth in the GA industry during this time frame may have lowered the industry's commitment to preserve the system, and may have actually contributed to airport closures. But with strong GA growth over the past 7-8 years, and forecasts of continued growth in the GA industry, preservation of the existing GA airport system is more important than ever. Over the next 20 years the region's public use airports will need to accommodate an additional 200,000 annual GA operations and over 1,200 new aircraft.

General aviation airports continue to be threatened by a variety of forces, including lack of adequate funding for capital improvements, increasing operating and maintenance costs, safety/security and standards concerns, maintenance issues such as deteriorating pavement conditions, proliferation of obstructions, liability concerns coupled with high insurance costs, and land use encroachment. The pressure of increasing land values in the urban region is threatening privately owned airports, whose owners may seek to redevelop airport property into more profitable uses. If we are to preserve the existing airport system, there is a need to monitor system airports that are threatened, evaluate the factors that are contributing to that threat, and identify actions which might be taken to preserve these airports.

#### **5. Airport compatible land use (addressing height hazard, safety, and noise)**

There are three dimensions to airport compatible land use: height hazard, safety, and noise. Height hazard relates to protecting critical air space around airports to ensure the safety of aircraft in flight [a related issue is radar reflectivity – see below]. Safety relates to protecting people and structures on the ground in areas that are historically more susceptible to aircraft accidents. Aircraft noise affects the quality of life in communities near airports, especially for noise sensitive uses such as housing and schools. Planning to achieve more compatible land uses near airports faces significant challenges:

- Many areas surrounding the region's airports are already developed with non-compatible uses, and existing plans and zoning ordinances could allow for additional development.
- Increasing property values combined with population and economic growth are adding pressure to develop properties near airports throughout the region, making it more difficult to preserve these properties in compatible uses (open space and low density non-noise sensitive uses).
- New incompatible development continues to occur near airports. This includes new noise sensitive uses built within noise contours, new structures located in or near known airport safety zones, and new structures which are potentially height hazards to air navigation. In the past 8 years, land use authorities surrounding Sea-Tac Airport have granted permits for over 200 new residential units located inside the existing 65 Ldn noise contour. In the past 10 years, new commercial and industrial development has surrounded Auburn Airport, reducing the airport's ability to expand, and limiting the

airport to visual only approaches. New residential development is edging closer to several of the region's busiest airports, including Crest Airpark, Tacoma Narrows, Paine Field, Thun Field, and Arlington.

- Most airport sponsors identify airport height hazard areas, safety zones, and noise impact areas on their airport layout plans. Unfortunately, many of these areas fall outside airport property, and airport operators generally do not have land use authority over these properties. There is clearly a need for increased communication and coordinated planning between airport sponsors and land use agencies who plan for properties surrounding the airport, plus a need to share critical technical airport planning information with local land use planners related to airport height hazards, safety zones, and noise impact areas.
- The most effective and permanent approach to protecting height hazard, safety, and noise areas adjacent to airports is for airport sponsors to acquire affected properties. Unfortunately, there is insufficient funding for airport sponsors to purchase these properties. Therefore, cooperative planning, zoning, development regulations, and improved communication may be the best way to balance the interests of the region's communities and airport sponsors.
- Land use authorities take on some level of risk and liability when they approve development of new uses in known airport height hazard and safety zones. There is a need to document these risks and liabilities and incorporate this information in local land use decisions.
- An emerging issue is radar reflectivity, especially at airports with constrained sites in urban areas. Construction of buildings and other structures both on and near airports can reflect airport radar signals. This can reduce radar coverage, adversely affect aircraft navigation, and compromise aviation safety. FAA's 7460-1 Obstruction Evaluation/Airport Airspace Analysis process ("Notice of Proposed Construction or Alteration") could be enhanced to improve the coordination between airport sponsors, FAA, and local government to address this issue.

## **6. Planning for regional airport system capacity**

### Commercial Aviation Capacity

With the addition of the third runway, Sea-Tac Airport will have a maximum theoretical annual capacity of between 600,000 and 630,000 operations. With this level of capacity, Sea-Tac is expected to meet the region's commercial air passenger capacity needs until the year 2030, and perhaps beyond, if planned improvements to air traffic control technology are implemented. Beyond the ultimate capacity of the third runway, the Regional Council will cooperate with state and local agencies to implement a comprehensive process for evaluating all options to meet the state of Washington's long term air travel and inter-regional ground transportation needs, including high speed rail.

The immediate issue of whether the region's capacity needs will be met hinges on the Port of Seattle receiving all necessary permits for construction of the third runway. If these permits are obtained and construction is completed, the Regional Council will turn its attention to planning for the region's longer range needs in cooperation with the State. If the permits are not received and construction does not go ahead, the region will face the much more urgent issue of addressing our short and medium term needs. When U.S. Army Corps of Engineers and State Department of Ecology permit processes are completed the future direction of planning related to the region's commercial air transportation needs will become more clear.

## General Aviation Capacity

Overall, the region's general aviation airport system has sufficient airfield capacity to meet forecast general aviation demand for the next 20 years. However, there is a critical need for additional aircraft storage, particularly hangars. The increasing cost and sophistication of new aircraft, coupled with strong growth in the corporate and business sectors of general aviation, is placing a premium on quality enclosed aircraft storage facilities. While there is existing supply of open aircraft tie-downs, the region's hangars are virtually full, and another 800 aircraft are on existing hangar waiting lists throughout the region.

The region's 20-year demand for new hangars (including some share of existing hangar waiting lists plus new demand) shows a need for some 1,200 new hangars. Most of this demand will center on the region's top ten busiest airports. Several of these airports, such as Boeing Field, Renton, Crest Airpark, and Auburn, have limited space available to accommodate new aircraft. Others, such as Paine Field, Harvey Field, Thun Field, Arlington, and Bremerton, have property available to accommodate additional aircraft, and are planning to accommodate some portion of the region's forecast demand. The 2001 RASP recommends development of new aircraft hangars to meet regional demand at those airports with both the ability and the willingness to accommodate growth. Questions remain as to whether users are willing to locate there, and how these airports can obtain the necessary funding to construct new hangars, since they are not eligible for FAA funding. An additional unknown is the true extent of current hangar waiting lists, and how the region's airports should respond to this latent demand.

### **7. Mitigation of airport impacts (noise, traffic, air quality, schools, etc.)**

Airports provide transportation and economic benefits that spread across the entire central Puget Sound region. At least a few times each year a large proportion of the region's residents and businesses use the region's airports to gain access to the national and worldwide air transportation system. Unfortunately, while the benefits of aviation are broad and shallow, the impacts are narrow and deep. The communities adjacent to major commercial service airports are significantly affected by airport activity, most notably in the form of noise, traffic congestion, and air quality impacts. While the FAA's FAR Part 150 Noise Compatibility Planning program addresses airport noise, other impacts have not been adequately identified and addressed. There is a need for regional mitigation efforts which would recognize localized impacts, determine the cost of mitigation, identify funding sources, and develop implementation programs. These efforts should tap into existing federal, state, regional, and local funding sources or create new ones if needed.

Recognizing these issues, the Regional Council in 1994 recommended new legislation allowing for substantial and equitable incentives and compensation for communities impacted by the proximity of essential public facilities, including airports. Such legislation has not yet been passed by the legislature. starting in 1995 the Regional Council has been supporting transportation improvement projects which address traffic impacts related to Sea-Tac Airport. The Regional Council's policy framework for the TEA-21 Transportation Improvement Program (TIP) process includes nine policy objectives to help guide the allocation of regional and state funds to transportation projects. One of these policy objectives is to "mitigate ground transportation impacts from Sea-Tac Airport." Several major transportation projects implementing this objective have received financial support through the Regional Council's TIP process. They include improvements to International Boulevard (SR-99), completion of SR-509 from Des Moines Way South to I-5, the Airport South Access Project, and Sound Transit's proposed *LINK* light rail connection to the airport.

Addressing the impacts from Sea-Tac Airport, although a complex and expensive undertaking, has been made somewhat easier by the environmental impact process, which identified the major impacts of airport development on neighboring communities. Additional analysis done cooperatively by the Port and the Highline School District has now identified the airport's impacts on Highline schools and outlined a program to mitigate those impacts. In addition, the 1997 Interlocal Agreement between the Port of Seattle and the City of SeaTac has provided a cooperative platform for planning and implementing land use and transportation projects which help to mitigate airport impacts on the City of SeaTac. The SeaTac agreements might serve as models for future regional efforts to address the broader regional impacts from Sea-Tac and the rest of the regional airport system.

Wrapped up in the mitigation issue are the difficult questions of determining who benefits from the airport, who should pay for mitigation, how those costs can be equitably shared, what agencies should be involved in addressing the mitigation issue, and how mitigation projects/payments should be selected and implemented. The recent agreement between the Port of Seattle, the Highline School District, the FAA, and the Governor illustrates the complexity of this issue, the high cost of solutions, and how long it can take to put effective programs into motion. That agreement came nearly 5 years after the Regional Council resolution mandating the agreement. In terms of addressing known impacts on the schools, the agreement took decades to accomplish. Having agreed on what needs to be done, implementing the program will now take another 10 years to accomplish.

## **8. Airport system funding**

The general aviation airport system has limited funding, and the continued lack of investment in airport infrastructure may reduce airport system safety, compromise security, increase long term costs, and induce further airport closures. While AIR-21 has provided additional nationwide funding for aviation system improvements, actual funding levels have not been sufficient to meet the regional airport system's needs. As a result, there is an increasing need to coordinate regional, state, and federal funding priorities. There is also a need to increase revenue retention (aircraft and pilot registration fees and aviation fuel taxes), as well as seeking additional revenue sources.

The *2001 Regional Airport System Plan* documents the short, medium, and long term (5-, 10-, and 20-year) capital needs of the regional general aviation airport system. Excluding Sea-Tac Airport, those improvements total nearly \$300 million over the next 20 years. While airport master plans and state and regional airport system plans identify capital improvement needs, those plans have not provided a systematic regional framework to fund those needs. Without such a framework the region does not know how existing and future revenues compare with system operation and improvement needs, and how to fund the revenue shortfall, should one exist. In the arena of airport pavements, recent analysis of future pavement needs and required funding levels points out the following:

- Airport capital improvement programs for many of the region's airports (see *2001 RASP Report*, chapter 9, exhibit 9-1) show the need for significant investment in pavement maintenance projects that is consistent with the levels recommended in the State's Pavement Management Program.
- While the region's existing airport pavements are in relatively good condition, existing funding levels will not keep pace with future pavement maintenance needs. Using the pavement data developed for the statewide pavement management program, the analysis predicts the average pavement condition index (PCI) for the state airport system would decline from its current 73 to approximately 65 over the next 8 years if funding for pavement maintenance programs is limited to the existing levels provided by state and federal sources (\$3,350,000 per year).

- In order to maintain the existing condition of the region's airport pavements, considerable additional funding will be required. At the 13 airports included in the regional pavement analysis, existing funding levels are under half the amount required to maintain existing pavement conditions. Over the next 8 years, the region would need to generate over \$14 million in additional funds to maintain and preserve the existing pavements at their current level (PCI = 76.19).

Airport sponsors, the Regional Council, State DOT Aviation Division, FAA, and others should work together to document the importance of airports to the state and the region, identify the airport system's funding needs, and pursue existing and new funding sources. These efforts should take a systems approach and leverage regional, state, and federal resources to meet the region's needs.

## **9. Maintenance and preservation of the airport system**

Maintenance and preservation of the existing transportation system infrastructure is a fundamental goal of the Washington Transportation Plan (WTP) and the region's long range multi-modal transportation plan (*Destination 2030*). Whether interstate highways, marine ferries, HOV lanes, major arterial streets, regional transit, port and marine facilities, or airports, the existing infrastructure represents an enormous investment that must be preserved to meet existing and future regional travel needs. Recognizing these priorities, the WTP, *Destination 2030*, and the *2001 Regional Airport System Plan (RASP)* focus a significant amount of financial resources on these transportation system goals. In the case of the region's airports, maintenance and preservation of the system translates into three prime categories of need:

- maintaining and preserving the airport system's pavement (runways, taxiways, and aprons) - without safe and serviceable pavements the airport system cannot meet the region's needs
- investing in system safety/security and capacity - the system must be safe and secure, and provide enough capacity to meet the region's needs
- protecting the airport system from incompatible land uses on surrounding properties - land use encroachment has contributed to airport closures in the past, and new incompatible land use has the potential to erode the system's ability to meet future needs

Achieving these goals will take large amounts of funding, a public will to preserve and protect the resource, and a continuing and cooperative program to address the compatible land use issue. The question is, how can we accomplish these lofty goals? It's likely to take more than just each airport preparing and implementing its airport master plan. It's likely to require a continuing, cooperative discussion of critical issues at the regional and/or state level. It may require a new kind of partnership between airport sponsors, local land use agencies, airport and airport system users, FAA, and state and regional airport planners.

## **10. The role of new technology**

During the 1990s the nation's airport system experienced tremendous growth. Domestic passenger traffic increased by nearly 3% per year, reaching 600 million enplanements in the year 2000. Growth accelerated in the past 5 years, with passenger traffic increasing at 4% per year between 1995 and 2000. FAA's 2001 forecasts predicted domestic passenger traffic would grow by 3.6% per year, reaching 927 million passenger enplanements in the year 2012. Worldwide, passenger travel was forecast by the Boeing Company to grow by an average annual rate of 4.7% from 2001-2020. Air cargo was forecast to grow even more briskly, at an average annual rate of 6.4% worldwide over the coming two decades.

However, recent events have changed our view of the future, at least temporarily. The terrorist attacks of September 11, 2001 shocked the world and devastated the aviation industry. The attacks came on the heels of a declining economy and already lagging aviation demand in the first half of 2001. Passenger activity actually declined in 2001 for the first time in many years, sending further ripples throughout the economy. Domestic U.S. passenger activity declined from 606 million passenger enplanements in 2000 to 595 million in 2001. FAA predicts this figure will drop further, to 515 million in 2002, then begin to recover, reaching 859 million in the year 2013. This is still significantly below their previous figure of 927 million for 2012. Nevertheless, the system will continue to see overall growth, with FAA forecasting annual rates of 3.1% between 2001 and 2013. Most experts believe this growth will require increases in both capacity as well as technology.

The U.S. General Accounting Office's December 2001 Report (*National Airspace System: Long-Term Capacity Planning Needed Despite Recent Reduction in Flight Delays*) captures the need for improvements to aviation technology: "Although recent events [the September 11<sup>th</sup>, 2001 terrorist attacks] may have moved airport congestion off center stage as a major national issue, delays remain a pervasive problem, in part because of the interdependence of the nation's airports. Delays have many causes, but weather is the most prevalent. Figures compiled by FAA indicate that weather causes about 70 percent of the delays each year."

To meet these passenger and air cargo demand forecasts, Boeing estimates that domestic airlines will invest over \$460 billion dollars in their passenger and cargo aircraft fleet, delivering over 7,400 new aircraft in the next 20 years. The nation's airports will invest billions of dollars each year in airport infrastructure to meet the needs of the traveling public. Much of this investment will go into old technology: pavement. Of the 31 busiest U.S. airports, 14 have new runway projects underway to meet growing demand, and other new runways are in the planning stages. But hard infrastructure alone will not provide adequate capacity and safety to meet the nation's air travel needs. It is therefore essential, to meet demand and maintain acceptable safety margins, to optimize the effectiveness of both the existing and future airport system.

To achieve this goal, the nation's airports and air traffic control systems will rely on numerous technological improvements to enhance safety/security and increase capacity in the system. These improvements include Automatic Dependent Surveillance-Broadcast/Cockpit Display (used with LAAS), Flight Management System/Area Navigation (FMS/RNAV), Passive Final Approach Spacing Tool (pFAST), Simultaneous Offset Instrument Approaches (SOIA), Precision Runway Monitor (PRM), Land And Hold Short Operations (LAHSO), Standard Terminal Automation Replacement System (STARS), and Terminal Automated Radar Display and Information System (TARDIS). According to the FAA's 2001 Airport Capacity Benchmarks Report, among the nation's 31 busiest airports, these new technologies could increase hourly airport capacity by up to 19 percent. At Sea-Tac, these enhancements alone will increase capacity by 3-4%, and when combined with the new runway, will increase hourly capacity by 57% in good visibility and by 51% in bad visibility conditions.

In addition to the improvements listed above, FAA and the aviation industry are currently involved in an intense nationwide program to deploy the proposed Wide Area Augmentation System (WAAS), Local Area Augmentation System (LAAS), and Global Positioning System (GPS). These related programs are designed to enhance the safety, capacity, reliability, and accessibility of our nation's airport system by improving and simplifying the navigational tools available to pilots and air traffic controllers. GPS and its supporting WAAS and LAAS technology have the potential to provide simplified instrument approach capability to hundreds of general aviation airports that currently have only visual approaches.

To date, the basic WAAS, LAAS, and GPS infrastructure requirements have been identified at the national level, and new FAA standards are being prepared to guide the application of WAAS, LAAS, and GPS at the airport level. These standards have not been evaluated to determine how WAAS, LAAS, and GPS can actually be implemented at the region's airports. Many of our region's airports have plans to implement GPS and related technology to increase capacity, enhance safety, and improve access for users. However, system requirements necessary to implement GPS and other navigational improvements have not been defined. It is currently uncertain whether both WAAS and LAAS will be deployed by the FAA, and what the implications will be at the airport level when those decisions are made. In addition, the regional need, cost, and benefits of GPS and other new technologies has not been defined.

Clearly, the region has the potential to benefit greatly from new technologies currently being developed. But the benefits could come at great cost. Preliminary analysis of GPS potential at several northwest airports using the preliminary FAA standards showed the cost would be prohibitive. If the region's airports are to achieve maximum benefit from this new technology at reasonable cost, there is a need to evaluate the system-wide need for improved approaches, determine the system implementation requirements, identify costs, and document system benefits. While the new technologies could improve approaches at many of the region's airports, the potential costs do not justify implementing these potentially high-cost solutions at more than a few of the region's airports. The question remains as to which of the region's airports require significantly improved approaches, how can new technology be applied, what are the costs, and what are the benefits to system users and the region in general.

## **11. Airport system performance monitoring**

State law instructs the Regional Council to work with cities, counties, transit agencies, the state department of transportation, and others to develop level of service standards or alternative system performance evaluation measures. Performance monitoring programs typically include defining system performance standards or benchmarks, collecting performance data, evaluating the data relative to standards and benchmarks, and using the results to provide feedback into the planning and funding decision process. The overall goals of the performance monitoring approach are to optimize system performance and maximize the benefits of capital investments in the system. Underlying these goals is a desire to monitor how systems perform over time so trends can be identified and evaluated.

Given the fact that transportation funds are never sufficient to match needs, nearly every mode of transportation embraces the need to monitor, evaluate, and maximize the performance of existing infrastructure. System performance monitoring is increasingly used to evaluate highway, transit, and other elements of ground transportation systems. In the aviation industry, the FAA prepares annual aviation forecasts, and has for decades monitored both airline and air traffic system performance at the national and airport levels. Until recently, however, the FAA had not developed a systematic approach to monitoring airport system demand and capacity. In June 2001, however, the FAA completed its first ever performance analysis for the nation's top 31 commercial airports. The analysis established airport capacity benchmarks (performance levels), reviewed demand forecasts to the year 2010, and assessed future performance for each airport. These first efforts to monitor demand and capacity performance for the national airport system will serve as a good starting point, and it's likely the program will be enhanced and refined in future years.

While these performance monitoring programs exist at the federal level, there are currently no comprehensive programs to monitor the performance of the Washington state or PSRC regional airport systems. Individual airport sponsors watch over their own turf and plan for their own airport's needs, but the performance of the entire airport system is overlooked. Both state and regional airport planners recognize the potential benefits systematic performance monitoring systems could provide, but also raise several questions which should be addressed before these programs can be effectively designed and put into action:

- What would be measured?
- What standards or benchmarks would be appropriate?
- How should data be collected and analyzed?
- How should the results be used?
- Who should be involved in the programs, and how might they be funded?

## **12. Defining airports of regional significance**

Washington State law (chapter 47.06 RCW) defines facilities of state-wide significance and requires WSDOT to cooperate with regional transportation planning organizations and other appropriate agencies to include them in the state-wide multi-modal plan (WTP). These facilities include the interstate highway system, interregional state principal arterials including ferry connections that serve statewide travel, intercity passenger rail services, major passenger intermodal terminals, the freight railroad system, and others. These facilities are also defined in the RCW as essential public facilities (EPF) under the Growth Management Act. In addition, state law for Regional Transportation Planning Organizations (RCW 47.80) directs them to address facilities of regional significance in their regional transportation plans. The intent of designating facilities of state-wide or regional significance is to protect the public investment in these facilities so they can fulfill their role. Though airports are defined as essential public facilities under GMA, they are not listed as facilities of state-wide significance.

*Destination 2030* (the Regional Transportation Plan) includes an aviation component consisting of the 26 public use airports throughout the 4-county region. Of these 26, the plan designates six airports as part of the Metropolitan Transportation System (MTS): Sea-Tac International Airport, King County International Airport/Boeing Field, Snohomish County Airport/Paine Field, Harvey Field, Renton Municipal, and Auburn Municipal. These six MTS airports are considered to be of regional importance since they include the region's only major commercial service airport plus the five existing reliever airports. The plan does not contain criteria for designating additional airports as regionally significant.

Designating major regional airports as regionally significant could help the region to identify, protect, and invest in these important public resources. Such a designation could include a wide range of actions, such as:

- general recognition of these airports' importance
- commitment to ongoing maintenance, preservation, and improvement programs
- commitment of necessary funding
- support for compatible land use programs in adjacent communities

Three key questions emerge related to this issue: (1) how would we identify airports of regional significance? (2) what goals would such a designation accomplish? and (3) are there other ways of accomplishing these goals?

### **13. Role of the region's military airfields**

The Central Puget Sound Region hosts two military airfields, both located in Pierce County: Gray Army Airfield/Fort Lewis and McChord Air Force Base. Begun in 1917 as "Camp Lewis," Fort Lewis was dedicated as a permanent army post in 1927. McChord Air Force Base was formally dedicated in 1940. Since that time, both bases have contributed to national security through several military conflicts, and both have survived several waves of base realignment and closure by the Department of Defense. In response to the closure of several other bases across the country, both Fort Lewis and McChord Field have experienced growth in their levels of activity, numbers of base personnel, numbers of based military aircraft, and amount of support facilities required to fulfill their military mission. In addition to their military mission, both bases have been instrumental in assisting civil authorities in disaster relief and search and rescue aid. Today, these two facilities retain their critical roles and missions in national defense.

Fort Lewis, covering some 125 square miles, is home to the 7<sup>th</sup> Infantry Division, which was relocated from Fort Ord. In addition, Fort Lewis is home to the I Corps, Madigan Army Medical Center, 14 other military commands, and is a major military training facility. In addition, Fort Lewis is used on a regular basis by the Air Force, Navy, Marine Corps, Washington National Guard, Oregon Army National Guard, Reserve Units, British Regular units, and Canadian Regular and Militia units.

The primary mission of McChord AFB has, since 1968, been to house the 62<sup>nd</sup> Military Airlift Wing (MAW). The 62<sup>nd</sup> MAW provides for the airlift of troops, ammunition, equipment, passengers, and mail during both peacetime and wartime. In addition, McChord is home to 13 other military tenant units. McChord covers 4,537 acres, or 7.1 square miles.

During the Regional Council's evaluation of potential sites for a major supplement airport in the early 1990s, both McChord AFB and Gray Army Airfield were considered. After initial evaluation of local airspace, Gray Army Airfield was eliminated due to conflicts with airfield and military operations area (MOA) traffic from both McChord AFB and Fort Lewis.

In comments from the Department of the Air Force in 1992 and 1993, the base commander at McChord AFB cited the base's critical military mission, airspace conflicts, and physical constraints to growth, and strongly advised against use of McChord as a joint use airfield. Based on this advice and additional evaluation of airport siting criteria, McChord AFB was eliminated from more detailed study.

The interaction of air traffic between McChord AFB, Gray Army Airfield, and civilian airports continues to influence planning for other civilian airports throughout the region. Military traffic at McChord AFB interacts with Sea-Tac traffic, limiting options for addressing noise and capacity issues at Sea-Tac, and vice versa. The proximity of Gray Army Airfield and McChord AFB will continue to present a major constraint to possible future civilian use at either field as long as the other is still in use by the military.

## ***Chapter 4 - Summary of Mandates and Authority for the PSRC Aviation Program***

The Regional Council's mandates and authority are derived from a variety of federal, state, and regional sources. A few speak directly, and several refer indirectly, to aviation or airports. The direct references to airports are primarily federal and state directives which require the inclusion of airports in Metropolitan and/or Regional Transportation Plans (MTPs or RTPs). Other legislative guidance, such as that contained in the state's Growth Management Act and Planning Enabling Act, speak to the Regional Council's role in certifying the transportation elements of local comprehensive plans, as well as providing guidance and requirements protecting general aviation airports from incompatible land uses. The Regional Council has brought these two issues together in its own policy and plan review procedures implementing our responsibilities under GMA.

Additional directives are contained in the Regional Council's own policy and resolutions, as well as the Framework Plan and Interlocal Agreement, which created the new Puget Sound Regional Council in 1991. Still further guidance regarding the Regional Council's mandate to address aviation related issues in the region resides in previous resolutions, adopted plans and policies, and existing memoranda of understanding between the Regional Council and other public agencies, such as WSDOT. These plans, policies, and resolutions provide guidance to support *Destination 2030* (the region's 2001 Metropolitan Transportation Plan, or MTP), the Regional Transportation Improvement Plan (TIP), the Regional Council's policy and plan review process under GMA, and other programs.

Overall, while the federal, state, and regional mandates and authority referenced here do contain certain requirements (particularly related to developing intermodal plans, TIPs, and mandating plan elements), much of their support comes from the mandate to prepare and maintain a continuing, cooperative, and comprehensive regional transportation planning process that considers all transportation modes, including airports. In addition, many of the federal mandates speak to planning for the regional movement of people and goods, which allows for and encourages the region to plan for both air passenger and air cargo needs. In addition, Title 23 of the U.S. Code requires the region to develop a 20-year transportation plan which is based on regional demand forecasts of people and goods for the same time frame, and requires Metropolitan Transportation Plans to address access to ports and airports.

Similarly, the Washington Administrative Code (WAC) requires municipalities to include air transportation facilities in the transportation elements of their comprehensive plans, to inventory airport facilities, analyze existing capacity and future airport needs, and assess freight and passenger access to airport facilities. In defining PSRC's authority and responsibility, the WAC explicitly requires that RTPOs shall certify that the transportation elements of the adopted county, city, and town comprehensive plans within the region conform with RCW 36.70A.070 of the Growth Management Act (Comprehensive Plans – Mandatory elements). These provisions of state law define the Regional Council's authority and role in reviewing and certifying plans under GMA, and clarify the Regional Council's role in addressing the issue of airport compatible land use.

In summary, there are numerous sources which provide direct and indirect support for the Regional Council to undertake aviation-related activities. These include Federal statutes; state law; and regional plans, policies, resolutions, and Memoranda of Understanding (MOUs). The following is a brief listing of these activities, with the mandate or authority for each shown in brackets. A more detailed listing of mandates and authority is contained in Appendix A.

- **Prepare and maintain the region’s long range multi-modal transportation plan** under state and federal law. The plan must consider all transportation modes, including airports; must include a 20-year financial element; must be coordinated with airport sponsors; and must address access to ports, airports, and intermodal transportation facilities. *[TEA-21, RTPO law, and PSRC Framework Plan]*
- **Review and certify** transportation elements of comprehensive plans (including airport compatible land use) under GMA; **certify** that all elements of countywide comprehensive policy plans are consistent with the MTP; and **assure consistency** between local plans, countywide comprehensive policy plans, and the MTP. *[GMA (RCW 36.70A and WAC 365-195-325) and RTPO law, and PSRC Framework Plan]*
- **Destination 2030, Vision 2020, and the 2001 RASP** contain regional policies, priorities, strategies, and airport system improvement program that support a wide range of aviation-related planning activities. *[Destination 2030, Vision 2020, and the 2001 RASP]*
- **Assure that all transportation projects** within the region that have an impact upon regional facilities or services **are consistent with the RTP**. *[RTPO law]*
- Prepare and maintain a **6-year Regional Transportation Improvement Program (TIP)**. *[TEA-21 and RTPO law]*
- Prepare and maintain a **regional data base**. *[TEA-21, PSRC Framework Plan, and MOU]*
- Provide a **forum for discussion** of regional issues. *[PSRC Framework Plan]*
- Plan for **passenger and freight access** to airport facilities. *[TEA-21, Title 23 U.S.C., GMA law, and MOU]*
- Provide **technical assistance** to local and state agencies. *[PSRC Framework Plan]*
- Develop a transportation system **performance monitoring** program. *[RTPO law and MOU]*
- **Work with the Port of Seattle** and other agencies regarding Sea-Tac Airport noise issues. *[PSRC Resolution A-96-02]*
- **Work with WSDOT and other agencies** to evaluate options for meeting state and inter-regional long range commercial air transportation needs. *[PSRC Resolution A-96-02]*
- **Work with the state** to mitigate impacts from essential public facilities. *[PSRC Resolution EB-94-01]*

## ***Chapter 5 - PSRC Aviation-Related Policy***

The following is an accounting of aviation-related Regional Council policy obtained from current and previously adopted Regional Council planning documents. These include *Vision 2020* (adopted in 1995), *Destination 2030* (adopted in May 2001), the *2001 Regional Airport System Plan (RASP)*, and the Regional TIP Policy Framework.

### ***Destination 2030 (adopted May 24, 2001)***

The following policy language was taken directly from *Destination 2030* (chapter 5, pages 65-67) as adopted May 24, 2001, and directly addresses the region's aviation system:

**Commercial Aviation.** The region will meet its long-term commercial air transportation needs consistent with the Regional Council's General Assembly action in 1996, which amended the 1995 Metropolitan Plan. *Destination 2030* continues prior actions to include plans for a third runway for Sea-Tac Airport, with additional noise reduction measures, implementation measures, and monitoring steps as noted in Appendix 7 (PSRC Resolutions A-93-03 and A-96-02, including Appendix G). The project must satisfy the Federal Aviation Administration and Port of Seattle environmental impact review and permit processes and be authorized by the Port of Seattle and agencies with permitting authority. In addition, the region will cooperate with the state and local jurisdictions to implement a comprehensive process for evaluating all options to meet the State of Washington's long-term air travel and inter-regional ground transportation needs including high speed rail.

**Air Cargo.** The region will require additional investments in air cargo facilities to meet the region's long range needs. Beyond the years 2010-2015, these needs have not been clearly defined. Additional regional airport system planning and airport specific master planning is required to document existing capacity, evaluate demand, assess the regional marketplace, and develop plans to meet the region's long term needs.

**General Aviation.** The region also supports strategic investments at general aviation airports to address existing and forecast airport system needs. These investments have been preliminarily estimated at over \$200 million between 2000 and 2010 to implement the following action strategies:

- Preserve and maintain the existing airport system infrastructure with strategic investments in airport pavements and by supporting airport compatible land use programs. At a minimum, support funding to maintain the existing condition of the region's airport pavements.
- Enhance airport system safety by meeting FAA and state airport design standards and by addressing airport obstructions (lighting, marking, and removing obstructions).
- Invest in strategic airport system enhancements (lighting, navigational aids, improved runway approaches, runway extensions) to improve the airport system and meet changing user needs.
- Encourage construction of general aviation aircraft storage facilities to accommodate up to 460 new aircraft by 2010 at airports with both the ability and willingness to provide those facilities.
- Support multi-modal ground access improvement projects which enhance access to major airports throughout the region.

The following policy language from *Destination 2030* (chapter 1, page 2) provides generalized support for the regional airport system planning program.

### **Major Objectives of *Destination 2030***

- Support maintenance and preservation of existing transportation infrastructure and services as a high priority.
- Provide stronger links between the transportation system and land use development to encourage growth within defined urban growth areas with balanced investments in multimodal transportation improvements.
- Identify and prioritize projects, programs and policies to improve all modes of transportation and keep up with growth.
- Improve the region’s financial capacity to fund needed investments.
- Tailor recommendations at the sub-regional and corridor levels, in recognition of the region’s social, physical and cultural diversity.

*Destination 2030* incorporates previous Regional Council policy commitments to pursue and help achieve reasonable mitigation of impacts on communities resulting from major transportation facility and service investments/improvements that are either regionally significant or of statewide significance. Related to this objective, Regional Council Resolution EB-94-01 states: “the Executive Board recommends that the region work with the State to enact legislation allowing for substantial and equitable incentives and compensation for communities impacted by the proximity of essential public facilities.”

### **Multicounty Planning Policies contained in *Vision 2020* and *Destination 2030***

*VISION 2020* and *Destination 2030* (appendix 1, pages A 1-6 through A 1-12) include multicounty planning policies which, as required by the State Growth Management Act, articulate the overall policy direction of the region [See RCW 36.70A.210(7)]. Multicounty policies included in the 1995 *VISION 2020* Update provide direction for transportation planning and investment decisions and form the policy framework for development of *Destination 2030*. The multicounty policies provide direction for development in urban growth areas, contiguous and orderly development, siting of regional capital facilities, housing, growth in rural areas, open space and resource protection, economic development, and transportation. The following policies provide direct or indirect support for the regional aviation program:

- RF-3 Strategically locate public facilities and amenities in a manner that adequately considers alternatives to new facilities (including demand management), implements regional growth planning objectives, maximizes public benefit, and minimizes and mitigates adverse impacts.
- RT-8 Develop a transportation system that emphasizes accessibility, includes a variety of mobility options, and enables the efficient movement of people, goods and freight, and information.
- RT-8.2 Promote convenient intermodal connections between all elements of the regional transit system (bus, rail, ferry, air) to achieve a seamless travel network which incorporates easy bike and pedestrian access.
- RT-8.3 Maintain and preserve the existing urban and rural transportation systems in a safe and usable state. Give high priority to preservation and rehabilitation projects, which increase effective multimodal and intermodal accessibility, and serve to enhance historic, scenic, recreational and/or cultural resources.

- RT-8.5 Encourage public and private sector partnerships to identify freight mobility improvements which provide access to centers and regional facilities, and facilitate convenient intermodal transfers between marine, rail, highway and air freight activities, to and through the region.
- RT-8.6 Promote efficient multimodal access to interregional transportation facilities such as airports, seaports, and inter-city rail stations.
- RT-8.30 Promote and assist in coordinated development and operation of high speed intercity rail corridor services and facilities connecting the Puget Sound region with effective interregional and interstate transportation mobility which may reduce highway and air travel demands in such corridors.
- RT-8.31 Support effective management and preservation of existing regional air transportation capacity and ensure that future air transportation capacity and phasing of existing airport facilities needs are addressed in cooperation with responsible agencies. Coordinate this effort with long-range comprehensive planning of land use, surface transportation facilities for effective access, and development of financing strategies.
- RT-8.35 Support appropriate development of freight access improvements for greater reliability and efficiency in the movement of freight and goods. Such improvements may include but are not limited to consideration of exclusive freight access facilities and/or preferential freight access where appropriate.

### **2001 Regional Airport System Plan (2001 RASP)**

The following policies are contained in the *2001 Regional Airport System Plan - RASP* (see chapter 7, pages 7-21 through 7-23), which was adopted by reference as part of *Destination 2030* on May 24, 2001:

#### **Commercial Passenger Service**

- The region will meet its long term commercial passenger air transportation needs through expansion of Sea-Tac International Airport (as identified in its most recent Airport Master Plan Update and related EIS), and consistent with the Puget Sound Regional Council General Assembly's Resolution A-96-02 (including Appendix G). The Regional Council will continue to coordinate with all agencies responsible for implementing Resolution A-96-02, and will continue to monitor and report on progress related to the noise reduction steps contained in the Resolution.
- The Regional Council will coordinate with the state to enact legislation allowing for substantial and equitable incentives and compensation for communities impacted by the proximity of essential public facilities.
- The Regional Council will coordinate with the state and local jurisdictions to implement a comprehensive process for evaluating all options to meet the State of Washington's long-term air travel and inter-regional ground transportation needs including high speed rail.
- The Regional Council will coordinate with the Port of Seattle, WSDOT, the FAA, and other appropriate agencies to identify and implement improvements to the region's surface transportation system to provide improved multi-modal access to Sea-Tac Airport and to mitigate the airport's transportation impacts on surrounding communities.

## **Air Cargo**

- The region will meet short and medium term air cargo demand (2009-2015) through planned improvements at Sea-Tac International Airport and King County International Airport / Boeing Field (as outlined in their most recent airport master plans and related planning documents). The Regional Council will also plan for and support funding of improvements to the regional surface access system to support the regional movement of air cargo shipments.
- The region's longer term air cargo demand (after 2015) will be addressed in future updates to the Sea-Tac Airport and Boeing Field master plans in coordination with regional airport system planning being done by the Regional Council. This coordinated planning for regional air cargo needs will address total regional air cargo demand, the regional distribution of air cargo facilities, the potential for additional regional air cargo activity at airports other than Sea-Tac and Boeing Field, and additional need for surface access improvements.

## **Airport Compatible Land Use**

- Building upon its Policy and Plan Review and Certification authority under the Growth Management Act, the Regional Council will continue and expand its efforts to improve land use compatibility adjacent to public use general aviation airports. These efforts will include the following actions:
  - Refine the policy and plan review process to clarify the airport land use compatibility criteria to be used in the plan review and certification process.
  - Establish airport compatible land use guidelines.
  - Provide compatible land use guidelines and technical assistance to local jurisdictions.
  - Monitor regional trends in airport compatible land use to assess the effectiveness of the programs.
- The Regional Council encourages cities and counties with public use general aviation airports to proactively use their planning and zoning authority to prevent further land use encroachment and incompatible land use adjacent to these airports.

## **General Aviation Airports**

- The region will preserve, maintain, and enhance its general aviation airport system as detailed in the *2001 Regional Airport System Plan (2001 RASP)*. The region will support a program of aviation facility and service improvements to allow each airport to fulfill its regional role as defined in the *2001 RASP*. The region will support investments in the airport system to meet growing demand, provide increased access to the airport system, meet the broadening needs of the business and corporate aviation sectors, and to improve system safety and reliability.
- The region will apply the concept of "essential public facilities" as defined in Washington's Growth Management Act to the region's public use airports as needed to provide a planning process for addressing airport compatible land use in communities adjacent to all system airports.
- The region will support strategic investments in the regional airport system as identified in the *2001 RASP* to address airport system safety and standards, maintenance and preservation, system enhancements, aircraft storage expansion, and related economic development.

- The region will encourage and support airport sponsors and other appropriate agencies to undertake the following action strategies to implement the *2001 RASP*:
  - The Regional Council will work with the FAA, WSDOT Aviation Division, airport sponsors, other appropriate public agencies, and the private sector, to identify additional financial resources required to meet the investment needs of the regional airport system and to help mitigate the impacts of airports on adjacent communities. The Regional Council will also explore the potential of using public funds for critical projects at privately owned public use airports.
  - The region will monitor the status of major privately owned public use general aviation airports throughout the region (particularly Harvey Field and Crest Airpark). If any of these airports are threatened with closure, the Regional Council will coordinate with the WSDOT Aviation Division, the FAA, the current airport owner, and other appropriate public agencies, to evaluate options for public acquisition of these airports.
  - Bremerton National and Tacoma Narrows airports should take steps as outlined in the *2001 RASP* to accommodate growth in corporate and business aviation. These steps should include safety and standards programs, obstruction programs, pavement maintenance programs, compatible land use programs, runway extensions, protection of runway approaches, improved approach lighting systems, development of newer technology instrument approaches (such as GPS), and landside facility enhancements.
  - Arlington should take steps to capitalize on its regional niche as a center for experimental, glider, and ultralight activity. In addition, it should improve its all weather capability to provide increased access to the northern portion of the region.
  - Airport system investment priorities identified in the *2001 RASP* will be used to communicate the Regional Council's policy concerning funding priorities for airport system improvements. The Regional Council will communicate these priorities with the WSDOT Aviation Division, the FAA, and airport management, and encourage airports to include these investments in their individual airport master plans and capital improvement programs.
  - The Regional Council will support airport master plan proposals that are consistent with the *2001 RASP*.
  - Concurrent with its planning for the region airport system, the Regional Council will work with the WSDOT Aviation Division, the FAA, and other appropriate agencies to identify and document the economic benefits of aviation to local communities and to the region.

## ***Chapter 6 - PSRC Mandate, Policy, Interest, Role, and Opportunities***

The information in chapter 6 is structured around the 13 regional aviation issue areas previously identified in the Regional Council's aviation strategic planning process and discussed in some detail in Chapter 3. As requested by the interagency committee, this chapter includes a summary of PSRC's mandate, policy, interest, and role for each aviation issue, and concludes with a brief outline of future opportunities where PSRC might be involved in addressing each issue. The goal of chapter 6 is to clarify the Regional Council's interest and roles, and begin to focus the strategic planning process toward identifying strategic actions and packaging those actions into a multi-year work program. The mandate and policy statements included below are summarized from those contained in previous chapters on *Mandates and Authority* and *Aviation-Related Policy*, as well as the information in Appendix A.

In addition to the text in this chapter, PSRC staff and the strategic planning interagency committee collaborated in preparing a matrix (see Exhibit 3) which displays the 13 aviation issues addressed in this strategic plan report, as well as the agencies involved in addressing each issue, plus the source of each agency's authority and mandate, the types of actions taken, their role, and needs and gaps. The matrix provided a tabular method of organizing the information generated during the strategic planning process.

### **REGIONAL AIR CARGO DEMAND AND CAPACITY PLANNING**

#### **PSRC Mandate**

- RTPO legislation
- PSRC Framework Plan
- *Destination 2030* and *2001 RASP*

#### **PSRC Policy Summary**

- Meet short and medium term air cargo demand (2009-2015) through planned improvements at Sea-Tac International Airport and King County International Airport / Boeing Field
- Meet longer term air cargo demand (after 2015) by future updates to the Sea-Tac Airport and Boeing Field master plans in coordination with regional airport system planning being done by the Regional Council

#### **PSRC Interest**

- PSRC raised the air cargo issue in the *2001 RASP*, including the need for longer range planning
- PSRC has a strong interest in how the region addresses air cargo demand since this affects airport ground access (a major PSRC responsibility)
- PSRC has an interest in airport specific air cargo decisions by airports or carriers since these decisions could have ripple affects on other system airports

#### **PSRC Role**

- Within the context of its RASP planning role, develop historic and current air cargo activity information, prepare air cargo forecasts and evaluate regional needs, bring together decision-makers (airports and air cargo interests) and coordinate discussion of the issue and potential solutions, and help develop a regional strategy for air cargo. Work with airport sponsors to implement the strategy.

### **Future Opportunities**

- Given the region's strong air cargo growth and the lack of a long range regional approach, there is both a need for and an opportunity to develop a regional air cargo strategy, which might be fashioned after the existing "FAST Corridor" program, developed by the regional Freight Mobility Round Table. Ongoing and emerging efforts of the Freight Mobility program, particularly the phase 2 "FASTrucks" program, could be dovetailed with regional air cargo planning efforts. These efforts should be coordinated with ongoing cargo planning work being done by the Port of Seattle, as well as airport master planning being done for Boeing Field and Paine Field. A key aspect of this opportunity is to bring together all major air cargo interests and decision-makers for cooperative discussions and forge a regional consensus.
- Addressing air cargo at the regional level while coordinating with local public and private interests (airport sponsors, airlines, freight carriers, etc.) could lead to a regional strategy that addresses the region's air cargo needs, coordinates airport and airline investments, and identifies critical airport access projects (see airport access below).

### **AIRPORT GROUND ACCESS**

#### **PSRC Mandate**

- GMA and Planning Enabling Act
- RTPPO legislation
- PSRC *Framework Plan*
- TIP policy framework
- *Destination 2030* and *2001 RASP*

#### **PSRC Policy Summary**

- Support multi-modal ground access improvement projects which enhance access to major airports throughout the region
- Plan for and support funding of improvements to the regional surface access system to support the regional movement of air cargo shipments

#### **PSRC Interest**

- PSRC is mandated to develop a multi-modal regional transportation plan (*Destination 2030*) that includes airports.
- We're required to specifically address access to ports, airports, and intermodal facilities.
- The Regional Council began to look at airport access in the *2001 RASP*, laying out the issue related to the region's largest airports (Sea-Tac, Boeing Field, Paine Field, and Renton).

#### **PSRC Role**

- Develop and maintain the regional transportation system plan, develop a Regional TIP, and allocate federal funding (under TEA-21) to transportation projects throughout the region.
- Through our TIP planning process we forecast demand, prepare and run regional travel demand models, identify needs, evaluate options, develop consensus on the Regional TIP (contained in *Destination 2030*), advance a comprehensive 30-year regional multi-modal transportation improvement program among a wide range of users, and maintain a transportation action strategy.
- Use our regional data analysis and travel demand modeling capability to produce information useful in planning and decision-making for airport access, including the region's air cargo needs
- Assure that local agency plans are certified by PSRC before allocating project funding.
- Coordinate with local agencies, transit agencies, WSDOT, and others to identify projects and integrate them into the regional plan and TIP.

### **Future Opportunities**

- The regional TIP provides funds for a broad range of transportation projects which can include airport access improvements. The TIP has already provided funding for SR-509, SR-99, the South Access Project, and the LINK light rail connection to Sea-Tac Airport. Further work in defining airport access needs could then feed into the future TIP.
- PSRC involvement in airport master planning efforts throughout the region can provide the forum for identifying airport access needs and coordination of projects that can then be funded through the regional TIP.
- The Freight Round Table and ongoing freight mobility program could provide additional opportunities to discuss issues, clarify data requirements, identify common goals, develop regional cooperation, and formulate a regional strategy for implementation of airport access projects. FAST projects have received significant levels of funding support through PSRC's TIP process.

## **THE REGIONAL BENEFITS OF AVIATION**

### **PSRC Mandate**

- *Destination 2030* and *2001 RASP*

### **PSRC Policy Summary**

- Work with the WSDOT Aviation Division, the FAA, and other appropriate agencies to identify and document the economic benefits of aviation to local communities and to the region

### **PSRC Interest**

- The Regional Council has identified airport system improvements and a capital improvement program to fund them in its RASP planning process. We are also involved in addressing airport compatible land use and mitigating the impacts of aviation. We have an interest in documenting and publicizing the benefits of aviation as a way of supporting these other program areas.

### **PSRC Role**

- To support preservation, maintenance, and enhancement of the regional airport system as a component of *Destination 2030* by documenting and publicizing the regional benefits of aviation.
- Identify aviation's contribution to the regional economy.
- Work with airport sponsors, FAA, WSDOT, and others to communicate the importance of aviation to the region's economy to airport sponsors, funding agencies, and the general public.

### **Future Opportunities**

- As the region and the state work together to address capacity, impacts, and funding issues, there is an opportunity to provide aviation benefits information to inform decision makers and funding agencies.

## **CLOSURE OF GA AIRPORTS / SUSTAINABLE AIRPORT SYSTEM**

### **PSRC Mandate**

- *Destination 2030* and *2001 RASP*

### **PSRC Policy Summary**

- Monitor the status of major privately owned public use general aviation airports throughout the region

### **PSRC Interest**

- PSRC has a mandate and strong interest in preserving the existing regional airport system, and is supported by WSDOT Aviation Division's policy of "no net loss" of airport capacity.

### **PSRC Role**

- We have an indirect role in preserving the existing airport system and preventing closures through our regional airport system planning efforts, our involvement in airport master plans and statewide airport system planning, through support for airport access improvements, and through support for compatible land use programs.

### **Future Opportunities**

- If the region established a program to collect information and monitor the status of the region's airports relative to potential threatening factors, we might be in a position to anticipate and positively influence the outcomes of future airport sponsor decisions.

## **AIRPORT COMPATIBLE LAND USE**

### **PSRC Mandate**

- Growth Management Act (GMA) and Planning Enabling Act
- PSRC *Framework Plan*
- Resolution A-96-02
- *Destination 2030* and *2001 Regional Airport System Plan (RASP)*

### **PSRC Policy Summary**

- Expand efforts to improve land use compatibility adjacent to public use general aviation airports
- Refine the policy and plan review process and clarify airport compatible land use criteria
- Establish airport compatible land use guidelines
- Monitor regional trends in airport compatible land use

### **PSRC Interest**

- PSRC's primary interest is to preserve and maintain the regional airport system, reduce airport impacts on adjacent communities, and work cooperatively with the WSDOT to maintain airport system safety/security, by addressing the three dimensions of airport compatible land use: height hazard, safety, and noise.

### **PSRC Role**

- Review and certify the transportation elements of local comprehensive plans under GMA, including review of compatible land use around airports.
- Maintain a plan review and certification process that is consistent and fair, based on reasonable guidelines and standards, and uses the best available science.

- Develop appropriate airport compatible land use guidelines and standards relative to our plan review and certification process.
- Assure that plans are certified before granting transportation improvement funds under the TIP
- Prepare comments and suggestions, provide technical guidance and support, and offer our resources to local agencies in developing their comprehensive plans and development regulations, and in their other efforts to plan for airport compatible land use.
- Coordinate with WSDOT and local agencies in implementing compatible land use programs.
- Participate in airport compatible land use efforts (such as Part 150 studies) to provide regional information, policy, and perspective
- Carry out PSRC responsibilities under Resolution A-96-02 related to Sea-Tac Airport.
- Work at the local, regional, state, and national levels to discuss the importance of airport compatible land use, share information, develop guidelines and standards, and work toward more effective approaches to addressing the issue.
- Provide a wide range of regional level demographic, GIS, land use, and transportation data, and apply analytical and modeling tools that are useful for compatible land use planning, analysis, and decision processes and provide these resources to local land use planning agencies as requested.

### **Future Opportunities**

- Local governments are required (under RCW 36.70A.130) to review their plans for GMA compliance and adopt resulting amendments by September 1, 2002. PSRC will review and certify these amended plans. This is an opportunity for coordination, providing technical guidance, and applying new standards and guidelines for airport compatible land use in our plan review process. In addition, PSRC reviews and certifies some 40 plan amendments each year in its ongoing GMA role. This review includes airport compatible land use as appropriate, and provides an ongoing opportunity for interaction with local agency staff.
- Working together, the Regional Council and WSDOT Aviation Division could influence future state and federal legislation regarding airport compatible land use, including the development of state or national guidelines and standards.

## **PLANNING FOR AIRPORT SYSTEM CAPACITY**

### **PSRC Mandate**

- GMA and Planning Enabling Act
- Regional Transportation Planning Organization (RTPO) Legislation
- PSRC *Framework Plan*
- Resolution A-96-02
- *Destination 2030* and *2001 RASP*

### **PSRC Policy Summary**

- Meet long term commercial passenger air transportation needs through expansion of Sea-Tac International Airport
- Implement a comprehensive process for evaluating all options to meet the State of Washington's long-term air travel and inter-regional ground transportation needs including high speed rail
- Support effective management and preservation of existing regional air transportation capacity

### **PSRC Interest**

- PSRC has long been involved in regional airport capacity issues, including the periodic and ongoing work on the RASP, the Flight Plan process, the Major Supplemental Airport (MSA) study, and the adoption of Resolution A-96-02. We've played a key role in forecasting demand, identifying needs, evaluating regional options, and reaching consensus on a preferred plan for addressing regional needs.
- As a component of *Destination 2030*, our interest is in working both independently and in cooperation with airport sponsors to assure the region's aviation needs are met.

### **PSRC Role**

- PSRC provides regional leadership, bringing people together to discuss large, complex issues that cross jurisdictional boundaries. In this role we provide technical and policy analysis, assist in conflict resolution and reaching consensus, help identify common goals, and build support for regional plans and strategies. This is a role common to many of the issues listed here.
- Through our ongoing RASP planning efforts, identify and plan for the region's commercial and general aviation capacity needs in cooperation with airport sponsors, the state, and FAA.
- Beyond the estimated future capacity of the third runway, cooperate with the state and other agencies to develop a comprehensive process for meeting the region and state's long range commercial air travel needs.
- Continue to monitor progress on the Sea-Tac Airport third runway project, including the permit process and ongoing actions implementing PSRC Resolution A-96-02.
- Continue to work with the Port of Seattle to monitor Sea-Tac airport activity levels, evaluate the status of airport capacity, and assess the accuracy of demand forecasts.

### **Future Opportunities**

- Participate with the Port of Seattle and FAA in ongoing discussions of Sea-Tac capacity issues and potential capacity enhancement measures
- Join with the state and other agencies to look at long range commercial air transportation options.
- Participate in future airport master planning efforts and provide regional level policy input on airport system capacity issues based on the *2001 RASP*.

## **MITIGATION OF AIRPORT IMPACTS**

### **PSRC Mandate**

- GMA and Planning Enabling Act
- Resolution A-96-02
- *Destination 2030* and *2001 RASP*

### **PSRC Policy Summary**

- Pursue and help achieve reasonable mitigation of impacts on communities resulting from major transportation facility and service investments/improvements that are either regionally significant or of statewide significance

### **PSRC Interest**

- The Regional Council has an interest in impact mitigation, and has been involved in the issue through adoption of resolutions requiring specific actions, EIS processes, and various policies.

### **PSRC Role**

- Our role in support of regionally significant projects is to work with project sponsors to help identify impacts, develop and evaluate possible mitigation options, help reach consensus on mitigation programs, seek program funding, and monitor program implementation.

### **Future Opportunities**

- The Regional Council has supported resolving the Highline School District noise issue through the Sea-Tac Airport Part 150 process, and will be monitoring progress on actions taken to implement the May 24, 2001 agreement between the Highline School District, Port of Seattle, FAA, Governor Locke, and Congressman Smith.
- Annual TIP process provides a window of opportunity for funding projects that mitigate impacts. Since 1995 the TIP has supported projects that reduce the traffic impacts of Sea-Tac (see airport ground access issue above).
- Work at the regional level could lead to the development of new state legislation addressing mitigation of airport impacts.

## **AIRPORT SYSTEM FUNDING**

### **PSRC Mandate**

- GMA and Planning Enabling Act
- RTPO legislation
- PSRC *Framework Plan*
- *Destination 2030* and *2001 RASP*

### **PSRC Policy Summary**

- Support funding to maintain the existing condition of the region's airport pavements.
- Improve the region's financial capacity to fund needed investments.
- Work with the FAA, WSDOT Aviation Division, airport sponsors, other appropriate public agencies, and the private sector, to identify additional financial resources required to meet the investment needs of the regional airport system

### **PSRC Interest**

- PSRC has a strong interest in assuring adequate airport system funding to maintain, preserve, and enhance the system as articulated in the *2001 RASP* as well as *Destination 2030*.

### **PSRC Role**

- PSRC has a primary role in the funding of surface transportation projects which implement the region's transportation plan. We also must assure that reasonable funding exists or can be developed to implement our regional transportation plan, including airports. While we have no direct authority over airport investment, we have a strong interest in airport system funding.
- Our role has historically been to prepare and periodically update the Regional Airport System Plan, which identifies regional investment needs, including those related to addressing airport system impacts.
- The Regional Council supports adequate funding for the regional airport system through the RASP process, contact with the legislature, and through cooperation with WSDOT, FAA, airport sponsors, and airport user groups.
- Consistent with the other transportation modes, the Regional Council prepared its first ever aviation revenue forecast in 2001. This work will provide a starting point for future revenue efforts.

### **Future Opportunities**

- Adequate funding to meet regional transportation needs (including those of aviation) has been identified through the *Destination 2030* process as a critical issue to the region. Future efforts with the legislature will provide opportunities to address this issue.
- Future expansion and refinement of the 2001 aviation revenue forecast work can help to clarify the issue of airport funding, identify future funding needs and actions to enhance revenues, and raise overall consciousness of this issue with airport sponsors, the state legislature, FAA, U.S. congress, and the general public.
- In addressing the airport funding issue there are opportunities to dovetail several efforts which could raise the understanding of the importance of airport funding. These related efforts include continuing work on airport pavement management needs, development of information on airport benefits, and further work on compatible land use programs. Increasing the visibility and public understanding of these issues and programs could help provide support for airport system revenue enhancement efforts. Future cooperative work by the Regional Council, WSDOT Aviation Division, and others could be directed toward influencing state and federal legislation related to airport system funding.

## **MAINTENANCE AND PRESERVATION OF THE AIRPORT SYSTEM**

### **PSRC Mandate**

- GMA and Planning Enabling Act
- RTPPO legislation
- PSRC *Framework Plan*
- Tea-21
- *Destination 2030* and *2001 RASP*

### **PSRC Policy Summary**

- Preserve, maintain, and enhance the general aviation airport system as detailed in the *2001 Regional Airport System Plan (2001 RASP)*

### **PSRC Interest**

- Maintenance and preservation of existing transportation facilities (including airports) is a high priority for investments in the regional transportation system.
- Both *Destination 2030* and the *2001 RASP* articulate the Regional Council's interest in this regard.

### **PSRC Role**

- Identify regional system needs in our planning programs, provide funding support where we have authority, and provide advocacy and policy support to other agencies when they have authority.

### **Future Opportunities**

- Ongoing airport master planning efforts present opportunities for the Regional Council to support maintenance and preservation projects consistent with RASP goals.
- In addition, the Regional Council could voice its support for maintenance and preservation projects (consistent with the RASP) to WSDOT and FAA during these agencies' funding decision processes.

## **THE ROLE OF NEW TECHNOLOGY AT REGIONAL AIRPORTS**

### **PSRC Mandate**

- None.

### **PSRC Policy Summary**

- None.

### **PSRC Interest**

- The RASP outlines a broad range of airport system improvements which respond to safety concerns, growing demand, and increasing needs of the aviation market. The Regional Council has an interest in looking for ways to meet those goals efficiently and at reduced cost. This is consistent with our overall planning objectives for the regional transportation system of maximizing the capacity and efficiency of existing infrastructure and the benefit of every dollar spent.

### **PSRC Role**

- While we have no direct role in the deployment of new technology for the aviation system, we support investments in new technology by airport sponsors, FAA, and the State DOT.

### **Future Opportunities**

- Through its periodic involvement in airport master plans, the Regional Council can provide support for appropriate use of new technology to advance the goals and objectives of the RASP.
- We could also monitor advances in new technology and share information on its potential benefits for the regional airport system with airport sponsors.

## **AIRPORT SYSTEM PERFORMANCE MONITORING**

### **PSRC Mandate**

- GMA and Planning Enabling Act
- RTPO legislation
- MOU between PSRC and WSDOT
- Resolution A-96-02
- *Destination 2030* and *2001 RASP*

### **PSRC Policy Summary**

- Monitor regional trends in airport compatible land use to assess the effectiveness of the programs
- Monitor the status of major privately owned public use general aviation airports throughout the region (particularly Harvey Field and Crest Airpark)

### **PSRC Interest**

- Consistent with the other modes included in *Destination 2030*, the Regional Council is increasingly involved in monitoring the performance of the system to test the effectiveness of investments and to maximize system efficiency.

### **PSRC Role**

- PSRC does not currently have a role in airport system performance monitoring, but has an interest in developing airport system performance data that could inform ongoing planning and funding processes throughout the region, including monitoring aviation supply and demand trends.
- Possible roles would include developing benchmarks and performance measures; data collection, analysis, and reporting; incorporating results into ongoing airport system planning efforts; and sharing information with airport sponsors for use in airport master planning.

### **Future Opportunities**

- There are opportunities for performance monitoring program data to be used in future airport master plans, regional and statewide airport system plan updates, and FAA planning and programming decisions at airports in the region.

## **DEFINING AIRPORTS OF REGIONAL SIGNIFICANCE**

### **PSRC Mandate**

- GMA and Planning Enabling Act
- PSRC Resolutions
- *Destination 2030* and *2001 RASP*

### **PSRC Policy Summary**

- Pursue and help achieve reasonable mitigation of impacts on communities resulting from major transportation facility and service investments/improvements.

### **PSRC Interest**

- To date the Regional Council has not defined airports of regional significance per se, but as part of *Destination 2030* has defined six airports as part of the Metropolitan Transportation System, which is the regionally significant system. These airports are Sea-Tac International plus the five existing reliever airports (King County International Airport/Boeing Field, Snohomish County Airport/Paine Field, Harvey Field, Renton Municipal Airport, and Auburn Municipal Airport).

### **PSRC Role**

- Our role on this issue is currently undefined.

### **Future Opportunities**

- An aggressive approach to this issue, if adopted by regional consensus, could provide for improved leverage in planning for compatible land use, a more predictable funding stream, and a higher level of commitment to airport preservation and enhancement from local agencies, the region and state, and the FAA.

## **ROLE OF THE REGION'S MILITARY AIRFIELDS**

### **PSRC Mandate**

- *Destination 2030* and *2001 RASP*

### **PSRC Policy Summary**

- Continue to support compatible land use planning programs adjacent to military airfields and support transportation improvements providing surface access to these airfields.

### **PSRC Interest**

- The region is interested in supporting these airfields as they meet their military mission.
- The region also recognizes the major contribution these facilities make to the local and regional economy.

### **PSRC Role**

- Our role is to cooperate with the DOD to incorporate their needs into the RASP, and work with the DOD, the state, and local agencies in planning for compatible land use as well as supporting ground access improvements that meet regional and military needs.
- The Regional Council works with local agencies in developing appropriate compatible land use regulations near the two military airfields, implementing recommendations contained in the 1998 McChord AFB *Air Installation Compatible Use Zone (AICUZ)* Study.

### **Future Opportunities**

- Address compatible land use issues in PSRC's ongoing policy and plan review process.
- Address military base surface access needs in the regional transportation plan (*Destination2030*) and through the Regional Council's annual TIP process.
- Use upcoming DOD base closure process to verify military airfield roles for region.

### Exhibit 3 - Regional Airport System Issues and Roles Matrix

Key Aviation Issues	Who is Involved	Source of Authority, Mandate	Types of Actions Taken	Role in Addressing Issue	Needs / Gaps
<b>1. Air Cargo Capacity</b>	PSRC	RTPO legislation (RCW 47.80), policy	RASP planning and regional analysis Work with airports, identify issues	Evaluate regional needs, provide regional planning Coordinate with airports, WSDOT, users Organize local efforts, provide data and analysis Provide a cooperative forum to develop strategy Coordinate with efforts of the freight mobility roundtable	Need for coordinated strategy Setting priorities Research on regional cargo market Evaluate and plan for access needs Visibility, documentation
	Airports	Master plans, grant assurances, enabling legislation	Plan, coordinate with FAA, users; build	Planning, coordinate, implementation	Historical and current activity data
	WSDOT	State law	WTP planning and statewide analysis Freight & goods mobility program	Evaluate statewide needs, integrate into WTP Coordinate with airports, industry, PSRC	Evaluation of statewide needs, including implications for WTP and specific projects
	Airlines, others	Market decisions	Cooperate with airport sponsors provide facilities, service	Cooperate with airports re: facilities and service Respond to market	
<b>2. Airport Ground Access</b>	PSRC	Planning, policy, MTP, TIP RTPO Legislation (RCW Chapter 47.80)  MOU with WSDOT	Planning, funding (TIP) Freight & goods mobility program	Identify needs, integrate into regional TIP, prepare and maintain MTP, prepare TIP, action strategy Provide data and analysis useful in airport access planning Coordinate with WSDOT, local agencies, transit, airports Advocate for state & regional support for improvements	Information on ground access demand
	Local agencies	State law (level of service)	Planning, funding, construction	Plan and implement local projects	Coordinate with PSRC, WSDOT
	Airports	Grant assurances, enabling legislation, RODs	Coordinate with appropriate agencies	Provide info, cooperate, advocate	Coordinate with PSRC, WSDOT
	WSDOT	WTP, funding, policy MOU with PSRC	Planning, funding, policy	Integrate into WTP, fund projects, coordinate with sponsors, PSRC	Coordinate with airports, PSRC on needs, identify projects, and project funding
	FHWA	Legislation (e.g., Tea-21), funding	Funding	Provide funding, standards	Coordinate with PSRC, WSDOT
	Transit agencies	Service operation	Service operation	Plan for and provide service	Coordinate with PSRC, WSDOT
<b>3. Benefits of Aviation</b>	PSRC	Policy	Policy, advocacy	Advocacy, education, coordination	Develop and publicize information on aviation benefits
	Community	None	Studies	Understand issues	
	AOPA, AAAE, WPA, etc.	None	Advocacy, education programs, research	Provide information, advocate / lobby	
	WSDOT	Aviation policy	Policy, advocacy, data collection education program	Advocacy, education, coordination Data collection and reporting	
<b>4. Closure of GA Airports</b>	PSRC	GMA, Destination 2030	System planning, advocacy Review and certify plans Support airport maintenance	System planning, advocacy, coordination Plan review and certification Compatible land use planning & coordination	Analysis of airport closure factors Collection and analysis of data for threatened airports Discussion of results and next steps
	Airports	Ownership, grant assurances	Planning, financing	Protect interests, coordinate with local agencies.	
	FAA	Grant assurances (public use airports)	Advocate, funding (public use airports)	System planning, advocacy, coordination, funding	
	WSDOT	GMA, State Aviation Policy Compatible Land Use Program	System planning, advocacy, grants	System planning, advocacy, coordination, grants Compatible land use planning & coordination	
	Industry (AOPA)		Advocacy, public relations	Advocacy, public relations	

### Exhibit 3 - Regional Airport System Issues and Roles Matrix

Key Aviation Issues	Who is Involved	Source of Authority, Mandate	Types of Actions Taken	Role in Addressing Issue	Needs / Gaps
<b>5. Compatible Land Use</b>	PSRC	GMA / plan certification, policy Resolution A-96-02	Plan certification (GMA) Technical guidance to cities and counties TIP funds linked to plan certification Actions under Resolution A-96-02	Review and certify plans, educate, advocate Provide information and analysis to local agencies Coordinate with airports, local agencies, WSDOT Provide regional perspective - trends Monitor plan update schedules to influence outcomes Participate in local compatible land use efforts	Clarify role Guidelines, standards Procedures and criteria Regional trend data Technical expertise Educate the public
	Local agencies	Planning and zoning authority under state law	Planning, zoning, building permits Overlay zones, special planning areas	Land use authority, coordinate with airports Prepare plans and zoning regs Public welfare & safety	Technical information Guidelines, standards Risk & liability data Coordination, communication
	Public input	Public involvement req'ts			
	WSDOT, OCD	Legislation (RCW), Aviation policy	Compatible land use program Develop land use handbook Technical assistance, education Obstruction / safety review	Develop guidelines & standards, educate, advocate Coordinate with airports, local agencies, PSRC Maintain / enhance safety	Policy leadership assistance and coordination Challenge resolution assistance
	Airports	ANCA, grant assurances Airport Master Plans Enabling legislation Records of decision (RODs)	Planning, studies (Part 150), public info coordination with agencies, WSDOT, PSRC Provide airport technical information Noise abatement & remedy programs	Plan for their land, meet grant assurances, Plan and implement programs Technical info through Master Plan / ALP Coordinate with local agencies, others	Coordination and information exchange with land use agencies
	State legislature	Legislative, public, governor	Establish requirements (RCW)	Legislation, implement public will	Commercial airport law? Funding for planning programs
	FAA	ANCA, AIP, Grant assurances	Develop airport safety standards Publish advisory circulars Enforce grant assurances Funding for noise programs	Provide safety standards, distribute technical data Support airport and local agency efforts Enforce grant assurances	
<b>6. Capacity Needs</b>	PSRC	State law (RCW 47.80), policy, resolutions MOU with WSDOT	Planning, forecasts and capacity analysis, regional airport site selection study regional capacity decisions, policy	Evaluate regional needs, coordinate with airports, plan for regional airport system capacity, access needs provide regional leadership for decisions, consensus Participate in capacity efforts and planning studies Monitor demand/capacity and assess forecasts	Define PSRC's unique role Look at growth vs capacity and evaluate urgency, timing, options Analyze trends and forecasts Develop strategic approach
	Airports	Airport master plans, grant assurances Enabling legislation (RCW), RODs, funding	Plan, fund, build, operate airport Coordinate with FAA, uses, public, others	Plan, fund, construct, operate	Accommodate bizjets
	FAA	AIP, congressional mandates, regulations national airspace system, ATC	Planning, capacity analysis, grants, ATC	Research, analysis, NPIAS, funding, special studies	
	Airlines	Market decisions, legislative controls	Aircraft, schedule, service, pay fees	Meet market demand, legal mandates Direct demand to places where supply and interest exist	Better scheduling
	U.S. Congress	Legislative	ANCA (1990), slot rules, etc.	Legislation, authorize funding, respond to public	Additional funding, streamline process
	WSDOT	Legislative direction, policy	Develop state aviation policy, system planning	Plan for statewide airport system capacity	Future plans, forecast demands
	User groups		Calls to action, involvement in planning	Communicate with congress, industry	Mitigate future competition

### Exhibit 3 - Regional Airport System Issues and Roles Matrix

Key Aviation Issues	Who is Involved	Source of Authority, Mandate	Types of Actions Taken	Role in Addressing Issue	Needs / Gaps
<b>7. Mitigation of Impacts</b>	PSRC	NEPA, SEPA, resolutions, policies	Define needs, funding, advocacy Coordinate with airports, WSDOT, others	Identify mitigation needs, coordinate with public and agencies who will implement Seek funding, monitor implementation	Collect information on impacts Document programs and future needs/gaps Develop and evaluate mitigation options
	Airports	EISs, planning, req'ts, RODs enabling legislation, grant assurances	Specific projects Define mitigation needs	Implement projects, cooperate with public, agencies, and aviation industry	Lack of funding
	WSDOT	NEPA, SEPA, WTP, State policy	Funding, advocacy	Assist in defining mitigation needs	
	Local agencies	Agreements, law suits, public sentiment	Special studies, agreements, legal action	Advocate for solutions, cooperate with airport sponsor, WSDOT, PSRC, FAA	
	Resource agencies	Federal law	Req'ts, permit process	Implement requirements	
	U.S. Congress	Federal law	ANCA (1990), Part 150	Legislation, respond to public	
	Public	Legal	Law suits	Advocacy, work thru EIS & planning process	
<b>8. Funding</b>	PSRC	State RTPO requirement, MTP, policy	RASP capital improvement program	Evaluate funding needs, coordinate with airports and funding agencies, advocate	Analysis of aviation needs and revenues Develop revenue enhancement options
	FAA	Congressional mandates, AIP, NPIAS	Grants	NPIAS, AIP, project funding	
	Airports	Lease or use agreements, grant assurances, enabling legislation	Revenue generation	Develop CIP, maintain lease agreements, collect user fees	
	WSDOT	State budget, WTP	Grants	Evaluate needs, coordinate with airports, collect user fees, advocate for change	Evaluate options and impacts of alternative airport revenue programs
	Airlines	Lease or use agreements	Fees paid to airports	Coordinate with airport sponsors	
<b>9. Preserving the System</b> (including obstructions and airport standards)	PSRC	MTP, RASP policy	Planning, policy, Regional airport CIP Work with airports on master plans	Planning, coordinate with airports, FAA, WSDOT Compatible land use planning, advocacy	Information on airport investment programs Information on airport system status
	Airports	Master plans, standards, safety grant assurances, enabling legislation	Planning, funding, projects	Plan/implement standards, safety projects Airport maintenance	
	FAA	Standards, safety, grant assurances	Grants, Part 77, standards	Set standards, provide funding, obstruction program, airspace planning	
	WSDOT	Standards, safety	Planning standards, grants, obstruction program, pavement management program, and advocacy	Set standards, support planning, obstruction program, provide funding to airport sponsors Land use encroachment programs	
	User groups	Interpretation of public will	Petitions, advocacy	Advocacy	

### Exhibit 3 - Regional Airport System Issues and Roles Matrix

Key Aviation Issues	Who is Involved	Source of Authority, Mandate	Types of Actions Taken	Role in Addressing Issue	Needs / Gaps
<b>10. New Technology</b>	PSRC		Planning, evaluating potential, advocate	No direct role Support technology investments that meet RASP goals	Research on potential benefits and costs Standards for application
	FAA	Safety, capacity	Research, funding, standards	Research, fund new technology, set standards	
	Airports	Master plans, safety, capacity	Planning, acquire, install	Plan, coordinate, install, operate	
	Airlines/users	Safety, capacity, FAA directives	Incorporate into planes, procedures	Implement to enhance safety and capacity Advocate for cost-effective technology, comply with FAA directives	
	WSDOT		Planning		
<b>11. Performance Monitoring</b>	PSRC	MOU with WSDOT RCW	Planning for MTP, TIP, RASP	Potential PSRC roles include: Develop benchmarks and performance measures Data collection and reporting program Regional analysis of airports and total system Providing performance data to airport sponsors	Clarification on need for program Coordination with other PSRC/WSDOT programs
	WSDOT	MOU with PSRC, Legislature	WTP	Develop monitoring program, integrate with overall WTP performance program	
<b>12. Defining Airports of Regional Significance</b>	PSRC	Legislation (RCW)	Designated 6 MTS airports for D-2030	Potential roles: develop criteria, identify implications, coordinate with airports, WSDOT Tie designation to specific objectives, such as funding, compatible land use, maintenance and preservation projects	Discussion of need and benefits
	WSDOT			Coordinate with PSRC, airports	
	Legislature			Legislation, requirements, guidelines	
<b>13. Role of Military Airfields</b>	PSRC		Planning, coordination	Coordinate with DOD in RASP planning Work with DOD and local agencies on compatible land use programs and to define and implement access projects	Information on latest DOD initiatives and their implications on region's military airfields
	DOD	Protect mission, national defense	Airfield planning, maintain mission coordination with FAA, airports	Protect mission, national defense Coordinate with FAA, airports	
	FAA	Airspace safety, capacity	Airspace, MAP, coordination	Airspace safety, capacity Coordinate with military, airports, public	
	WSDOT		Planning, coordination	Planning, coordination	

## ***Chapter 7 - Analysis and Information Needs***

This chapter outlines a list of analysis and information gaps which need to be filled to begin addressing the region's major aviation issues. These efforts represent initial building blocks upon which the work program can be developed. Continuing work on the strategic planning process will likely refine and build upon these initial ideas to formulate strategic actions and work program tasks.

### **Air cargo**

- Collect and review regional air cargo industry trend data (domestic, international, air mail, traditional, overnight/express)
- Collect and evaluate data for regional and sub-regional cargo markets, air cargo origins and destinations, related regional demographics, and distribution of regional market share
- Collect information on regional air cargo industry decision factors
- Prepare/validate long range (20-year) regional air cargo forecasts
- Assess the potential impacts of September 11<sup>th</sup> on the region's future air cargo market and needs
- Review short and long range air cargo capacity potential at SEA, BFI, and other airports
- Identify timing and magnitude of unmet need
- Identify major uncertainties (forecasts, markets, airline and airport decisions, etc.)

### **Airport access**

- Collect information on airport access trip generators (passengers, employees, cargo, GA users, etc.) - expand initial work begun in the *2001 RASP*
- Develop method to forecast airport access demand
- Identify airport access needs related to serving the region's air cargo market
- Identify data needs to facilitate analysis of options to meet demand (travel demand model input)
- Assess possible air quality conformity implications and requirements
- Policy analysis re: integration into MTP and TIP
- Assess possible linkage with Freight Mobility Round Table efforts (and air cargo work above)

### **The regional benefits of aviation**

- Review the results of existing economic impact studies (WSDOT, Boeing Field, Sea-Tac, etc.)
- Develop information on airport system facilities and services provided to the region and identify system user benefits
- Assess need for additional efforts (analysis, public information, etc.)

### **Closure of GA airports/sustaining the airport system**

- Collect information on factors that have contributed to historical airport closures
- Collect and evaluate data on trends, current status, and future prospects of system airports relative to these factors
- Research efforts and results from other regions

### **Airport compatible land use**

- Collect and analyze data on past and current trends in land use development near airports
- Review the status of existing efforts to address compatible land use throughout the region (comprehensive plans, zoning, other)
- Review the status of emerging work on compatible land use guidelines (CalTrans, FAA, other)

### **Airport system capacity**

- Monitor short term trends in light of September 11 and evaluate possible affect on forecasts
- Review and update (if needed) long range regional passenger forecasts
- Review and monitor existing capacity and planned and potential capacity enhancements
- Assess implications on facility needs (type, size, timing)

### **Mitigation of airport system impacts**

- Develop regional information on airport impacts /mitigation (review plans, resolutions, EISs)
- Identify major impact issues (noise, overflights, traffic, air and water quality, economic, etc.)
- Assess existing mitigation programs, evaluate progress, and identify gaps
- Outline need for additional actions (projects, programs, legislation)
- Use information from planned Sea-Tac Airport impact survey (Spring 2002)

### **Airport funding**

- Refine airport system capital improvement program (with costs) - fill gaps in the 2001 RASP airport capital improvement program and develop process for updating
- Prepare refined and more complete airport system revenue forecasts
- Identify future revenue needs and options
- Monitor status of airport funding programs (AIR-21, AIP, NPIAS, State Airport Aid, etc.)

### **Maintenance and preservation of the airport system**

- Collect and monitor airport pavement condition (ongoing WSDOT program)
- Identify other maintenance and preservation measures
- Monitor project funding by FAA, WSDOT, and airports and compare with needs

### **New technology**

- Data on the status of new and emerging technology and its potential benefits to the region

### **System performance**

- Design system performance monitoring program (goals, data, methods, feedback)
- Develop ongoing data collection and analysis program for airport system performance
- Develop methodology for incorporating data into ongoing planning and investment decisions

### **Defining airports of regional significance**

- Document previous efforts to define airports of statewide or regional significance
- Determine need for such designation and potential benefits

### **Role of the region's two military airfields**

- Evaluate information resulting from current BRAC (base realignment and closure) process
- Develop implications based on above for military missions and future joint use potential

## ***Chapter 8 - Implementing the Regional Aviation Vision in the Work Program***

Before preparing the multi-year work program, the strategic planning team prepared a set of strategies for implementing the aviation system vision and describing how the aviation vision connects with the future work program (see Chapter 9). In addition, this chapter identifies a set of activities the Regional Council will engage in to move toward its aviation vision and mission.

### **Strategies to Implement the Regional Aviation System Vision**

#### **Overall**

- Promote intergovernmental cooperation and provide a regional forum for discussing and resolving important regional aviation issues that cannot be effectively addressed at the local (airport) level

#### **The system is safe and secure - - Assure the system is safe for air travelers and for those on the ground**

- Work with airports, WSDOT, and FAA to identify, prioritize, and fund needed safety/standards and security improvements
- Promote safety and security through compatible land use programs in communities adjacent to airports
- Monitor progress

#### **The system is efficient - - Plan, invest, and operate the system to be efficient**

- Address system efficiency and utilization in ongoing and periodic RASP efforts
- Engage in system performance monitoring and incorporate results into ongoing planning efforts
- Set regional funding priorities to maximize value of system investments
- Use technology
- Provide for connections to and from airports

#### **The system is sustainable - - Invest in the system and protect that investment**

- Identify system maintenance and preservation needs, including airport pavements
- Support adequate funding to sustain the airport system
- Identify and promote the benefits of aviation
- Work to prevent additional airport closures
- Protect the system from encroachment

#### **The system is responsive to natural and human environments - - Recognize and address impacts**

- Work with airports and others to identify and address airport impacts
- Support airport compatible land use planning throughout the region

#### **The system meets the region's aviation needs - - Provide for the region's broad range of demands**

- Monitor industry trends, anticipate change, and recognize uncertainty
- Monitor regional demand and capacity
- Identify short, medium, and long range needs
- Build regional consensus and support for decisions/actions that meet regional needs
- Address intermodal connections and airport access needs as part of the RASP, Destination 2030, and Regional TIP process

### **Activities to Achieve the Central Puget Sound Regional Airport System Vision and Mission**

To move the region toward its long range vision, to advance our mission, and in response to emerging regional aviation issues, the Regional Council will engage in the following activities:

- Provide leadership in identifying and addressing important regional aviation issues, and promote communication and cooperation between airports and communities. Support broad regional partnerships and provide a forum for local, regional, state, and federal agencies, aviation industry, airport users, and the public to discuss and resolve important aviation issues.
- Perform continuing regional airport system planning to identify system needs and priorities, and support airport sponsors' efforts to preserve and enhance the region's airports, and to meet appropriate federal and state safety/security and design standards. Participate in local airport planning and investment decision processes to advocate for the regional airport system vision, recognizing the need for coordination and cooperation among the many aviation interests in the region.
- Monitor regional demand and work with appropriate agencies, industry, and the public to identify and secure adequate commercial air transportation capacity to meet the region's long range passenger and air cargo needs.
- Work with airport sponsors, FAA, WSDOT, aviation industry, local government, and the public to jointly address mitigating impacts related to operation and expansion of the regional airport system.
- Identify airport system funding needs, advocate for continuing and adequate airport system funding levels, and work toward securing a higher share of aviation system user fees to support the airport system.
- Integrate airport access planning into the Regional Council's ongoing regional transportation planning program, and provide funding for critical projects meeting the region's airport access needs. Support highway-related and rail access improvements serving Sea-Tac and other major airports to provide convenient access for passengers, employees, and other airport users. Work toward a future where airports are no longer seen in isolation, but as an integral part of a region-wide, seamless, multi-modal transportation system.
- Plan for and support the deployment of new aviation technology to enhance safety/security, increase capacity, improve efficiency, and reduce congestion and delay.
- As part of the Regional Council's policy and plan review and certification process, provide technical information, coordination, and leadership to assist airports and adjoining communities who are working together to implement compatible land use programs to address noise, height hazard, and safety issues. Develop technical assistance programs to provide guidance to help local planning agencies prepare effective plans, zoning ordinances, and development regulations.
- Establish airport system performance benchmarks, and develop monitoring programs to track system trends and progress toward the benchmarks. These programs will provide useful information to track system demand, capacity, safety and standards, environmental impact, airport access, system investment and funding levels, and other key indicators. Expand upon the pavement maintenance and pavement management programs begun in 2000 to provide critical ongoing information to airport sponsors and funding agencies.
- Provide information to policy makers about the benefits of aviation, and work with WSDOT, airport sponsors, airport users, and others to lobby for legislative reform where needed to achieve the region's aviation vision.

## ***Chapter 9 - Multi-Year Work Program***

This chapter presents the multi-year aviation work program as developed in the strategic planning process. The order of future tasks represents generalized project priorities. Tasks 1 through 4, have been more clearly detailed than later tasks. It is anticipated that work tasks 1 and 2a will be funded during the 2002-2003 federal fiscal year. Task 3 (Air Cargo Strategic Plan) is anticipated during the 2003-2004 fiscal year. Beyond these first three tasks the timing and priorities could change.

### **BACKGROUND FOR TASKS 1 AND 2**

Providing for the efficient intermodal movement of freight and goods is a primary responsibility of the WSDOT, PSRC, and many local governments. This responsibility has received increased emphasis as a result of the federal 1991 *Intermodal Surface Transportation Efficiency Act* (ISTEA), its replacement, the 1998 *Transportation Equity Act for the 21<sup>st</sup> Century* (TEA-21), and legislation governing transportation and growth management in Washington State. ISTEA, TEA-21, and Washington law require the State and PSRC to include a specific focus on freight and goods mobility (including air cargo) as one element of our transportation plans. Such planning is hindered, however, by the lack of information on the source and characteristics of freight movements on state and regional highways. Freight movement by rail and water can be tracked adequately through Interstate Commerce Commission (ICC) waybill samples, Corps of Engineers waterborne commerce data, and other sources. However, obtaining comprehensive data on air cargo and truck freight movements is much more difficult due to the large number of carriers and the numerous potential origins and destinations. This data is crucial for improved planning to meet the region's air cargo and related airport ground access needs.

Task 1 (Regional Airport Ground Access Plan) and Task 2 (Regional Air Cargo Strategy) are the region's initial efforts to bring a comprehensive regional perspective to planning for the region's air cargo and airport ground transportation needs. As such, these two tasks will establish a baseline of information about the region's air cargo market, will identify critical links between air cargo and the ground transportation system, will focus on short and medium term planning and facility needs, and will identify longer term issues and planning needs that will be addressed in the future. These tasks will lay the foundation for future development of long range air cargo and airport ground access demand forecasts, regional travel demand modeling analysis, and identifying the region's longer range needs. An additional goal of Tasks 1 and 2 will be to provide information which can be used by airport sponsors and local governments in planning and decision-making for airport improvements and airport ground access projects.

### **TASK 1: REGIONAL AIRPORT GROUND ACCESS PLAN**

**Objectives:** Identify the extent of critical regional airport ground access needs, develop a 10-year regional airport ground transportation access plan, and integrate airport ground access needs into the next update of the Regional Transportation Action Strategy. This task will evaluate airport ground access needs for the region's 26 public use airports as well as the two military airfields (Gray Army Airfield and McChord AFB). Air cargo ground access needs at Sea-Tac Airport and Boeing Field will be addressed as part of the Regional Air Cargo Strategy (see Task 2). The results of that work related to air cargo ground access will then be incorporated into a future update of this airport ground access plan and other appropriate regional transportation plans. The airport ground access plan task will be closely coordinated with ongoing state, regional, and local transportation planning efforts.

All public use airports in the region will be included in Task 1, but the ground access planning effort will focus in more detail on Sea-Tac Airport plus the region's busiest general aviation airports, as measured by number of based aircraft and/or annual aircraft operations. These airports include Arlington, Auburn, Boeing Field, Bremerton National, Crest Airpark, Harvey Field, Paine Field, Renton, Tacoma Narrows, and Thun Field. The amount of analysis devoted to individual system airports will be based on each airport's activity levels and ground access needs. This will be defined during the course of the study.

### **Task 1.1: Review status of airport ground access facilities and services, activity levels, and planning**

- Collect and review information on existing facilities and services providing ground access to regional airports. Identify major highways, transit, HOV, and other ground access to the region's airports. For major ground access facilities and services, document existing traffic volumes, capacities, levels of service, and ridership (for transit). For Sea-Tac Airport, review available Port of Seattle data on trip generation, average daily trips, passenger and employee origins and destinations, mode split, traffic route/corridor assignments, and other relevant airport ground access information.
- Review and document airport ground access projects and service improvements as contained in airport master plans, transit agency plans, and local, regional, and state transportation plans. Coordinate with these other agencies relative to airport ground access needs.
- Document major ground access issues and problems which could be addressed in this planning effort, including intermodal connectivity, jurisdictional responsibilities, system gaps and choke points, additional system capacity needs, and funding concerns.

### **Task 1.2: Airport ground access demand forecasts**

- Identify major components of airport ground access demand (trip generators), including air passengers, employees, air cargo and mail, GA users, airport businesses, aerospace industry, and others.
- Review and document air passenger and employee forecasts and related traffic forecasts for Sea-Tac Airport.
- Review activity forecasts for other regional airports as needed to provide input for ground access demand forecasts.
- Collect and review employment and business forecasts from Boeing and other major airport-related businesses that could affect the airport ground access demand forecast.
- Review regional population and economic forecasts, land use and development plans for areas around the region's airports to provide information needed to prepare airport ground access forecasts.
- Prepare airport ground access demand forecasts for major airport ground access components: passengers, air cargo, airport and other employees, GA activity, airport related aerospace activity, etc.
- Develop 10-year airport ground access demand forecasts for each major airport.

### **Task 1.3: Regional needs and airport ground access plan**

- Meet with airport sponsors, FAA, WSDOT, local land use and transportation planning agencies, and others as needed to discuss existing improvement plans, the results of the airport ground access demand forecasts, and future airport ground access needs. Identify any gaps in existing plans, programs, and projects that could be filled by the airport ground access plan.
- Sea-Tac airport passenger and employee ground access needs: Prepare inputs and run the PSRC regional travel demand model to evaluate the affects of Sea-Tac Airport's future passenger and employee ground access demand on the regional transportation system. These inputs will include average daily trips, mode split, origins and destinations, and assignment to the roadway system. Evaluate results of model run and work with the Port of Seattle, WSDOT, transit agencies, and local agencies to refine existing projects and identify additional multi-modal airport ground access

improvement projects (highway, transit, rail, and other transportation facilities and services) to serve Sea-Tac Airport.

- Regional air cargo ground access needs: This sub-task will be completed as part of Task 2 (Regional Air Cargo Strategy), after the work documenting regional air cargo trends and market analysis, and review of the regional air cargo forecasts, has been completed. At that time, the air cargo ground access needs as identified in Task 2 will be incorporated into this Regional Airport Ground access Plan, as well as other relevant planning documents, such as the Metropolitan Transportation Plan (Destination 2030) and the Washington Transportation Plan (WTP), as warranted.
- Other regional airport ground access needs: For other airports included in the airport ground access plan analysis, evaluate the impacts of non-passenger and non-cargo airport ground access demand forecasts on sub-regional and local roadway networks. This work will address airport ground access needs related to general aviation airport activity, aerospace activity, and other airport-related traffic. Work with airport sponsors, airport users, transit agencies, and local agencies to outline facility and service improvement needs and identify airport ground access projects. Coordinate these projects with existing local, regional, and state transportation improvement plans and programs.
- Consolidate the results of this Task 1.3 (defining the regional ground access needs related to Sea-Tac passengers and employees, regional air cargo activity, and other regional airport ground access demand) into a comprehensive regional airport ground access improvement program which includes all projects addressing the variety of regional airport ground access needs.
- Work with airport sponsors, WSDOT, cities and counties, and transit agencies to assemble airport ground access projects into a 10-year regional airport ground access plan. The plan will include proposed improvements to highway, transit, rail, and other transportation system facilities and services; will outline order of magnitude cost estimates; and will identify generalized project timing. The plan will include a combination of existing and new projects as contained in existing plans and programs plus new projects/programs identified in this airport ground access planning process. The plan will identify ground access improvements to address air cargo airport ground access needs, and will be coordinated with activities of the Freight Mobility Roundtable.
- Work with other transportation agencies to identify linkages between proposed airport ground access projects and other transportation improvement projects and programs. This sub-task will focus on packaging airport ground access projects with larger improvement projects to gain economies of scale and broaden support for project funding and implementation. Identify major decision points for airport ground access projects (e.g., Sea-Tac Airport's South Access project, Sound Transit's LINK light rail connection to Sea-Tac Airport and Boeing Field, SR-509 extension, SR-518 improvement project, SR-18 improvements in Kent, etc.) and provide PSRC planning, policy, and regional support to project sponsors.
- Identify policy, funding, and institutional issues and suggest approach to addressing them.
- Assess possible air quality conformity implications and requirements.
- Identify additional actions needed and responsibility for implementing the plan.

**Task 1.4: Integration into the Regional Transportation Action Strategy and the Regional Transportation Improvement Program (TIP)**

- Integrate the 10-year airport ground access plan improvement projects into the Regional Transportation Action Strategy.
- Coordinate with WSDOT, transit agencies, local planning and transportation agencies, and others to address airport ground access demand, needs, and projects in their project formulation and CIP processes, and integrate projects into the Regional TIP.
- Integrate considerations for airport ground access plan into the Regional TIP project review process. Outline TIP project evaluation criteria which provide funding support for projects that meet the multiple goals of advancing the region's airport ground access plan and the goals of Destination 2030.
- Evaluate existing regional policy relative to airport access, and develop new policy and/or policy refinements as needed for integration into Destination 2030 and the Regional TIP.
- Assess possible linkage with Freight Mobility Roundtable efforts (and air cargo work below).
- Monitor process and update airport ground access planning and airport ground access projects as needed.

**TASK 2a: AIR CARGO CONSULTANT WORK SCOPE**

Due to FAA funding constraints in late 2001, the bulk of the Air Cargo work task will be deferred until FY 2003-2004. This will allow for sufficient funding to be allocated for the work task, and will also allow for the events of September 11, 2001, and their downstream implications, to be evaluated prior to undertaking the task. However, Task 2a will be completed during the FAA fiscal year 2002 work program. Task 2a will focus on developing a work scope, schedule, and budget for an air cargo consultant, who will be instrumental in developing the Air Cargo Strategy (Task 2). Completing Task 2a in conjunction with Task 1 during the 2002 fiscal year will assure the project team and their consultants will be ready to undertake the *Air Cargo Strategy* portion of the work program in 2003-04. However, Task 2a.2 (preparing the RFQ and consultant selection) will not be undertaken until FAA funding for the *Air Cargo Strategy* task is assured.

**Task 2a.1: Prepare Work Scope, Schedule, and Budget for Air Cargo Consultant**

- Develop scope of work, schedule, and budget for a consultant to assist on this work task. The primary consultant tasks will be to document national, state, and regional air cargo industry trends and develop a comprehensive profile of the regional air cargo market. The consultant will also assist staff in review and refinement of regional air cargo forecasts (as needed), identifying regional air cargo needs, and developing a regional air cargo strategy (see attached work program budget).

**Task 2a.2: Prepare Request for Qualifications (RFQ) and Select Consultant**

- Develop a Request for Qualifications (RFQ) to solicit statements of qualifications from air cargo consultants. The RFQ will provide project details and work scope, define the requirements needed for successful applicants, and outline the process to be used for consultant selection.

## **TASK 2: REGIONAL AIR CARGO STRATEGY**

**Objective:** Develop a regional air cargo strategy that anticipates future growth, outlines short and medium range (5-10 year) regional needs, and coordinates plans to meet those needs. The underlying goal of this work is to guide airport sponsor and air cargo industry investments at the region's airports and to coordinate investments in the regional intermodal transportation system to better meet the region's air cargo needs. This task will attempt to develop a collective knowledge of the regional air cargo market and explore two primary issues related to meeting the region's air cargo needs: (1) airport air cargo capacity, and (2) regional airport ground access relative to serving the region's air cargo market. This task will be closely coordinated with Task 1 (Regional Airport Access Plan) to identify and address the region's airport access needs. It is intended that this work task, combined with task 1 above, will provide the initial data needed to build the aviation component of a regional freight mobility model.

### **Task 2.1: Project management and coordination**

- Form an internal PSRC working group and an external committee to provide ongoing project review, information, and technical advice. The external committee will draw upon existing aviation-related committees used in preparing the 2001 RASP and the Strategic Plan for Aviation. In addition, PSRC staff and/or their consultants may hold meetings, focus group, or other forums with cargo carriers and/or air cargo shippers to obtain critical data for the study.
- Identify relevant points for coordination of this work task and its products with PSRC policy boards, airport sponsors, aviation industry groups, Freight Mobility Round Table, WSDOT freight planning efforts, and others. Communicate and consult with these groups as needed.

### **Task 2.2: Historical national and regional air cargo industry trends**

- Review and document historical data on national air cargo industry trends (domestic and international; air mail and air freight; traditional and overnight/express; belly, integrated, all-cargo, etc.). Include ten years of baseline trend data where available.
- Review and document historical regional air cargo trends and current activity levels (aircraft operations and air cargo volumes) at existing airports serving the regional air cargo market. Include data by airport, cargo carrier, and type of cargo (domestic and international; air mail and air freight; traditional and overnight/express; belly, integrated, all-cargo, etc.). Collect data on current air cargo aircraft fleet mix, annual air cargo aircraft operations, and level of truck activity (daily and/or annual truck trips and cargo volume carried) related to air cargo volume.
- Collect and review comparative background data for other large hub airports and for airports exclusively serving the air cargo market (examples may include Rickenbacker, Alliance, Global TransPark, etc.). Data collected from other airports may include air cargo volume and trends by cargo type, airfield facilities, air cargo support facilities, ground access, regional air cargo market and demographic data, and future forecasts and plans.
- Research emerging air cargo trends, airport operational procedures, security requirements, and new FAA standards resulting from September 11th that might affect the short and medium term regional air cargo market, future forecasts, and facility needs.
- To the extent possible, identify major uncertainties (resulting from federal regulations, emerging security issues, airline and airport decisions, etc.) that could affect the overall industry, the regional market, air cargo forecasts, and future needs. Outline key assumptions that will be used in developing the regional air cargo strategy.

### **Task 2.3: Assess Regional Air Cargo Market and Decision Factors and Constraints**

- This sub-task will build an understanding of the regional air cargo market, look at the regional distribution of air cargo demand, and review airport location and facility factors that may affect airport choice and other air cargo business decisions. This information will assist the region and airport sponsors in planning to meet regional and airport specific air cargo capacity needs, and will assist the region in planning for airport ground access needs related to serving the regional air cargo market. This work will be coordinated with the region's other freight mobility planning efforts, including strategic freight transportation analysis efforts being done by the WSDOT.
- Collect and analyze data to develop a profile of the regional air cargo market:
  - Document regional air cargo volume by weight, value, and type.
  - Collect and evaluate existing and emerging data on state and regional freight flows, origins, and destinations using information developed by the Port of Seattle, WSDOT, the state's freight mobility strategic investment board (FMSIB), the regional freight mobility round table, the upcoming WSDOT "Strategic Freight Transportation Analysis" study, and others. Use this data to build a picture of the region's air cargo market within the larger context of the region's overall freight mobility system.
  - Identify regional air cargo origins and destinations using air cargo carrier data, trucker information, customer surveys, focus groups, and/or other techniques.
  - Evaluate air cargo origin and destination data (regional demand) relative to existing regional airport capacity (supply), and identify major regional cargo surface access routes/corridors used by air cargo carriers in serving the regional market. This analysis will provide information for defining regional airport access needs related to air cargo, and will be incorporated with the results of Task 1 above.
  - Collect and evaluate information on the nature of goods being shipped via air by major regional import and export industries (technology, computer software, medical supplies and equipment, transportation, aerospace, retail, banking, etc.).
  - Collect and evaluate data on the shipping characteristics of major regional air cargo employers/customers (e.g., Microsoft, Boeing, US West, Nordstrom, Weyerhaeuser, Bon Marche, Costco, Amazon, Starbucks, etc.). Document findings that have major implications on planning for regional air cargo facility and airport access needs.
  - Identify relationships between the air cargo market and demographic and employment patterns.
  - Evaluate trends in regional air cargo market shares among the region's airports.
- Assess airport facility, ground access, and location decision factors:
  - Contact air cargo carriers to identify the factors and constraints that affect their decisions on how to serve their regional markets. Identify factors and constraints that could affect future air cargo decisions, such as regional airspace, airfield capacity, runway length, approach capability, cargo hardstand capacity, landside facilities, facility efficiency, available property, airport costs, airport access, congestion and delay on the regional roadway system, regional airport locations relative to air cargo market customers, customs facility constraints, environmental issues (including noise), etc.

#### **Task 2.4: Review and Evaluate Air Cargo Forecasts**

- Collect and review existing national, statewide, regional, and airport-specific air cargo forecasts from the air cargo industry, Boeing, FAA, WSDOT, PSRC, and airport sponsors. Include a review of key air cargo forecast components (domestic and international; air mail and air freight; traditional and overnight/express; belly, integrated, all-cargo, etc.).
- Evaluate national and regional air cargo trend data since September 11th to assess short and medium term impacts on the market. Evaluate data to identify any possible short term effects, such as shifts in share between belly and all-cargo, security regulations, and other factors, which might affect future air cargo trends and forecasts.
- Review PSRC's latest 2000 census data and regional demographic and economic trends and forecasts as input for evaluating regional air cargo forecasts. Compare this data with that used for previous forecasts and assess changes and potential impacts on the air cargo forecasts.
- Collaborate with airports, industry, WSDOT, and FAA to evaluate the accuracy of existing air cargo forecasts, including major components (domestic and international; air mail and air freight; traditional and overnight/express; belly, integrated, all-cargo, etc.). This collaboration may include small group meetings with separate groups as well as larger, cross-cutting workshops with several groups. Determine whether any refinements to the forecasts are needed to reflect new information about the nature of the regional air cargo market, identified uncertainties in the market, affects of September 11th, changing national or regional air cargo trends, etc. Document the results of this work task in the form of meeting minutes or a brief summary paper. [Based on the results of the analysis, the Regional Council may decide to develop new regional air cargo forecasts as part of a future work task.]
- Develop estimates of the regional distribution of air cargo demand and airport market shares using socio-economic, air cargo industry data, and other data developed in earlier tasks.
- Incorporate results from the regional air cargo forecasts (see Task 2.4) to develop forecasts of regional air cargo access demand. This task will translate air cargo volume forecasts into annual and/or daily vehicle trip forecasts, and assign those trips to the region's airports based on regional airport market share analysis done in Task 2.3.
- Using the results of Task 2.4, develop data that can be used to prepare air cargo-related ground access demand forecasts as input for determining air cargo access needs, and coordinate with airport ground access planning (see Task 1 above) and the freight mobility roundtable.

#### **Task 2.5: Regional Air Cargo Capacity, Future Needs and Options**

- Collect and review information on existing air cargo capacity at the region's airports from airport master plans, special studies, state and regional airport system plans, and other sources.
- Develop estimate of total existing regional air cargo capacity.
- Compare existing capacity analysis with regional air cargo forecasts and identify potential regional air cargo capacity shortfalls and additional regional air cargo capacity needs.
- Identify capacity constraints and opportunities (facility, access, location, land availability, cost and financial, environmental, other) at existing airports.
- Identify options for meeting the region's future regional air cargo needs, including:
- Sea-Tac Airport: major planned air cargo facility projects (SASA, the North Cargo Area, and the L-shaped parcel) contained in the Master Plan, 1999 study, and current planning efforts.
  - Boeing Field: facilities defined in the current draft Master Plan plus potential new opportunities.
  - Air cargo service at other airports in the region.
  - Define "what if" scenarios that would outline the regional air cargo implications of major air cargo investment decisions (such as, what options are available to meet regional demand if the SASA project at Sea-Tac does not go ahead).

- Evaluate future air cargo options against a set of criteria, which could include: ability to meet short and medium range demand (can the option meet space and facility needs); regional market, location, and air cargo business considerations; environmental issues (including noise); regional ground access issues; cost, financial, and timing factors; airspace constraints; other.

### **Task 2.6: Regional Air Cargo Strategy**

- Develop regional air cargo strategy, including the following components:
- Outline strategic regional air cargo capacity improvements needed to accommodate short and medium range (5-10 years) regional demand.
  - Define regional airport roles relative to serving the regional air cargo market.
  - Using the results of Task 2.1 through 2.5, plus Task 1 (Airport Access Plan), identify existing and forecast future regional air cargo access needs. Document forecast air cargo volumes, regional distribution of demand, major regional air cargo customers, and major access routes/corridors used for regional transport of air cargo. Identify major choke points and other problem areas in the regional transportation system that impact the air cargo industry, and outline improvement projects that will address these choke points/problem areas and meet the region’s air cargo access needs. Coordinate with other freight mobility planning efforts, including the Regional Freight Mobility Round Table, the State’s Freight Mobility Strategic Investment Board (FMSIB), the WSDOT-sponsored “Eastern Washington Intermodal Transportation Study” (EWITS), and the EWITS 2 Study (“Strategic Freight Transportation Analysis, or SFTA”). Incorporate the results of this work task effort as needed into the Metropolitan Transportation Plan (Destination 2030) and the Washington Transportation Plan (WTP).
  - Identify airport access improvement projects which would support the regional air cargo strategy and coordinate results with Task 1 (regional airport access plan).
  - Identify order of magnitude costs, existing funding sources, and potential new funding sources as needed.
  - Outline responsibilities and actions needed to implement the strategy, including possible actions by FAA (funding), WSDOT (policy, planning, funding, ground access projects), PSRC (policy, planning, advocacy, ground access project funding), air cargo industry (service and facility investments), airport sponsors (planning, funding, facility construction), and local agency actions (land use planning, project approvals, public infrastructure).
  - Outline opportunities to collaborate and assess possible marketing strategies to support implementation of the air cargo strategy. Identify incentives that could be used to attract air cargo carriers to become partners in implementing the regional strategy.
  - Identify unresolved issues, future research needs, and additional policy and technical analysis that have surfaced during this work task that will need to be addressed in future work efforts.

### **TASK 3: BENEFITS OF AVIATION STUDY**

**Objective:** Identify and publicize the benefits of aviation. This task will outline the economic and community service benefits of aviation on the region. Both qualitative and quantitative impacts will be discussed, with the qualitative information adding context and substance to the quantitative data. Quantitative data will be largely derived and summarized from previous work. Qualitative data will focus on documenting the facilities, services, and businesses supported by the regional airport system, and the local and regional benefits they provide. In addition, this work task will review and document the direct and indirect impacts of the September 11th terrorist attacks on the region’s airport system, airport-related business, aerospace industry, and overall regional economy.

**Task 3.1: Review existing economic benefit information**

- Review and summarize the results of previous and current economic impact study efforts (WSDOT Aviation Division’s 2001 Economic Impact Study, the 1999 Boeing Field study, studies done for Sea-Tac Airport, other aviation industry studies, etc.). Use national and statewide information to establish a framework for local detail.
- Assess need for additional efforts (data, analysis, public information, etc.).

**Task 3.2: Identify the impacts of September 11**

- Review and document the direct and indirect impacts of September 11 on the region’s airport system, aviation industry, and general economy.
- Include data such as airport activity trends (passengers, air cargo, operations, etc.), related airport revenue impacts, affects on airport-related businesses, operational and maintenance cost impacts, security-related costs, and short and medium term impacts on airport capital improvement programs.

**Task 3.3: Benefits of aviation report**

- Drawing upon existing economic impact studies, airport master plans, airport system plans, and other data sources, develop a comprehensive list of the types of facilities, services, and businesses that are supported by the region’s airport system.
- Document existing tenants at the region’s top ten airports, plus selected other airports within the region that offer a variety of facilities and services, and are geographically diverse.
- Contact/interview airport sponsors, airport tenants, and airport users/customers and collect information about the facilities and services they provide/use. Where available, collect information on the levels of activity related to these facilities and services (e.g., annual visitors, aircraft delivered, number of student pilots trained, medical evacuations performed and supplies delivered, search and rescue operations, emergency responses dispatched, air cargo processed, passengers carried, fire suppression missions, etc.). Also include information about special aviation events, such as education programs, tours, air shows and fly-ins, that offer the public an opportunity to learn about aviation.
- Collect and document information related to the region’s two military airfields, including the types of activities they support and the broad range of civilian-related support functions they provide. Include updated information on changing roles, mission, and activity levels resulting from the September 11th terrorist attacks.
- Build upon the results of Tasks 3.1, 3.2, and this Task 3.3, plus data from Task 4 (Sustainable Airport System), to identify the potential impacts of future airport closures, and document the economic and community benefits that would be lost.
- Prepare a report that documents the regional airport system’s contribution to the community and the economy. Include summary information derived from other studies (e.g., employment, sales, and labor income, tax revenues, total regional economic impact, etc.), plus the results of this work task, including human interest details that could appeal to a broader audience.

**Task 3.4: Public information program**

- Produce a “Benefits of Aviation” report and/or web-based materials to publicize the benefits of aviation.
- Develop a public information program (including target audiences) to communicate the results of this task.

## **TASK 4: SUSTAINABLE AIRPORT SYSTEM**

**Objective:** Work to sustain the regional airport system. This task will review information about historical airport closures, assess the status of existing system airports and evaluate the potential risk of further airport closures, and develop a strategy for sustaining the existing regional general aviation airport system.

### **Task 4.1: Assess historical and current threats to sustaining the GA airport system**

- Document historical trends in the regional airport system, with emphasis on the dates and circumstances surrounding past airport closures. Include data on airport role, based aircraft, activity levels, ownership, etc.
- Collect and assess information on historical factors that have threatened or contributed to the closure of GA airports in the region. Review information on likely factors, such as land use encroachment and urban development pressures/urban growth; proliferation of obstructions (such as trees, communication towers, and other structures); accident data; public opposition; financial issues; environmental concerns; airport maintenance and safety; changing market conditions; airport ownership; lack of adequate facilities; etc.
- Collect and review airport activity statistics, financial data, and other relevant information since September 11<sup>th</sup> to identify possible additional airport threats and closure risk factors.
- Research historical airport closure data from other regions, including contributing factors.
- Identify common factors in airport closures and assess their relative importance.
- Develop plausible scenarios of the future airport system and identify the impacts of those scenarios. This task will attempt to anticipate possible future events that could have significant impacts on the airport system. These events could include commencing new commercial passenger service at new airports, expansion of existing regional air cargo service at new airports, and/or the closure of key regional general aviation airports. Any of these events could have major “ripple” effects on the rest of the regional airport system.
- Collect and evaluate data on trends, current status, and future prospects of system airports relative to historical risk factors.
- Identify airports potentially at risk of closure and the factors contributing to that risk.

### **Task 4.2: Sustainable airport system action strategy**

- Research efforts and results from other regions to sustain their airport systems.
- Identify potential actions which could be taken to help sustain the regional airport system and prevent additional airport closures, and determine who would implement these actions. These actions might include more proactive airport compatible land use planning, airport maintenance and preservation programs, efforts to capture more existing aviation system user fees, identifying alternative revenue sources, innovative funding sources for local matching of FAA grants, identifying possible airport sponsors, etc.
- Based on the results of above sub-tasks, identify airport facility enhancements needed to assure sustainability of the regional airport system. Work with airport sponsors and relevant funding agencies to advocate for these airport improvements.
- Identify actions needed to address the ripple effects of major events as outlined in Task 4.1 above.
- Coordinate with existing airport owner/sponsor, WSDOT, FAA, airport user groups to develop a sustainable airport system action strategy.
- Set up an ongoing program to periodically review/monitor airport status relative to sustaining the airport system and preventing potential airport closures.

## **TASK 5: AIRPORT COMPATIBLE LAND USE PROGRAM**

**Objective:** As part of the Regional Council’s policy and plan review and certification process, provide technical information, coordination, and leadership to assist airports and adjoining communities who are working together to implement compatible land use programs to address noise, height hazard, and safety issues. Develop technical assistance programs to provide guidance to help local planning agencies prepare effective plans, zoning ordinances, and development regulations.

### **Task 5.1: Compatible Land Use Working Group**

- Create a statewide or regional airport compatible land use working group or other appropriate group to address this issue.

### **Task 5.2: Review and Evaluate Existing Technical Data**

- Review and evaluate the status of existing and emerging sources of technical data on compatible land use (WSDOT, CalTrans, etc.) and assess the need for changes in land use guidelines.
- Collect and review land use plans, zoning ordinances, and associated regulations to determine existing status and potential for future incompatible development.

### **Task 5.3: Regional Land Use and Development Database**

- Develop and maintain regional land use and development database around airports to assess trends and effectiveness of existing programs.
- Collect and evaluate data on past and current trends in land use development near airports.

### **Task 5.4: Compatible Land Use Guidelines and Standards**

- Develop/adopt land use standards and guidelines for use by PSRC and local agency planners.
- Develop PSRC procedures and criteria for plan review and certification under GMA.
- Communicate with public agencies/public on the importance of airport compatible land use.

### **Task 5.5: Program Implementation**

- Develop funding program for ongoing and expanded compatible land use planning programs.
- Improve coordination and information exchange between airports and land use agencies.
- Develop better risk and liability data for use by local agencies.
- Monitor local agency plan update schedules to identify opportunities to influence future outcomes.

## **TASK 6: AIRPORT SYSTEM CAPACITY**

**Objective:** Monitor regional demand and work with appropriate agencies, industry, and the public to identify and secure adequate commercial air transportation capacity to meet the region’s long range passenger and air cargo needs.

### **Task 6.1: Regional Airport Capacity Working Group**

- Create regional airport capacity working group and set out objectives and goals.

### **Task 6.2: Evaluate Existing System Capacity and Activity Trends**

- Collect and review existing capacity documents (FAA, Port, region, state) to assess capacity.
- Monitor short term trends in light of September 11 and evaluate possible affect on forecasts.
- Collect and evaluate airport activity data re: growth in commercial activity versus available capacity to assess how well capacity is keeping pace with demand. Include airfield, landside, and ground access.

- Review and monitor existing capacity and planned and potential capacity enhancements.

### **Task 6.3: Evaluate Forecasts and Assess Capacity Needs**

- Review existing commercial activity forecasts and evaluate against actual activity trends to assess accuracy of forecasts.
- Update regional passenger forecasts as needed.
- Evaluate and verify future capacity needs (timing, location, type and amount of facilities).
- Identify capacity options and evaluate ways to streamline the process for capacity delivery.
- Participate in ongoing discussions / efforts to enhance existing airport system capacity.
- Develop a comprehensive planning process for evaluating the region's long range options for meeting commercial demand (beyond the 3rd runway) and develop a regional strategy.
- Look for opportunities to meet GA hangar demand at appropriate airports.
- Monitor other general aviation activity measures to keep track of other potential demand and capacity concerns.

## **TASK 7: MITIGATION OF AIRPORT SYSTEM IMPACTS**

**Objective:** Work with airport sponsors, FAA, WSDOT, aviation industry, local government, and the public to jointly address mitigating impacts related to operation and expansion of the regional airport system.

### **Tasks:**

- Review documents which identify airport impacts (master plans, EISs, noise studies, etc.).
- Identify critical impact areas (noise, traffic, air and water quality, wetlands, biotic, social, economic and property value, etc.).
- Document existing mitigation efforts and gaps.
- Develop and evaluate options for filling mitigation gaps.
- Create regional airport impact mitigation strategy and outline agency responsibilities.
- Develop funding for mitigation programs.
- Develop regional information on airport impacts/mitigation (review plans, resolutions, EISs).
- Identify major impact issues (noise, overflights, traffic, air and water quality, economic, etc.).
- Assess existing mitigation programs, evaluate progress, and identify gaps.
- Outline need for additional actions (projects, programs, legislation).
- Use information from planned Sea-Tac Airport impact survey (Spring 2002).

## **TASK 8: AIRPORT SYSTEM FUNDING**

**Objective:** Identify airport system funding needs, advocate for continuing and adequate airport system funding levels, and work toward securing a higher share of aviation system user fees to support the airport system.

### **Tasks:**

- Refine airport system capital improvement program (with costs) - fill gaps in the 2001 RASP airport capital improvement program and develop process for updating
- Refine airport system revenue forecasts
- Identify regional funding shortfalls
- Develop and assess options for addressing shortfalls
- Develop funding strategy and implementing steps

- Develop approach to influence future rounds of state and federal funding legislation and coordinate with other agencies to implement approach
- Monitor status of airport funding programs (AIR-21, AIP, NPIAS, State Airport Aid, etc.)

#### **TASK 9: MAINTENANCE AND PRESERVATION**

**Objective:** Perform continuing regional airport system planning to identify system needs and priorities, and support airport sponsors' efforts to preserve, maintain, and enhance the region's airports, and to meet appropriate federal and state safety and design standards. Participate in local airport planning and investment decision processes to advocate for the regional airport system vision, recognizing the need for coordination and cooperation among the many aviation interests in the region.

##### **Tasks:**

- Determine criteria for measuring airport system status and trends.
- Periodically collect information and evaluate status and trends relative to airport system maintenance and preservation efforts.
- Use results to identify future actions needed and incorporate into future RASP and airport master planning efforts.
- Collect and monitor airport pavement condition (ongoing WSDOT program).
- Identify other maintenance and preservation measures.
- Monitor project funding by FAA, WSDOT, and airports and compare with needs.

#### **TASK 10: NEW TECHNOLOGY**

**Objective:** Plan for and support the deployment of new aviation technology to improve safety/security, increase capacity, improve efficiency, and reduce congestion and delay.

##### **Tasks:**

- Identify new technologies that could benefit regional airport system.
- Outline current status of research and development efforts.
- Assess the potential benefits and costs of these new technologies.
- Determine next steps based on results of assessment.
- Collect and evaluate data on the status of new and emerging technology and its potential benefits to the region.

#### **TASK 11: SYSTEM PERFORMANCE**

**Objective:** Establish airport system performance benchmarks, and develop monitoring programs to track system trends and progress toward the benchmarks. These programs will provide useful information to track system demand, capacity, safety and standards, environmental impact, airport access, system investment and funding levels, and other key indicators. Expand upon the pavement maintenance and pavement management programs begun in 2000 to provide critical ongoing information to airport sponsors and funding agencies.

##### **Tasks:**

- Identify objectives/benefits of system performance monitoring.
- Design system performance monitoring program (goals, data, methods, feedback).
- Identify what performance measures will be monitored.
- Establish performance benchmarks.

- Collect performance data and compare to benchmarks.
- Evaluate results and feed back into planning process.
- Develop ongoing data collection, analysis, and feedback program to incorporate data into ongoing FAA, state, regional, and airport specific planning and investment decisions.

## **TASK 12: AIRPORTS OF REGIONAL SIGNIFICANCE**

**Objective:** Identify airports of regional significance and establish guidelines and policies for those airports.

### **Tasks:**

- Establish reasoning behind defining airports of regional significance.
- Establish criteria for defining "significant."
- Apply criteria and define affected airports.
- Determine what policies, actions, or guidelines will be applied to “significant” airports.
- Coordinate with airport sponsors, FAA, WSDOT, and other agencies to implement policies, actions, or guidelines.
- Incorporate into future updates to the RASP and individual airport master plans.

## **TASK 13: ROLE OF THE TWO MILITARY AIRFIELD FACILITIES IN THE REGIONAL AIRPORT SYSTEM**

**Objective:** Clarify the existing and future roles of the region’s military airfields, and incorporate that role into the regional airport system plan.

### **Tasks:**

- Review existing and emerging status of the region's two military airfields relative to their overall mission and proposed new round of DOD base realignment and closure.
- Develop implications based on above for military missions and future joint use potential.
- Incorporate this information into the RASP and develop policy as needed related to possible future joint use potential.

**Exhibit 4**  
**Puget Sound Regional Council**  
**Air Transportation Work Program Budget**

<b>Task #</b>	<b>Task Description</b>	<b>PSRC Staff Hours</b>	<b>PSRC Cost per Hour *</b>	<b>PSRC Staff Cost</b>	<b>Direct Cost **</b>	<b>Consultant Cost</b>	<b>Total Cost</b>
<b>1</b>	<b><u>Regional Airport Ground Access Plan</u></b>						
1.1	Status of Airport Access	240	\$78.61	\$18,865.29	\$100.00	N/A	\$18,965.29
1.2	Demand Forecasts	250	\$78.61	\$19,651.35	\$200.00	N/A	\$19,851.35
1.3	Needs and Access Plan	360	\$78.61	\$28,297.94	\$200.00	N/A	\$28,497.94
1.4	Integration into Action Strategy/TIP	220	\$78.61	\$17,293.19	\$100.00	N/A	\$17,393.19
	<b>Task 1 Sub-total:</b>	<b>1,070</b>		<b>\$84,107.77</b>	<b>\$600.00</b>	N/A	<b>\$84,707.77</b>
	<b>FAA share (90%)</b>			<b>\$75,696.99</b>	<b>\$540.00</b>		<b>\$76,236.99</b>
	Task 1 duration (months)	9.0					
<b>2a</b>	<b><u>Air Cargo Consultant Work Scope</u></b>						
2a.1	Prepare consultant work scope	88	\$78.61	\$6,917.27	\$0.00	N/A	\$6,917.27
2a.2	Prepare RFQ and select consultant	104	\$78.61	\$8,174.96	\$200.00	N/A	\$8,374.96
	<b>Task 2a Sub-total:</b>	<b>192</b>		<b>\$15,092.23</b>	<b>\$200.00</b>	N/A	<b>\$15,292.23</b>
	<b>FAA share (90%)</b>			<b>\$13,583.01</b>	<b>\$180.00</b>		<b>\$13,763.01</b>
	Task 2a duration (months)	3.0					
	<b>Total for Tasks 1 &amp; 2a:</b>	<b>1,262</b>		<b>\$99,200.00</b>	<b>\$800.00</b>	N/A	<b>\$100,000.00</b>
	<b>FAA share (90%)</b>			<b>\$89,280.00</b>	<b>\$720.00</b>	N/A	<b>\$90,000.00</b>
	Tasks 1 & 2a duration (months)	9.0					
<b>2</b>	<b><u>Regional Air Cargo Strategy</u></b>						
2.1	Management & Coordination	180	\$81.75	\$14,714.93	\$400.00	\$0.00	\$15,114.93
2.2	Air Cargo Industry Trends	260	\$81.75	\$21,254.90	\$200.00	\$54,000.00	\$75,454.90
2.3	Regional Air Cargo Market	380	\$81.75	\$31,064.85	\$100.00	\$75,000.00	\$106,164.85
2.4	Evaluate Air Cargo Forecasts	320	\$81.75	\$26,159.87	\$100.00	\$18,000.00	\$44,259.87
2.5	Capacity Analysis and Needs	360	\$81.75	\$29,429.86	\$100.00	\$16,000.00	\$45,529.86
2.6	Regional Air Cargo Strategy	280	\$81.75	\$22,889.89	\$100.00	\$12,000.00	\$34,989.89
	<b>Task 2 Sub-total:</b>	<b>1,780</b>		<b>\$145,514.30</b>	<b>\$1,000.00</b>	<b>\$175,000.00</b>	<b>\$321,514.30</b>
	<b>FAA share (90%)</b>			<b>\$130,962.87</b>	<b>\$900.00</b>	<b>\$157,500.00</b>	<b>\$289,362.87</b>
	Task 2 duration (months)	13					
<b>3</b>	<b><u>Benefits of Aviation Study</u></b>						
3.1	Review Existing Information	140	\$85.02	\$11,902.74	\$100.00	N/A	\$12,002.74
3.2	Impacts of September 11	220	\$85.02	\$18,704.31	\$0.00	N/A	\$18,704.31
3.3	Benefits of Aviation Study	620	\$85.02	\$52,712.15	\$200.00	N/A	\$52,912.15
3.4	Public Information Program	140	\$85.02	\$11,902.74	\$3,200.00	N/A	\$15,102.74
	<b>Task 3 Sub-total:</b>	<b>1,120</b>		<b>\$95,221.94</b>	<b>\$3,500.00</b>	N/A	<b>\$98,721.94</b>
	<b>FAA share (90%)</b>			<b>\$85,699.75</b>	<b>\$3,150.00</b>		<b>\$88,849.75</b>
	Task 3 duration (months)	7					
<b>4</b>	<b><u>Sustainable GA Airport System</u></b>						
4.1	Historical Airport Closures	320	\$85.02	\$27,206.27	\$100.00	N/A	\$27,306.27
4.2	Sustainable Airports Action Strategy	380	\$85.02	\$32,307.44	\$200.00	N/A	\$32,507.44
	<b>Task 4 Sub-total:</b>	<b>700</b>		<b>\$59,513.71</b>	<b>\$300.00</b>	N/A	<b>\$59,813.71</b>
	<b>FAA share (90%)</b>			<b>\$53,562.34</b>	<b>\$270.00</b>		<b>\$53,832.34</b>
	Task 4 duration (months)	5					

Puget Sound Regional Council  
**Air Transportation Work Program Budget**

Task #	Task Description	PSRC Staff Hours	PSRC Cost per Hour *	PSRC Staff Cost	Direct Cost **	Consultant Cost	Total Cost
5	Airport Compatible Land Use	1,450	\$88.42	\$128,209.54	\$400.00		\$128,609.54
6	Airport System Capacity	1,280	\$88.42	\$113,178.08	\$300.00		\$113,478.08
7	Mitigation of Airport Impacts	380	\$91.96	\$34,943.73	\$100.00		\$35,043.73
8	Airport System Funding	560	\$91.96	\$51,496.03	\$100.00		\$51,596.03
9	Maintenance and Preservation	320	\$91.96	\$29,426.30	\$100.00		\$29,526.30
10	New Technology	180	\$91.96	\$16,552.29	\$100.00		\$16,652.29
11	System Performance	680	\$95.64	\$65,032.12	\$200.00		\$65,232.12
12	Airports of Regional Significance	460	\$95.64	\$43,992.32	\$200.00		\$44,192.32
13	<u>Role of Military Airfields</u>	160	\$95.64	\$15,301.68	\$100.00		\$15,401.68

**Tasks 1-13 Grand Total: 10,332                      \$897,582.04      \$7,200.00                      \$1,079,782.04**

Total Project Staff Months (@152/mo)      65.0                      **Total FAA-eligible Project Costs:                      \$1,079,782.04**

\* Hourly cost reflects 4% annual increase in staff salary

\*\* Includes meetings, mailing, reproduction, and printing

**FAA Share (90%):                      \$971,803.84**

**Local Share (10%):                      \$107,978.20**

**Exhibit 5**  
**Puget Sound Regional Council**  
**2002-2003 Air Transportation Work Program Schedule**

Project Task	2002			2003								
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
<b>1 <u>Regional Airport Ground Access Plan</u></b>												
1.1 Status of Airport Access												
1.2 Demand Forecasts												
1.3 Needs and Access Plan												
1.4 Integration into Action Strategy/TIP												
<b>2a <u>Air Cargo Consultant Work Scope</u></b>												
2a.1 Prepare consultant work scope												
2a.2 Prepare RFQ and select consultant *												
* Subject to FAA funding												

**Exhibit 6**  
**Puget Sound Regional Council**  
**2002-2008 Air Transportation Work Program Schedule**

Project Task	2002	2003	2004	2005	2006	2007	2008
1 <u>Regional Airport Access Plan</u>		■					
2a <u>Consultant Work Scope</u>		■					
2 <u>Regional Air Cargo Strategy</u>		■					
3 <u>Benefits of Aviation Study</u>			■				
4 <u>Sustainable GA Airport System</u>			■				
5 <u>Airport Compatible Land Use</u>				■			
6 <u>Airport System Capacity</u>				■			
7 <u>Mitigation of Airport Impacts</u>					■		
8 <u>Airport System Funding</u>					■		
9 <u>Maintenance and Preservation</u>						■	
10 <u>Airport of Regional Significance</u>						■	
11 <u>System Performance</u>							■
12 <u>New Technology</u>							■
13 <u>Role of Military Airfields</u>							■

**APPENDIX A**

**Mandates and Authority for PSRC Aviation Program**

## APPENDIX A - Mandates and Authority for PSRC Aviation Program

The following information regarding the Regional Council's mandates and authority was derived from federal, state, and regional sources.

### **FEDERAL AUTHORITY AND MANDATES** (emphasis added)

**TEA-21** (Title 23, U.S.C. § 134) - - Transportation Equity Act for the 21<sup>st</sup> Century - - TEA-21 requires the consideration of the following seven planning factors:

1. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity and efficiency.
2. Increase the safety and security of the transportation system for motorized and nonmotorized users.
3. Increase the accessibility and mobility options available to people and for freight.
4. Protect and enhance the environment, promote energy conservation, and improve quality of life.
5. Enhance the integration and connectivity of the transportation system, across and between modes, for people and for freight.
6. Promote efficient system management and operation.
7. Emphasize the preservation of the existing transportation system. Several of these factors provide a context for linking transportation planning and programs with growth and development considerations.

### **TEA-21 Section 1203. METROPOLITAN PLANNING.**

(a) GENERAL REQUIREMENTS.—Section 134(a) of Title 23, United States Code, is amended to read as follows: “(a) *GENERAL REQUIREMENTS.*— ... (1) *FINDINGS.*—*It is in the national interest to encourage and promote the safe and efficient management, operation, and development of surface transportation systems that will serve the mobility needs of people and freight and foster economic growth and development within and through urbanized areas, while minimizing transportation-related fuel consumption and air pollution.* ... (2) *DEVELOPMENT OF PLANS AND PROGRAMS.*—*To accomplish the objective stated in paragraph (1), metropolitan planning organizations designated under subsection (b), in co-operation with the State and public transit operators, shall develop transportation plans and programs for urbanized areas of the State.* ... (3) *CONTENTS.*—*The plans and programs for each metropolitan area shall provide for the development and integrated management and operation of transportation systems and facilities (including pedestrian walkways and bicycle transportation facilities) that **will function as an intermodal transportation system for the metropolitan area** and as an integral part of an intermodal transportation system for the State and the United States.* (4) *PROCESS OF DEVELOPMENT.*—*The process for developing the plans and programs shall provide for **consideration of all modes of transportation** and shall be continuing, cooperative, and comprehensive to the degree appropriate, based on the complexity of the transportation problems to be addressed”.*

## **TEA-21 Section 1106.103. Federal Aid Systems**

“(b) NATIONAL HIGHWAY SYSTEM - - ... (1) DESCRIPTION.—The National Highway System consists of the highway routes and connections to transportation facilities depicted on the map submitted by the Secretary to Congress with the report entitled ‘Pulling Together: The National Highway System and its Connections to Major Intermodal Terminals’ and dated May 24, 1996. The system shall - ... (A) serve major population centers, international border crossings, ports, airports, public transportation facilities, and other intermodal transportation facilities and other major travel destinations ... ”

**TEA-21** requires MPOs to develop and maintain a regional TIP; requires MPOs to maintain a comprehensive database to support continuing, cooperative, and comprehensive planning processes; and requires integrated intermodal transportation planning.

**AIR-21** - - “Wendell H. Ford Aviation Investment and Reform Act for the 21<sup>st</sup> Century.”

Section 738. *The Administrator is encouraged to consider any proposal with a regional consensus submitted by a State aviation authority regarding the expansion of existing airport facilities or the introduction of new airport facilities.*

**Title 23 U.S.C. - Highways** - Part 450 - Subpart C - Section 450.312, Metropolitan transportation planning: Responsibilities, cooperation, and coordination states: “... *the development of the plan and TIP shall be coordinated with other providers of transportation, e.g., sponsors of regional airports, maritime ports operators, rail freight operators, etc.*”

**Title 49 U.S.C. - Transportation** - Chapter VI, Part 613, Sub-Part A, Section 613.100 - “Metropolitan Transportation Planning and Programming” and **Title 23 U.S.C. - Highways** - Part 450 - Subpart C - Section 450.300, “Metropolitan Transportation Planning and Programming” require: “*a metropolitan planning organization (MPO) be designated for each urbanized area and that the metropolitan area have a **continuing, cooperative, and comprehensive transportation planning process** that results in plans and programs that **consider all transportation modes** and supports metropolitan community development and social goals. These plans and programs shall lead to the development and operations of an integrated, intermodal metropolitan transportation system that facilitates the efficient, economic movement of people and goods.*”

**Title 23 U.S.C. - Highways** - Part 450 - Subpart C - Section 450.316, “Metropolitan transportation planning process: Elements” states: “... *As part of the planning process for all metropolitan areas, the following factors shall be **explicitly considered**: (4) The **likely effect of transportation policy decisions on land use and development** and the consistency of transportation plans and programs with the provisions of all applicable short- and long-term land use and development plans. (6) The effects of all transportation projects to be undertaken with the metropolitan planning area, without regard to the source of funding. (7) International border crossing and access to ports, airports, intermodal transportation facilities, major freight distribution routes . . . . (11) Enhancement of the efficient movement of freight.*”

**Title 23 U.S.C. - Highways** - Part 450 - Subpart C - Section 450.322, “Metropolitan transportation planning process: Transportation plan” states: “*(a) The metropolitan transportation planning process shall include the development of a transportation plan addressing at least a twenty year planning horizon. The plan shall include both long rang and short range strategies/actions that lead to the*

*development of an integrated intermodal transportation system that facilitates the efficient movement of people and goods. (b) In addition, the plan shall: (1) **Identify the projected transportation demand of persons and goods in the metropolitan planning area over the period of the plan.** (11) Include a financial plan that demonstrates the consistency of proposed transportation investments with already available and projected sources of revenue.”*

**Federal-Aid Highway Act** (1962) - - Created Federal requirements for urban transportation planning, and established the condition on federal transportation financing assistance that transportation projects in urban areas of more than 50,000 people be based on a continuing, comprehensive, and cooperative planning process (the birth of the “3C” idea).

**Federal-Aid Highway Act** (1981) and UMTA planning regulations - - Required a transportation plan, a transportation improvement program (TIP), and a unified planning work program.

### **STATE AUTHORITY AND MANDATES**

**RCW Chapter 36.70 Planning Enabling Act** and **RCW Chapter 36.70A Growth Management** - - require cities and counties to protect airports from incompatible development through its comprehensive plan and development regulations. In addition, RCW 36.70A.200 requires that the comprehensive plan of each city and county that plans under GMA include a process for identifying and siting essential public facilities . . . and that no local comprehensive plan or development regulation may preclude the siting of essential public facilities.

**RCW Chapter 47.80 Regional Transportation Planning Organizations** - - requires each RTPO to develop, in cooperation with the WSDOT, providers of public transportation and high capacity transportation, ports, and local governments within the region, adopt, and periodically update a regional transportation plan that identifies existing and planned transportation facilities, including airports, includes a financial plan demonstrating how the plan can be implemented, and indicating reasonably expected funding sources to finance the needed facilities. This section also requires our plan to be based on a least cost planning methodology that identifies the most cost-effective facilities, services, and programs. The law requires us to develop and maintain a 6-year regional TIP. The law also requires integrated transportation and comprehensive planning. RCW 47.80.030 requires that all transportation projects . . . within the region that have an impact upon regional facilities or services must be consistent with the plan and with adopted regional growth and transportation strategies.

**WAC 365-195-325 Growth Management Act - Procedural Criteria for Adopting Comprehensive Plans and Development Regulations - - Transportation Element** - - requires that all plans contain at least the following sub-elements: an inventory of air facilities and services . . . as a basis for future planning. This section of the WAC also requires forecasts of traffic for at least ten years, and identification of system expansion needs. This section (section (2) (c) (i)) of the WAC recommends the following: *“Air transportation facilities inventory can include but not necessarily be limited to: A description of the services provided by the facilities and location of the air transportation facilities; a capacity analysis to compare current and projected airport needs; a capacity analysis of roads, rail, and navigational routes to assess freight and passenger access to airport facilities. Consideration of the current and projected surrounding land uses should be made with respect to uses that are compatible and available for projected airport needs.”*

**WAC 365-195-325 Growth Management Act** states: “A regional transportation planning organization shall certify that the transportation elements of the adopted county, city, and town comprehensive plans within the region conform with RCW 36.70A.070. Regional transportation plans, state transportation plans, and county and city comprehensive plans shall be consistent with one another.”

**WAC 365-195-325 Growth Management Act** also states that: *Consideration of the current and projected surrounding land uses should be made with respect to uses that are compatible and available for projected airport needs.*

## **REGIONAL AUTHORITY AND MANDATES**

### **Resolution A-91-01, Framework Plan, Interlocal Agreement, and Bylaws** (1991)

Resolution A-91-01 created PSRC, designated it as the region’s official MPO and RTPO, and adopted the *Framework Plan*, Interlocal Agreement, and Bylaws.

**SECTION 1. MISSION** of the *Framework Plan* and Interlocal Agreement established PSRC’s Mission:

*The mission of the new regional planning agency is to preserve and enhance the quality of life in the central Puget Sound area. In so doing, it shall prepare, adopt, and maintain goals, policy, and standards for regional transportation and regional growth management in the central Puget Sound area, in accordance with federal and state law and based on local comprehensive plans of jurisdictions within the region. The agency shall ensure implementation in the region of the provisions of state and federal law which pertain to regional transportation planning and regional growth management.*

In addition to establishing our mission, the *Framework Plan* and Interlocal Agreement set forth the following requirements of the Regional Council, and serve as our foundation of authority (much of which is also founded in Washington State law in the WAC and/or RCW relating to RTPOs, the state’s growth management act, and planning enabling act).

**SECTION 3** of the *Framework Plan* laid out the new agency’s functions and authority as follows:

1. **Transportation**. In meeting its responsibilities for regional transportation planning, the agency shall:
  - a. **Produce a regional transportation plan (RTP)** in accordance with state and federal law and consistent with local comprehensive plans. The RTP will establish planning direction for regionally significant transportation projects, as defined in state law, and shall be consistent with the regional growth management strategy. The RTP will cover . . . . airports. It will address demand management, levels of service, and capital investments.
  - b. Through the RTP, **establish regional transportation policy** and, in cooperation with WSDOT, **set minimum standards** for state government to integrate in its transportation planning and for local governments to reflect and include in the preparation of transportation elements of local comprehensive plans.
  - c. **Carry out MPO functions** (as prescribed for federal funding projects in the region), which include preparing the RTP, an annual work program, and a six-year capital plan.

- d. **Carry out RTPO functions** (as prescribed by state law - - Planning Enabling Act and GMA), which include preparing an RTP covering regionally significant transportation projects, as well as these other functions as mandated by state law:
  - (1) **Certify** that transportation elements of local comprehensive plans are consistent with the RTP.
  - (2) **Certify** that transportation elements of comprehensive plans adopted by counties, cities, and towns conform with comprehensive planning provisions of state law.
  - (3) **Assure** that all transportation projects within the region that have a significant impact upon regional facilities or services are consistent with the RTP.
  - (4) In cooperation with the state DOT, identify and jointly plan improvements and strategies within those corridors which are important to moving people and goods in a regional or statewide basis.
- f. **Review and comment in the NEPA-SEPA process** on proposed actions with potential significant impact on the implementation of the RTP.
- 2. **Growth Management**. The agency shall maintain VISION 2020 as the adopted regional growth management strategy.
- 3. **Countywide Comprehensive Plans**. Develop a process for regional review of countywide plans for consistency with the adopted regional growth strategy and/or the regional transportation plan.
- 4. **Regional Data Base Development**. The agency shall provide for establishment and maintenance of a regional data base to:
  - a. Support development of the RTP and regional growth management strategy;
  - b. Forecast and monitor economic, demographic, and travel conditions in the region;
  - c. Develop the data base jointly with relevant state agencies for use in the region by local governments and the State of Washington.
- 5. **Technical Assistance**. As requested, the agency shall provide technical assistance to local and state governments through regional data collection and forecasting services, consistent with the mission and functions of the agency. In addition, the agency may provide general planning assistance, consistent with the mission and functions of the agency, to small cities and towns which are members of the agency and which request help to complete planning they are unable to staff or fund.
- 6. **Discussion Forum**. The agency **may** provide a forum for discussion among local and state officials and other interested parties of common regional issues.

**SECTION 5** of the *Framework Plan* describes the relationships of the regional agency to local and state governments as follows:

- b. Consistency of planning: The RTP, transportation elements of local comprehensive plans and countywide comprehensive policy plans are coordinated and consistent with each other. Assuring consistency among these plans and planning elements is the responsibility of the regional agency under state law.
- c. Certification:
  - (1) In conformance with state law, the regional agency certifies that transportation elements of local comprehensive plans are consistent with the RTP, and conform with comprehensive planning requirements.
  - (2) The regional agency also certifies that all elements of countywide comprehensive policy plans are consistent with the RTP.

***Destination 2030*** (adopted May 24, 2001 by Resolution No. PSRC-A-01-02) serves as the region's Metropolitan Transportation Plan (MTP) under federal law and the Regional Transportation Plan (RTP) under state law. ***Vision 2020*** (adopted in 1995) is the long range growth management, economic, and transportation strategy for the Central Puget Sound region. It combines a commitment to a growth management vision and the transportation investments and programs and economic strategy necessary to support that vision. *Destination 2030* and *Vision 2020* implement the Regional Council's authority and responsibilities under RTPO legislation, the *Framework Plan* and Interlocal Agreement, and RCW Chapters 36.70 and 36.70A. *Destination 2030*, *Vision 2020*, and the *2001 Regional Airport System Plan* contain goals, objectives, policies, priorities, strategies, and the regional airport system improvement program, which provide direction to the aviation program and to the Regional Council's multi-modal transportation and growth management planning effort.

**Memorandum of Understanding** (between PSRC and WSDOT) - December 3, 1996. Provides a framework for cooperative transportation planning, avoid duplication, provide effective coordination, and optimize regional and state transportation planning and investments in support of local, countywide, and multicounty growth management policies and objectives in the central Puget Sound region. The MOU:

- Requires the WSDOT and PSRC to cooperate and coordinate on a transportation process that includes coordination of data collection and analysis for evaluating surface, air and marine transportation alternatives and developing plans and programs; cooperative development of central Puget Sound area components of statewide transportation plans.
- Requires coordination in developing a 6-year regional TIP. Also requires policy coordination between PSRC, WSDOT, transit agencies, and Ports, as well as a 20-year financial element. Requires PSRC and WSDOT to cooperate on major transportation investment studies.
- Requires the Regional Council to periodically provide to the WSDOT current and forecast demographic, economic, transportation, and other appropriate data.
- Requires cooperative and coordinated transportation system performance monitoring between PSRC and WSDOT.
- States: "In accordance with federal regulations, the development and update of VISION 2020 and-or the MTP will also be coordinated with other transportation providers, including local and regional transit agencies, regional airport sponsors, maritime port operators, passenger and rail freight operators, etc."

- Incorporates the Regional Council's Policy and Plan Review Process to certify transportation elements of local comprehensive plans.

**Memorandum of Understanding** (between FAA, WSDOT, PSRC, and the Port of Seattle) which implemented PSRC Resolution A-93-03 (March 1994), commenced the MSA study. This MOU is no longer in force, but could provide an example for cooperative efforts in the future.

**Resolutions:**

- **Resolution 3042** including Exhibit A-1 (May 23, 1989) - - Interagency Agreement for Long Term Air Carrier System Planning (Port of Seattle and PSRC).
- **Resolution A-91-01** creating the Puget Sound Regional Council, designating PSRC as the region's official MPO and RTPO, and adopting the *Framework Plan*, Interlocal Agreement, and Bylaws. This 1991 resolution and its related *Framework Plan*, Interlocal Agreement, and Bylaws are still in force, providing the foundation of our authority.
- **Resolution A-93-03** (as amended by General Assembly Resolution A-96-02 on July 11, 1996) A resolution of the General Assembly of the Puget Sound Regional Council Amending the 1988 Interim Regional Airport System Plan (RASP) for Long-Term Commercial Air Transportation Capacity Needs of the Region. This resolution is contained in *Destination 2030* as Appendix 7.
- **Resolution A-96-02** - - A Resolution of the General Assembly of the Puget Sound Regional Council Amending the 1995 Metropolitan Transportation Plan (MTP) and Related Planning Documents to Provide for the Long-Term Commercial Air Transportation Capacity Needs of the Central Puget Sound Region. This resolution is contained in *Destination 2030* as Appendix 7.
- **Resolution No. PSRC-A-01-02** - - A resolution of the Puget Sound Regional Council adopting *Destination 2030* (the 2001 Metropolitan Transportation Plan).

**Regional Council Policy and Plan Review Questionnaire.** Criteria under GMA require cities and counties to identify public use general aviation airports within or adjacent to their jurisdiction, discuss how their plans, zoning ordinances, and development regulations discourage the siting of incompatible land uses adjacent to such airports, and identify the airports' future ground transportation access needs.